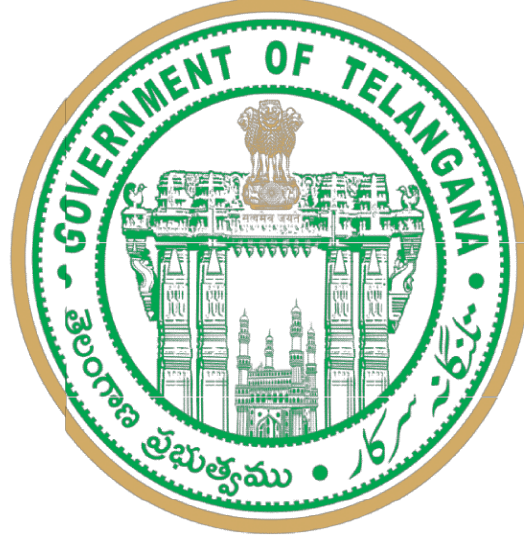


GOVERNMENT OF TELANGANA



COMMON SCHEDULE OF RATES
AS PER
T.S. REVISED STANDARD DATA
FOR THE YEAR 2018-19
(Effective from 1st June, 2018)

BOARD OF CHIEF ENGINEERS

MASTER
INDEX

Sl. No.	Description	Page No.	
		From	To
1	Part-I (Irrigation & CAD Works)	1	
2	Part-II(Road & Bridge Works)	1	
3	Part-III (Building works)	1	
4	Part-IV (Public Health Works)	1	

**Office of the Engineer-in-Chief (I.W)
I&CAD Dept., Errum Manzil, Hyderabad**

Proc. No. ENC/IW/P&M/EE/DEE-2/AEE.5/SoR 2018 19/Vol.II Dt: 19.06.2018

Sub: Schedule of Rates as per Telangana Revised Standard Data for the year 2018-19 -Irrigation & CAD works(Part-I), Road & Bridge Works (Part-II), Building Work Items(Part-III) and Public Health Items (Part-IV)-approved-Printing & Communication of SoRs - Reg.

Ref:

- 1) G.O.Ms.No.49,I&CAD (PW:Reforms)Dept., dt:2.3.2009
- 2) ENC (PH) Lr.No. 146/AE4/T2/SoR 2018-19/2015 dt. 05.06.2018
- 3) ENC (SR & CRN) R&B Dept Lr.No. 5040/EE(R)/DEE1/AEE4/2017 dt. 14.05.2018
- 4) ENC(NH & Bldgs) R&B Dept Lr. No. DEEII/AE10/SoR 2018-19 Dt:08.06.2018
- 5) Industrial Consumer Price Index points obtained from Commissioner, Labour Department
- 6) Minutes of Board of Chief Engineers (BOCEs) meeting on finalization of Schedule of Rates 2018-19 held on 29.05.2018.

The Government have approved Revised Standard Data vide ref 1st cited. The Schedule of Rates as per Telangana Revised Standard Data for the year 2018-19 is approved based on the following.

The Engineer-in-Chief (IW), I&CAD Dept., has furnished the draft rates proposed for Labour Rates and Basic data for Irrigation Items Part-I of Common SoR for the year 2018-19.

The Engineer-in-Chief (SR & CRN), R&B Dept has furnished the draft rates for the Part-II of Common SoR for Roads & Bridge items for the year 2018-19.

The Engineer-in-Chief (NH & Bldgs), R&B Dept has furnished the draft rates for the Part-III of Common SoR i.e., Buildings & Electrical items for the year 2018-19.

The Engineer-in-Chief (PH), PH&ME Dept has furnished Part-IV of Common SoR for Public Health works items and Public Health Materials for the year 2018-19.

The draft schedule of rates for the year 2018-19 as furnished by the Engineer-in-Chief (IW), I&CAD Dept., Engineer-in-Chief (NH&Bldgs), R&B Dept., Engineer-in-Chief (SR & CRN), R&B Dept., Engineer-in-Chief (PH), PH&ME Dept were discussed in detail and finalized in the annual Board of Chief Engineers meeting held on 29.05.2018 at 3.00PM in BOCE's Conference hall, Jalasoudha, I&CAD Dept., Hyderabad.

The procedure for the adoption of Irrigation work items, lead & lift charges (Common to all departments) is incorporated in the Annexure-A of schedule of rates (SoR).

The approved basic rates are applicable to the data as per Revised Standard Data approved by the Government vide G.O.1st cited.

The Government vide G.O. MS.No.15 T.R&B(R-1) Department Dt: 24.12.2014 have issued orders for adoption of MoRTH data by all Engineering Departments of Telangana State in respect of Road and Bridge works, with prevailing Standard Schedule of Rates in preparation of estimates. The Government approval is necessary to adopt any other data.

The lead & lift charges are common to all Engineering Departments. The detailed calculations are incorporated in the Lead & lift chapter in the I&CAD Works (Part-I) of Telangana Revised Standard Data.

One hard copy & compact disc containing Schedule of Rates is here with communicated.

No other items other than the items communicated by this office shall be introduced in the SoR.

The Heads of Department and Officers mentioned below are authorized to print the Schedule of Rates for the year 2018-19. The unauthorized printing & selling of the SoR is strictly prohibited. The Schedule of Rates for 2018-19 will be in force until the new SoR comes in to force.

Any discrepancies found (or) corrections required in SoR 2018-19 may be brought to the notice of the undersigned for issuing necessary corrigendum/addendum.

The revised rates will come into force from 1st June of 2018.

The receipt of the proceedings may be acknowledged.

Encl: SoR 2018-19 containing Part-I (Irrigation & CAD works), Part-II (Road & Bridge works) Part-III (Buildings works) and Part-IV (Public Health works)

Sd/- B. Nagendra Rao; Dt 19.06.2018
Engineer-in-Chief(I.W)
Irrigation & CAD Department and
Chairman, Board of Chief Engineers

I) Copy submitted to the Special Chief Secretary to Govt., I&CAD Dept., B-Block, Secretariat Buildings, Hyderabad for favour of information.

II) Copy Communicated to the following Heads of Departments along with Enclosures for information and necessary action.

- 1) Engineer-in-Chief (NH & Buildings), Roads & Buildings Department.
- 2) Engineer-in-Chief (SR & CRN), Roads & Buildings Department
- 2) Engineer-in-Chief (P.H.), PH & ME Department.
- 3) Engineer-in-Chief (P.R.), Panchayat Raj Department.
- 4) Engineer-in-Chief (RWS) R W S & S, Department.
- 5) Copy of C.D containing Schedule of Rates 2018-19 & Standard data, Part-1 (Irrigation & CAD works) to all Engineers-in-Chief, Chief Engineers of Irrigation & CAD Department for favour of information and necessary action.

III) Copy to the Superintending Engineer, Irrigation Circle, Irrigation & CAD Department, Red Hill, Hyderabad for necessary action.

Sd/- B. Nagendra Rao; Dt 19.06.2018
Engineer-in-Chief(I.W)
Irrigation & CAD Department and
Chairman, Board of Chief Engineers

Important – Read the following

ANNEXURE- A

- 1) The SPIU (Irrigation), Centre for Good Governance (CGG), Hyderabad has developed software package linking the basic input data of Irrigation with approved data of Irrigation work items.
- 2) The lead and lift charges are common to all Engineering Departments. The detailed calculations are incorporated in the Lead & Lift charges chapter in the I&CAD works (Part-1) of Telangana Revised standard data.
- 3) The estimate sanctioning authority shall physically verify each and every Irrigation work item data incorporated in the estimate with basic input data before sanction of the estimate. Any lapses or arithmetic errors arising in the sanction of data's / estimate due to adoption of the software package lies entirely on the concerned estimate sanctioning authority only.
- 4) Any discrepancies / corrections required for improper basic input data appearing in the approved data's of Irrigation work items in the software package and hard copy of SoR & Standard data (Part-1) may be brought to the notice of undersigned for issuing corrections.
- 5) Estimate Sanction Authority shall examine the Components/Materials/Items proposed for arriving finished rate in the Data. Any Items Components/Materials/Items not required for that work, can be deleted by the Estimate Sanctioning Authority while according the approval to Datas.

Sd/- B. Nagendra Rao; Dt 19.06.2018
Engineer-in-Chief(I.W)
Irrigation & CAD Department and
Chairman, Board of Chief Engineers

Preamble
(SoR 2018-19)
Common to all Engineering
Departments

PREAMBLE

1) AREA ALLOWANCES:

A) CORPORATIONS & MUNICIPALITIES:

- a) i. 25% extra over the basic rates on labour component of works is allowed in all Municipal Corporation Limits of Telangana except Greater Hyderabad (up to a belt of 12 Kms. from Municipal Corporation limits) and other corporations as notified by the Government from time to time.
- ii. 40% extra over the basic rates on labour component of works is allowed in Greater Hyderabad (up to a belt of 12 Km from Municipal Corporation limits).
- b) 20% extra over basic rates on labour component of works is allowed in all District Headquarters and the remaining Municipal limits (up to a belt of 12 Kms from Municipal limits).

B) JAIL COMPOUNDS:

20% extra is allowed over labour rates for the works in the Jail compounds. Only equivalent number of Man Mazdoor shall be provided in the Jail premises and no women Mazdoor are allowed inside.

C) INDUSTRIAL AREA:

20% over basic rates on labour component of works is allowed for works situated within 10km belt of Industrial area of Jeedimetla, in Malkajgiri District, Lingampally, Tandur, Ibrahimpatnam and Kothuru in Ranga Reddy District, Patancheru, Ramachandrapur in Sangareddy District, Bibinagar in Yadadri-Bhongiri District, Wadepally in Nalgonda District, Nagapally (Centenary Colony, Begumpet "X" roads), Takkalapally, Ramagundam and Godavarikhani in Peddapally District, Manchiryal, Mandamarri, Bellampalli in Manchiryal District, Sarpaka, Kothagudem, Paloncha and Manguguru in Bhadradi-Kothagudem district, Singareni Collieries area limits in Khammam and Bhadradi-Kothagudem Districts, Kamalapur in Jayashankar-Bhoopalpally District.

D) AGENCY / TRIBAL AREAS:

- a) 25% extra is allowed for the works located within the interior Agency / Tribal limits, i.e. for the works located within & upto 16 KMs from any all weather route inside Agency / Tribal.

- b) 40% extra is allowed for the works located within the interior Agency / Tribal limits, i.e. for the works located beyond 16 KMs from any all weather route inside Agency / Tribal.

NOTE:

1. No extra percentage is permissible in respect of Forest produce such as Bamboo, Rellu grass and for all materials obtained from outside the Agency / Tribal.
2. The extra percentage under Agency / Tribal areas allowance may be allowed on the labour component and on the labour charges in the rates for conveyance of materials.
3. The extra percentage on cost of materials in Agency / Tribal areas can be allowed on the labour component only, if they are manufactured in the Agency / Tribal areas itself except Forest produce.

E) GHAT ROADS:

For Ghat Roads and other roads steeper than 1 in 20, the length of the road may be taken as 1.5 times the existing length of the road for the purpose of leads only for conveyance of materials based on the certificate for the Ghat Road given by the Superintending Engineer concerned.

Foot Note: Under compelling circumstances, the concerned Chief Engineer can adopt the equivalent length of road as 2 ½ times of actual length.

Note:

Area allowances:

If more than one area allowance (such as those) for (1) Municipalities (2) Agency / Tribal areas (3) Industrial areas are applicable for a particular situation, only the maximum out of the allowable percentages is to be allowed.

2) EXCAVATION OF TRIAL TRENCHES, TRIAL PITS AND EXCAVATION IN RESTRICTED

PLACES: -

A. TRENCHES:

- 1) Trenches of not more than 2 metres in width : 25% extra

B. TRIAL PITS:

- 1) Up to 2 Metres depth : 25% extra
- 2) 2 Metres to 4 Metres depth : 50% extra
- 3) 4 Metres to 6 Metres depth : 75% extra
- 4) 6 Metres to 8 Metres depth : 100% extra
- 5) 8 Metres to 9 Metres depth : 150% extra
- 6) More than 9 Metres depth : 200% extra

C. EXCAVATION IN RESTRICTED PLACES:-

1	Foundation of Buildings	:	75% extra
2	For pipe lines where the depth is less than 1.5 times the width	:	75% extra
3	For pipe lines where the depth is 1.5 times or more than the width	:	120% extra
4	Silt removal in restricted areas such as U. T's., Culverts and Syphons.	:	120% extra
5	Excavation of field channels	:	75% extra
6	For narrow trenches not more than 2 meters in width and depth not less than twice the width and for excavation of road boundary drains, model sections of canals.	:	75% extra
7	High berm cutting of not more than 150 mm average thickness and sectioning for roads	:	50% extra

Note: 1) The extra percentage is allowed over Common item for all earth works (COM-MWRK-Manual Works) for corresponding soil and Standard data items. It includes the charges for all lifts and initial lead but does not include dewatering charges if any in respect of all the items under (A) and (B) above.

2) The above extra percentages in respect of excavation in hard rock for restricted places are to be allowed for (2/3) rd of the cost and shall not to be allowed in respect of items involving blasting component which may be taken as 1/3 of the cost.

3) Manufactured Sand:

As per **GO Ms No 37 Industries and Commerce(Mines-I) Dept, dated 29.05.2018**, the Government have directed all the Engineering works Departments to use **Manufactured Sand** (Rock sand) and natural river sand in the ratio of **50:50** in all the mixes of Cement concrete and in the items of works where sand is used earlier, to reduce the burden on Natural Resources and to make the sustainable ecosystem. Accordingly, the Manufactured Sand/Rock Sand shall be substituted proportionately in respective data items.

4) Fly ash bricks:

As per recommendations of Board of Chief Engineers dated 11.11.2016, and MoEF & CC amended Notification No S.O 254(E), dated 25.01.2016 all Engineering Departments shall mandatorily adopt Fly ash bricks and other Fly ash based products in Buildings and other allied works proposed within 100Km radius of fly ash generating Coal/Lignite based Thermal Power plants in Telangana.

5) Conveyance of Bitumen(Bulk and Packed)

Packed Bitumen	---	Rs 1.75 per Km/MT
Bulk Bitumen	---	Rs 1.50 per Km/MT(round the trip)

6) SEIGNIORAGE CHARGES

Note:The rates of the materials indicated in the SoR are exclusive of Seigniorage Charges.

Appropriate Seigniorage Charges for relevant materials as fixed by the Government from time to time shall be kept in Part-II of Schedule-A i.e., under reimbursable items as recommended by the Board of Chief Engineers.

The concerned Technical sanctioning authority should ensure that the relevant Seigniorage charges of work items shall be reconciled separately duly excluding from the data, so that, the Seigniorage charges are not affected by quoted Tender percentage.

7) GST(Goods & Service Tax):

The GST (Goods & Service Tax) on **Works Contract** shall be implemented as per orders of the Government from time to time. At present, GST @ 5% on Works Contract where in earth work component is 75% or more and for all other works GST @ 12% will be applicable.

GUIDE LINES

1) The Schedule of Rates (SoR) is formulated under four Parts, which are applicable to all the Engineering Departments and other Organizations under the control of Telangana State Government.

PART -1: Irrigation& CAD (Dam and Allied Works, Canals and Allied Works, Canal C.D. Works, Tunnels and Allied Works, Preliminary and Maintenance Works, Hydraulic Gates and allied works and Leads and Lifts applicable to all Departments)

PART -2: Roads and Bridges

PART -3: Buildings including Electrical Works

PART -4: Drinking Water Supply and Public Health (Only for works done by manual means)

2) Brief description of item of work. :

Brief description of the item of work to cover all important aspects of the work included in the Data. On reading the description of the item, the user should be in a position to assess the various cost components involved in the work.

3) Data for assessing quantities:

The data reflects various assessments / assumptions made in arriving at the quantities of materials, machinery, labour and other in-puts. In case of plants and equipment the output of main plant is worked out and the requirement of all other inputs and assessed to match the output of the main plant. Cycle time of operations is the criteria for assessing the output of equipment. Generally the equipment manufacturers furnish the output of machinery under ideal conditions of working. Suitable job and management efficiency factors are considered while working out the average output of machinery under field conditions. In case of combination of machinery and manpower, the assessment of manpower shall match the output of machinery.

Though cycle time of operations is the criteria for hourly / daily out-put of machinery work-force, the actual progress of work depends on several other factors such as power interruptions, minor break-downs, time for meals and other needs of work-force, stray rains etc. Therefore, it is the general practice to consider 50 minutes as the actual working time per hour for working out the hourly / daily out-put of machinery / work-force. CWC / BIS guide-lines stipulate the actual working hours for the purpose of equipment planning and utilisation. The daily out-put is computed duly considering the actual available working time and feed back from the field.

- For gate and hoist works, it is the general practice to specify the quantity of work in terms of number of sets of embedded parts / gates. The requirement of machinery and work-force for cutting, bending, fabrication, erection, painting etc., is assessed to commensurate with the task involved.
- The data for gates and E.M. Parts is arrived per Metric Tonne (MT) quantity.
- The data for Hoists and Gantry Cranes is worked out on the basis of capacity in tonnage.

4) The lead and lift charges provided in SoR are generally applicable and common to all Engineering Departments. Any item which is not covered in this part, the rates as provided in the data of the relevant works may be adopted in preparation of estimates.

5) The basic material inputs needed for all works are listed and incorporated in the data. The requirements are analyzed and the specifications adopted shall confirm to Standards published by the BIS.

- The labour and material rates will be communicated by the Board of Chief engineers.

- Unless otherwise specified, all material rates shall be exclusive of GST.
- For sand, gravel , murum, stones , course aggregates etc, the rates are ex-quarry/Stock yard, adding loading charges by machinery / manual means and idle hire charges of machinery (as per table under chapter “ conveyance or lead and lift charges”), as applicable.
- For AC sheets, GI sheets, Hume pipes, wood and stone slabs, the rates are to be taken prevailing at major commercial centre near project area. The lead charges, as applicable are to be added in preparing estimates
- For Steel and Cement, the rates are delivery at site excluding GST.
- The specifications of the aggregates for sizes and gradation and its adoption shall be as per IS 383.

6) The labour component in the data is mentioned for unit work.

- No allowance towards labour importation and labour amenities added extra as they are included in the recommended overheads.
- On Labour Component: Certain additional allowances are added extra to the wages of labour (,i.e. only on labour component in the work item) in the form of percentage, as recommended by the Government/Board of chief engineers due to statutory and other provisions.

7) Hire Charges Of Machinery: The machinery and /or group of machinery

for items of works and their output has been worked out based on the availability of machinery generally in the market and working in the field successfully, duly considering cycle time, idle time, operator efficiency, type of work etc.

- The hire charge of a machinery / equipment is worked out based on the guidelines published by CWC and BIS codes.
- For the other machinery not covered by the list, the R&B and other users may adopt hire charges as recommended by the MORTH.

8) Lead Charges

- The high level committee has recommended to adopt, for conveyance by head load, a minimum lead of 50 meters and additional lead up to 150 meters in the intervals of 50 meters. Beyond 150 meters lead, only machinery rates are to be adopted.
- The basic work item rates provided in the Standard Data & Schedule of rates include 50 m or 1 km as initial lead and no lead charges shall be allowed where the source of material is within the initial lead specified in item rate. Additional lead charges shall be allowed for the lead exceeding initial lead specified in the item rate. The Guidelines may be followed regarding adding Lead charges as given against each chapter.

- **For the materials where the basic rates are mentioned as “Quarry Rates” in the SoR, which includes initial lead of 1.00km lead charges are to be added for the lead distances from the approved quarries as applicable**
- The lead charges per unit quantity for conveyance of the materials are worked out, and included in the schedule of rates in increment of 50 m for head load and in increment of 1 km for mechanical mode.
- The rates for lead charges by head load up to 150 meters and by machinery up to 5 km, shall be cumulative and inclusive of lead charges for preceding lead. For lead beyond 5 km, the lead charges shall be worked out on per km basis.

9) Loading and unloading charges for materials

The following features are considered:

1. Loading and unloading charges are not payable for conveyance by head load.
2. Loading and unloading charges are not payable for conveyance by mechanical means, for disposal of excavated material unless specified.
3. The rates for unloading of materials except earth, sand, gravel, coarse aggregate, rubble, size stone and cut stone, are inclusive of stacking wherever applicable.

10) Lift Charges:

- The data includes initial lift charges of 3.0 meters ,for materials conveyance by head load, Additional leads in the interval of 1.0 meters are worked out, as additional labour input and incorporated in the chapter on” Lead and lifts” .
- Where the conveyance / lifting of material is done by mechanical means, lift charges shall not be considered, as the cycle time of operation of the machine includes lifts involved.
- The data and rates for lift charges is cumulative and are inclusive of rates for preceding lifts also.

11) Wastage of Materials

i) Cement: No wastage allowance is recommended towards the quantity of cement used in works, as the wastage is already included in the input and in major works bulk quantities are used.

ii) Steel: The wastage of steel @ 2.5% is allowed for gates and allied structures. For RCC works the wastage is @2.5% for the reinforcement rods above 36mm dia. and @ 5% for rods below 36mm dia. Including overlaps, if they are not welded. If welding is adopted for the reinforcement rods even for below 36mm dia, 2.5% of wastage is only recommended.

12) In respect of RCC works, the rate for cement concrete for 1 cum is worked out separately for all grades based on Indian Standards. The rate of Reinforcement steel per MT is calculated separately and to be added in the estimates of RCC works as a separate item.

13) Soil classification: The Committee recommended to allow uniform classification of soils for all Departments and data is worked out accordingly.

1. all soils

2. Marshy soil

3. ordinary rock (not requiring blasting),

4. hard rock

a. hard rock (requiring blasting)

b. hard rock (controlled blasting)

c. removable by chiseling(blasting prohibited)

14) Use of Super Plasticizers and Admixtures:

Concrete admixtures such as Air-Entraining Agent (AEA) / Water reducing agent can be used advantageously for better quality concrete. The high level committee has recommended to adopt for super plasticizers and admixtures at 0.4% on cement for concrete work as per MORTH standards for batching plants.

15) Contractors overheads, profit and other provisions:

- Overheads and Contractor's profit @ 13.615% shall be allowed in the data which includes labour importation and amenities and other components recommended in MORTH **for original works subject to fulfilment of conditions** as detailed below.
- The provisions allowed in G.O.Ms.No.94, I&CAD, dated 01.07.03, need not be added separately for the items covered in the contractor overhead charges.

The overhead charges include the following elements:

- Site accommodation, setting up plant, access road, water supply, electricity and general site arrangements.
- Office furniture, equipment and communications
- Expenditure on:
 - Corporate office of contractor
 - site supervision
 - Documentation and "as built" drawings
 - Mobilisation/ de-mobilisation of resources
 - Labour camps with minimum amenities and transportation to work sites.
 - Light vehicles for site supervision including administrative and managerial requirements.
 - Laboratory equipment and quality control including field and laboratory testing.
 - Minor T & P and survey instruments and setting outworks, including verification of line, dimensions, trial pits and bore holes, where required.

- Watch and ward
- Traffic management during construction
- Expenditure on safeguarding environment
- Sundries
- Financing Expenditure

**16) ROLE OF CENTRAL COMPETENT AGENCY FOR SCHEDULE OF RATES
(BOARD OF CHIEF ENGINEERS)**

- a) The Board of Chief Engineers under the Chairmanship of Engineer-in-Chief, (Administration) I&CAD Department is the competent authority to finalize and recommend the Schedule of Rates applicable for all Engineering Departments. The Board has to assess and incorporate only the three basic inputs required to generate unit work item rates as below.

Basic rates of labour:

Wages of labour commonly required in execution of works has to be arrived and incorporated in the schedule of rates (**Basic input of Labour wages**), without adding extra towards area allowances (like municipality allowance, tribal area and ghat road allowances etc, which shall be added to the rates where applicable in the form of separate percentage as explained in the preceding paras. The rates shall be the prevailing daily rates in the State and shall not be less than the minimum wages fixed by the Government from time to time.

Materials rates:

The basic input material rates common to all departmental works are listed out and incorporated (in the chapter "Basic inputs") The material specifications adopted shall conform to Standards published by the BIS.

The Prevailing market rates for all basic input materials shall be obtained from the major commercial centers near the project areas. Average of the rates, ignoring freak rates, shall be reckoned as the prevailing market rate excluding all taxes viz., GST.

For sand, gravel, murrum, stones, aggregates etc, the rates are ex-quarry/stock yard including loading charges and idle hire charges. For steel, Cement, AC sheets, GI sheets, Hume pipes, wood and stone slabs, the rates prevailing at major commercial centre near project area has to be adopted.

Use rate of machinery:

The third parameter for incorporation in the Basic Inputs, is the use rate of machinery. To arrive at the use rate of machinery, the inputs to be incorporated are

- The list and capital cost of machinery required to be used in the construction activity, The rate has to be obtained from major manufacturers and outlet sources and the rate shall be the current market price inclusive of all taxes, duties and freight charges.
 - The prevailing fuel charges of petrol and diesel are ascertained and average rate adopted
 - Borrow rate of interest as fixed by the Government/competent authority be indicated.
 - For the other machinery not covered by the list, the R&B and other users may adopt hire charges as recommended by the MORTH
- c) The Chairman, Board of Chief Engineers(BOCEs) or competent authority appointed by the Government, based on the approved basic inputs, load the above three basic parameters in the software program. The unit rate of all works including hire charges of all machinery will be generated automatically for adoption.

The Chairman, BOCEs shall communicate the uniform Schedule of rates arrived from Standard Data, to all users for uniform and direct adoption in all infrastructure Departments, as applicable.

Sd/- B. Nagendra Rao
Engineer-in-Chief (IW)
I & CAD Department and
Chairman, Board of Chief Engineers

ANNEXURE (For Buildings)

- 1) The committee comprising of Chief Engineers of departments in-charge of execution of building works for finalization of Standard Schedule of Rates for Buildings (Electrical & Civil), constituted vide G.O. Rt. No: 471 TR&B (R-1) Dept., Dt. 20.4.2007, has agreed to have a separate 'Schedule of Rates' for Buildings (Civil & Electrical). The 2nd meeting of the above "SoR Committee for Telangana Buildings (Civil & Electrical)" was convened on 28-05-2018 with an objective to finalize and release the first Telangana Buildings-SoR: 2018-19.
- 2) The rates of labour, common materials & work items, Public Health items, conveyance rates of materials & hire charges approved and published in Common SoR-2018-19 remain applicable. The specifications, stipulations & all other conditions of Common-SoR other than those specified in this context remain applicable.
- 3) The committee of Chief Engineers on Buildings-SoR: 2018-19 (Civil & Electrical) has met in the chambers of Chief Engineer(R&B), Buildings on 28.05.2018 at 11.00 A.M. and approved the Telangana Buildings SoR: 2018-19.
- 4) SSR Rates for Civil, Sanitary & water supply items are purely for the guidance of the officers in preparation of estimates vide Para 113 of APPWD code. Authority who prepares the estimate is however responsible for proper rates as envisaged in Para 45 of APPWD code.
- 5) The rates published in the Buildings SoR are ceiling rates and the estimate preparing authorities are responsible for the correctness and reasonableness of the rates and technical specifications adopted in the estimates.

PART - I

IRRIGATION & CAD

WORKS

**BASIC DATA
FOR
IRRIGATION WORK ITEMS**

**BASIC DATA FOR
IRRIGATION WORK ITEMS
FOR THE YEAR 2018-19
STATEMENT OF RATES FOR MATERIALS**

GENERAL GUIDE LINES FOR REVISING RATES OF MATERIALS:

- 1 Average of the prevailing market rates, ignoring freak rates, shall be the criteria for fixing market rates for materials.
- 2 The rates for materials shall be exclusive of seigniorage charges wherever applicable.
- 3 The rates for materials, except those for which lead charges are admissible as per the statement of lead charges, shall be for all leads.
- 4 The rates provided for useful rubble / stone chips from excavation shall be at dump yard.

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
1	Acetylene gas	cum	325
2	Asphalt 80/100 Grade	Kg	40
3	Binding wire	Kg	50
4	Burnt stone slab 10 cm thick	sqm	200
5 (a)	Ordinary Portland Cement (43/53 GRADE) *(Note: As per Monthly rate fixed by Sub-Committee)	tonne	4750
5 (b)	Portland Pozzolana Cement *(Note: As per Monthly rate fixed by Sub-Committee)	tonne	4650
5 (c)	Portland Slag Cement *(Note: As per Monthly rate fixed by Sub-Committee)	tonne	4500
6	Chequered plate	Kg	53
7	Coarse aggregate 10-4.75 mm(excluding Seigniorage charges)	cum	760
8	Coarse aggregate 20-10 mm(excluding Seigniorage charges)	cum	990
9	Coarse aggregate 40-20 mm(excluding Seigniorage charges)	cum	890
10	Coarse aggregate 80-40 mm(excluding Seigniorage charges)	cum	510
	The aggregate rates mentioned above (from SI.No.7 to SI.No.10) are exclusive of Seigniorage charges but including blasting charges of Rs.67/cum and 25% machine crushing charges. However, if the metal is obtained from hand broken, the blasting and crushing charges shall be deducted. The aggregate shall be HB Stone of Granite, Dolomite, Dolerite and Trap. (Quartzite and Basalt with aggregate impact of less than 20)		
11	Coir brush	Each	42
12	Copper sheet 16 SWG	kg	600
13	Coursed rubble stone 30 x 30 x 45 cm(excluding Seigniorage charges)	Each	20
14	Coursed rubble stone 30 x 30 x 60 cm(excluding Seigniorage charges)	Each	28

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
15	Curing Compound	Ltr	119
16	D – cord	Rm	8
17	Delay - noiseless trunk	Each	17
18	Detonating fuse coil	Rm	7
19	Detonating shock tube / Cord relays	Rm	30
20	Detonator delay type	Each	15
21	Detonator electric	Each	8
22	Detonator ordinary	Each	6
23	Empty cement bag	Each	5
24	Explosive ANFO	kg	55
25	Explosive ANFO high strength booster	kg	70
26	Explosive small dia (Kelvex-220 or equivalent)	kg	75
27	Fine aggregate/ sand(un- screened) for Concrete, Filtering items,Filling & Blindage (excluding Seigniorage charges)	cum	570
28	Fine aggregate /Sand (Screened) for Mortar ,Plastering items and Sand blasting items(excluding Seigniorage charges)	cum	760
29	Geo-textile (filter fabric) 160 gsm	sqm	34
30	Geo-textile (filter fabric) 200 gsm	sqm	42
31	Geo-textile (filter fabric) 250 gsm	sqm	51
32	G I Pipe 100 mm dia B Class	Rm	675
33	G I Pipe 15 mm dia A class	Rm	80
34	G I pipe 25 mm dia A class	Rm	128
35	G I pipe 40 mm dia B class	Rm	211
36	G I pipe 50 mm dia A class	Rm	245
37	G I Pipe 80 mm dia B Class	Rm	422
38	G.I Bolts / Nuts and Washers	kg	84
39 (a)	G.I sheet (plain)	tonne	51000
39 (b)	G.I sheet (corrugated)	tonne	54500
40	Hariyala turfing sods	sqm	32
41	Hectometer stone one line dressed	Each	270
42	Hemp yarn	kg	72

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
43	Honne wood planks	cum	62000
44	Hume pipe with collar 150 mm dia (NP2) (PH Rate)	Rm	260
45	Hume pipe with collar 300 mm dia (NP2) (PH Rate)	Rm	519
46	J- Bolts 30 cm long	Each	34
47	Jungle wood planks	cum	26000
48	Khandki stone 15 to 20 cm height	Each	13
49	Khandki stone 20 to 25 cm height	Each	16
50	Khandki stone 25 to 30 cm height	Each	18
51	Kilometer stone one line dressed	Each	490
52	LDPE sheet (Geo membrane) 500 micron thick	sqm	84
53	LDPE sheet (Geo membrane) 750 micron thick	sqm	118
54	LDPE sheet (Geo membrane) 1000 micron thick	sqm	160
55	M S Bolts / Nuts / Washers	kg	70
56	Murum (including loading charges but excluding Seigniorage charges)	cum	200
57	Oxalic acid	Ltr	85
58	Oxygen gas	cum	40
59	PVC sealing strip	Rm	41
60	PVC water stopper 310 mm wide	Rm	415
61	PVC pipe of 100 mm dia	Rm	152
62	Reinforcement steel (HYSD/TMT) from primary steel producers like TATA,SAIL,VSP,JSW, Shyam steel and GOEL TMT. *(Note: As per Monthly rate fixed by Sub-Committee)	tonne	47000
63	Resin bond Cement capsule	Each	38
64	Rough stone 20 x 20 x 75 cm (Including Loading charges but excluding Seigniorage Charges)	Each	25
65 (a)	Shahabad stone slab polished (including loading charges but excluding Seigniorage charges)	sqm	200
65 (b)	Shahabad stone slab non-polished (including loading charges but excluding Seigniorage charges)	sqm	150

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
66	Stone chips (at dump yard/Spoil)(including loading charges but excluding Seigniorage charges)	cum	185
67	Stone chips (at quarry) (including loading charges but excluding Seigniorage charges)	cum	360
68	Structural steel angle / channel / beam / bars *(Note: As per Monthly rate fixed by Sub-Committee)	tonne	43000
69	Structural steel plate / flats (including loading charges) *(Note: As per Monthly rate fixed by Sub-Committee)	tonne	43000
70	Super Plasticizer	Kg	55
71	Synthetic Enamel paint 1st quality	Ltr	190
72	Synthetic adhesive (Resin + Hardener)	Kg	278
73	Tar felt joint filler board 12 mm thick	sqm	379
74	Tar felt joint filler board 20 mm thick	sqm	580
75	Through stones 20 x 20 x 30 to 45 cm (including loading charges but excluding Seigniorage charges)	Each	23
76	Through stones 25 x 25 x 45 to 60 cm long (including loading charges but excluding Seigniorage charges)	Each	39
77	Through stones 30 x 30 x 65 to 75 cm long (including loading charges but excluding Seigniorage charges)	Each	59
78	Un-coursed rubble stones (at dump yard /Spoil) (including loading charges but excluding Seigniorage charges)	cum	170
79	Un-coursed rubble stones (at quarry)(including loading charges but excluding Seigniorage charges)	cum	340
80	Water proofing compound	kg	79
81	Welding electrodes 4 mm dia	Each	11
82	Wire brush	Each	35
83	Wire mesh 20 gauge	sqm	215
84	Zinc chromate red oxide primer paint. (as per BIS)	Ltr	135

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
85	inorganic zinc silicate	Ltr	476
86	solvent less coal tar epoxy paint	Ltr	206
87	Zinc phosphate primer (as per BIS)	Ltr	159
88	Allkyd based iron oxide paint (as per BIS)	Ltr	151
89 (a)	Cost of hdpe (80mm dia)	Rm	169
89 (b)	light black MS casing pipe 80mm dia (4mm thick)	Rm	574
90	welded steel wire fabric 100X100X5 mm size	Kg	155
91	Protective Mastic	Ltr	401
92	Solventless coal tar epoxy (brown)	Ltr	206
93	Excavation of drain with Excavator	cum	38
94	Manufactured Sand/Crushed stone sand/Rock sand 4.75mm to 2.36 mm as per IS 383 (1970) (excluding Seigniorage charges)	Cum	550
95	Fly ash conforming to IS: 3812 (Part II & I)	Cum	72
96	Benching old embankment slopes 0.45 X 0.45 M	RM	6
97	Laying of Sand Bags in the stipulated places including cost of empty cement bag, sand, thread, stitching charges and labour charges etc., with 13.615% overhead charges and contractors profit.	per bag	30
98	Rough stone for revetment 225mm thick (including Loading charges but excluding Seigniorage charges)	cum	200
99	Eradication of Weed growth from Drains, Canals by spraying Chemicals	sqm	3
100	Thinner	ltr	71
101	Credit for excavated rock found suitable for use	Cum	200
102	Earth Cost or compensation for earth taken from private land(Excluding Seigniorage Charges)	Cum	65

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
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**MATERIALS FOR GATES & HOISTS
FOR THE YEAR 2018-19**

GUIDE LINES :

- For cast steel / Alloy steel / Forged steel / Bronze, alluminium alloy components the rates shall be inclusive of cost of basic metal for these components, casting / forging charges, and machining charges on finished alloy component.
- For other materials the rates shall be prevailing market rates.

1	Alloy steel (IS : 1570-carbon steel) shafts	Kg	211
2	Alloy steel (IS : 1570-stainless steel) pins	Kg	363
3	Bolt / Nut / Washer (hot dipped galvanized)	Kg	105
4	Bolt / Nut / Washer (stainless steel)	Kg	312
5 (a)	Bronze (IS:305)bearings/bushes	Kg	844
5 (b)	Aluminum alloy(IS:305)bearings/bushes	Kg	844
6	Cast iron blocks	Kg	72
7	Cast steel drums / gears	Kg	207
8	Cast steel pinions	Kg	194
9	Cast steel wheels / pulleys / hubs / rollers / retainers	Kg	156
10	Chemical for de-greasing/ derusting/phosphate coating	Ltr	135
11	Coal tar epoxy paint	Ltr	211
12	Forged steel hooks / shackles	Kg	224
13	MS pipe 200 / 300 mm dia	Kg	148
14	MS pipe 32 mm dia	Rm	169
15	MS pipe 25 mm dia	Rm	139
16(a)	Rubber bottom seal (IS : 11855) 120 X 16 mm	Rm	658
16(b)	Rubber bottom seal (IS : 11855) 120 X 20 mm	Rm	793

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
17 (a)	Rubber side seal (music note type Teflon claded) (IS : 11855) 36Ø 113 x 14 mm	Rm	1,266
17 (b)	Rubber side seal (music note type Teflon claded) (IS : 11855) 50Ø 125 x 16 mm	Rm	1,941
18 (a)	Rubber side seal (music note type uncladed) (IS : 11855) 36Ø 113 x 14 mm	Rm	1,097
18 (b)	Rubber side seal (music note type uncladed) (IS : 11855) 50Ø 125 x 16 mm		1,688
19	Rubber side seal Z-type (IS : 11855)	Rm	1,603
20 (a)	Rubber corner seal (Teflon claded) (IS : 11855) 36Ø 113 x 14 mm	Each	2,700
20 (b)	Rubber corner seal (Teflon claded) (IS : 11855) 50Ø 125 x 16 mm	Each	3,544
21 (a)	Rubber corner seal (un claded) (IS : 11855) 36Ø 113 x 14 mm	Each	2,532
21 (b)	Rubber corner seal (un claded) (IS : 11855) 50Ø 125 x 16 mm	Each	3,376
22	Stainless steel plates / flats	Kg	253
23	Welding electrode 4 mm dia x 450 mm (radiographic low hydrogen)	Each	17
24	Welding electrode 4 mm dia x 450 mm (stainless steel)	Each	23
25	Wire rope 6x37 constn (IS : 2266)	Kg	203
26	Zinc	Kg	167
27	Zinc rich (zinc content : 90 %) epoxy primer	Ltr	587

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
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**DETAILS OF CAPITAL COST OF MACHINERY / EQUIPMENT
FOR THE YEAR 2018-19**

GUIDE LINES FOR FIXING CAPITAL COST OF MACHINERY / EQUIPMENT:

- 1 The Capital cost of machinery / equipment shall be prevailing market rates.
- 2 The Cost of transport vehicles / equipment shall be exclusive of cost of tyres and tubes.
- 3 The Cost of drill rods / drill bits / air hose / water hose / road tax / insurance charges and other consumeable accessories shall not be included in the capital cost.
- 4 In cases, where the current capital cost of machinery / equipment could not be collected through enquiries, the capital cost considered for previous year may be updated on the basis of average percentage increase / decrease in the index for machinery published in the R.B.I Bulletin.

1	Agitator car / Transit mixer 2 cum (excluding tyres)	Each	2,200,000
	tyres and tubes 6 sets		90,000
2	Air compressor 5 cmm electric	Each	710,000
3	Air compressor 7 cmm diesel	Each	950,000
4	Air compressor 7 cmm electric	Each	865,000
5	Air compressor 8.5 cmm diesel	Each	1,085,000
6	Air compressor 8.5 cmm electric	Each	1,120,000
7	Air compressor 15 cmm electric	Each	1,370,000
8	Angle Dozer 90 hp	Each	5,475,000
9	Batching plant 0.5 cum with accessories	Each	1,200,000
10	Batching plant 2 x 1.00 cum with accessories	Each	4,245,000
11	Batching plant 2 x 1.50 cum with accessories	Each	5,425,000
12	Bending machine	Each	530,000
13	Clamp shell and hoisting ropes	Each	30,000
14	Concrete bucket 1.5 cum	Each	56,000
15	Concrete hand mixer 45/30 ltr	Each	15,500
16	Concrete mixer 300/200 ltr(diesel)	Each	150,000
17	Concrete mixer 300/200 ltr (electric)	Each	145,000
18	Concrete mixer 600/400 ltr(diesel)	Each	260,000
19	Concrete mixer 600/400 ltr (electric)	Each	255,000
20	Concrete paver 100 Sqm / hr	Each	2,361,000

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
21	Convey mucker (excluding tyres)	Each	3,855,000
	tyres and tubes 6 sets		90,000
22	Core drilling machine	Each	1,150,000
23	Diesel generating set 30 KVA	Each	522,000
24	Diesel generating set 50 KVA	Each	744,000
25	Diesel Loco 45 hp	Each	2,120,000
26	Dewatering pump 5 hp diesel	Each	34,000
27	Dewatering pump 5 hp electric	Each	24,500
28	Dewatering pump 10 hp diesel	Each	60,000
29	Dewatering pump 10 hp electric	Each	55,000
30	Dewatering pump 20 hp diesel	Each	190,000
31	Dewatering pump 20 hp electric	Each	100,000
32	Drifter	Each	1,100,000
33	Drilling jumbo (excluding tyres)	Each	1,350,000
	tyres and tubes 6 sets		90,000
34	Dumper 4.5 cum (excluding tyres)	Each	1,500,000
	tyres and tubes 6 sets		90,000
35	Geophysical Ele.resistivity meter	Each	500,000
36	Grouting pump	Each	150,000
37	Guniting / sand blasting equipment	Each	280,000
38	Ice plant with accessories 30 t / day	Each	2,280,000
39	Jack hammer	Each	70,000
40	Needle vibrator 40 mm petrol	Each	14,500
41	Needle vibrator 40 mm electric	Each	13,500
42	Needle vibrator 60 mm petrol	Each	16,500
43	Needle vibrator 60 mm electric	Each	15,500
44	Planing machine 4 m stroke	Each	780,000
45	Plate shearing machine up to 12 mm	Each	450,000

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
46	Pneumatic placer 0.5 cum	Each	590,000
47	Pneumatic tamper	Each	85,000
48	Pug cutting machine	Each	17,500
49	Pusher leg	Each	52,000
50	Road roller diesel 10 t	Each	925,000
51	Shovel 0.50 cum 75 hp	Each	3,750,000
52	Shovel 0.85 cum 110 hp	Each	6,380,000
53	Stationery derrick crane 5 t	Each	653,000
54	Tipper 5 cum (excluding tyres)	Each	1,645,000
	tyres and tubes 6 sets		90,000
55	Tipping tub 1.5 cum	Each	260,000
56	Tower crane 5 tonne	Each	7,650,000
57	Transformer 250 KVA	Each	450,000
58	Truck 10 t (excluding tyres)	Each	1,475,000
	tyres and tubes 6 sets		90,000
59	Truck mounted derrick crane 5 t (excluding tyres)	Each	2,240,000
	tyres and tubes 6 sets		90,000
60	Upright drilling machine	Each	56,000
61	Ventilation fan 20 hp	Each	260,000
62	Vibratory pad foot roller 8 t	Each	2,950,000
63	Wagon drill	Each	650,000
64	Water tanker 8000 ltr (excluding tyres)	Each	1,440,000
	tyres and tubes 6 sets		90,000
65	Welding set	Each	48,000
66	Winch 35 hp electric	Each	375,000
67	Hydraulic Truck Crane 30T	Each	14,300,000
	tyres and tubes 6 sets		190,000
68	Hydraulic Truck Crane 16T	Each	10,200,000
	tyres and tubes 6 sets		190,000
69	Heavy Duty Airless Spray Painting Equipment	Each	490,000

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
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**ACCESSORIES TO MACHINERY / EQUIPMENT
FOR THE YEAR 2018-19**

1	Casing shoe bit	Each	8,861
2	Diamond core bit BX size	Each	9,283
3	Diamond core bit NX size	Each	10,970
4	Double tube core barrel	Each	11,814
5	Extension drill rod with coupling sleeve	Rm	2,110
6	Jack hammer drill rod 1.5 m	Each	4,641
7	Jack hammer drill rod 2.5 m	Each	5,823
8	Nozzle for Guniting / sand blasting gun	Each	675
9	Paving Cylinder	Each	24,051
10	Rails 30R (30 kg / m)	tonne	47,257
11	Reamer shell	Each	5,063
12	T.C. Cross bit 50 mm dia	Each	4,219
13	T.C. Cross bit 75 mm dia	Each	10,127
14	T.C. Cross bit 100 mm dia	Each	11,814
15	Tyres and Tubes for truck	Set	15,190
16	Wire rope 16 mm dia	Rm	224

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
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**OTHER COSTS ON MATERIAL / MACHINERY / EQUIPMENT
FOR THE YEAR 2018-19**

- 1 The rate provided for 'SUNDRIES' (Lumpsum provision for unquantified inputs in the data rates) shall be updated on the basis of general percentage increase / decrease in the market rates or on the basis of R.B.I ' All Commodity' index.
- 2 The rate for structural steel fabrication shall include cost of all materials (except structural steel), machinery, labour and one coat of primer painting.
- 3 Demand charges and electric power charges shall be as per prevailing TSCPDCL tariff.
- 4 Rate of interest on capital cost shall be as approved by Govt or other competent authority.

1	Air hose 25 mm dia	Rm	155
2	Air hose 50 mm dia	Rm	217
3	Demand charges (HT-I : General-11 KVA category) on power supply	KVA / month	370
4	Diesel	Ltr	72.17
5	Electric power (HT-VIII Category) including tax (1.5 times of the Tariff of HT-I(A): General-11 KVA category)	Kwhr	10
6	Excise duty on Gates / Hoist supplies	%	0
7	Insurance charges on machinery	% / annum	0
8	Interest on capital cost	% / annum	9.00%
9	Lubricants	Ltr	230
10	Petrol	Ltr	79.43
11	Rivets	Kg	84
12	Road tax on transport vehicles	Rs./annum	As per RTA
13	Shalimastic sealing compound	Kg	94
14	Shutter oil	Ltr	30
15	Structural steel fabrication	Kg	23
16	Sundries (Lump sum for un quantified inputs)	LS	20
17	Water hose (pressure) 20 mm dia	Rm	143

SI No.	DESCRIPTION OF MATERIAL	UNIT	S.Rate for the year 2018-19 (Rs)
18	Steel wedges	LS	16
19	Elbows / Nipple / Plugs etc.,	LS	17
20	Soldering materials	LS	17
21	Steam circulation arrangement	LS	17
22	Fuel charges (gas for heating)	LS	17
23	Vulcanizing materials	LS	17
24	Gas cutting set (2 No's 15 m hose and nozzle unit)	Each	14,250
25	Grease	Kg	232
26	Welding holder set (cable / holder / gloves / mask etc)	Each	7,800
27	Use rate of ropes	LS	150

**MATERIALS FOR GATES AND HOISTS
FOR THE YEAR 2018-19**

1	Worm reducers	Each	192,000
2	Electric motor 20 hp(Double Shaft)	Each	104,000
3	Electric motor 17.5 hp(Double Shaft)	Each	73,000
4	Electric motor 12.5 hp(Double Shaft)	Each	62,000
5	Electric motor 5 hp(Double Shaft)	Each	29,000
6	Electric motor 3 hp (Double Shaft)	Each	20,000
7	Electric motor 2 hp (Double Shaft)	Each	10,500
8	Floating shaft 300 mm dia	Kg	170
9	Manual operating system	Each	27,000
10	Gate position indicator	Each	200,000
11	Ele-magnetic brake	Each	32,500
12	Electric cable / switch / control panel etc	LS	56,000
13	Wire rope sockets	Each	4,620

LABOUR RATES

LABOUR RATES

SI No.	CATEGORY OF WORKER	S.Rate for the year 2018-19 (Rs)
I.	SKILLED CATEGORY:	
1	Bar bender	565
2	Black smith / Tin smith / Rivetor	470
3	Blaster (Licensed)	565
4	Carpenter CI- I	565
5	Electrician (Licensed)	540
6	Fitter CI- I	540
7	Floor Polisher / Tile Layer	470
8	Foreman	540
9	Gauge reader	470
10	Maistry / Work Inspector	565
11	Mason CI- I / Brick layer CI- I	470
12	Mechanic CI- I	500
13	Operator Air compressor / DG set	500
14	Operator Batching plant	540
15	Operator Bus/Ambulance/ Lorry/ Tanker	540
16	Operator Concrete / Asphalt mixer	500
17	Operator Concrete / Asphalt paver	500
18	Operator Concrete pump / Placer/ ice plant	500
19	Operator Core drilling machine	540

SI No.	CATEGORY OF WORKER	S.Rate for the year 2018-19 (Rs)
20	Operator Crane/ Tower crane/ Cable way	540
21	Operator Drilling jumbo / Loco / Winch	500
22	Operator Grouting/ Guniting/ Shotcreting	500
23	Operator Jackhammer/Pneumatic tamper	500
24	Operator Pump / Ventilation fan	500
25	Operator Lathe/Drilling/Shearing machine	540
26	Operator Bending / Planing machine	500
27	Operator Road roller	540
28	Operator Shovel / Scraper / Dozer	540
29	Operator Spillway / Sluice gate	500
30	Operator Crusher / Conveyor / Mucker	500
31	Operator Tipper / Dumper / Transit mixer	540
32	Operator Concrete vibrator	500
33	Operator Vibratory plain / padfoot roller	500
34	Operator Wagon drill / Drifter	540
35	Painter CI- I	540
36	Plumber (Licensed) / Pipe fitter	540
37	Sarang / Khalasi	500
38	Spun pipe moulder	500
39	Stone chiseller CI- I / Stone cutter CI- I	500
40	Struct. steel Fabricator / Marker / Erector	580
41	Welder / Gas Cutter	500

SI No.	CATEGORY OF WORKER	S.Rate for the year 2018-19 (Rs)
42	Welder (X-ray quality)	540
43	Caulker	540
44	Bore Mechanic	540
45	Plumber Class-I	540
II.	SEMI SKILLED CATEGORY:	
1	Asphalt Sprayer / Boiler attendant	450
2	Bhisti	450
3	Boatman with boat	450
4	Carpenter CI- II / Erector shuttering	450
5	Cartman with double bullock cart	500
6	Cartman with single bullock cart	450
7	Chavali / Navagani	450
8	Crowbarman / Jumperman	450
9	Fitter CI- II	450
10	Gangman / Head / Survey mazdoor	450
11	Gardener / Trained mali	450
12	Helper Air compressor / DG set	450
13	Helper Batching plant	450
14	Helper Blasting	450
15	Helper Bus/ Ambulance/ Lorry/ Tanker	450
16	Helper Bending/Shearing/Planing machine	450
17	Helper Carpenter	450

SI No.	CATEGORY OF WORKER	S.Rate for the year 2018-19 (Rs)
18	Helper Concrete / Asphalt mixer	450
19	Helper Concrete / Asphalt paver	450
20	Helper Core drilling machine	450
21	Helper Crane/ Tower crane/ Cable way	450
22	Helper Drilling jumbo / Loco / Winch	450
23	Helper Fitter / Fabrication	450
24	Helper Grouting/ Guniting/ Shotcreting	450
25	Helper Jack hammer / Pneumatic tamper	450
26	Helper Laboratory / Instrumentation	450
27	Helper Road roller	450
28	Helper Shovel / Scraper / Dozer	450
29	Helper Crusher / Conveyor / Mucker	450
30	Helper Tipper / Dumper/ Transit mixer	450
31	Helper Vibrator	450
32	Helper Vibratory plain/ padfoot roller	450
33	Helper Wagon drill/ Drifter	450
34	Lineman Electric / Telephone	450
35	Mason Cl- II / Brick layer Cl-II	450
36	Mechanic Cl- II	450
37	Painter Cl- II	450
38	Patkari / Neeraganti / Sowdy	450
39	Stone Chiseller Cl- II	450

SI No.	CATEGORY OF WORKER	S.Rate for the year 2018-19 (Rs)
40	Stone breaker / Hammerman	450
41	Valveman / Canal sluice operator	450
42	Plumber Class-II	450
43	Sewer Cleaner	450
III.	UN-SKILLED CATEGORY:	
1	Cement / Asphalt handling mazdoor	425
2	Civic worker	425
3	Heavy mazdoor	425
4	Light mazdoor	425
5	Watchman	425
IV.	OTHER CATEGORY:	
1	Care-taker / conductor / Lift attender	450
2	Cook / Messman	450
3	Dhobi	450
4	Diploma Engineer / Surveyor	750
5	Diver with headgear	540
6	Graduate / Laboratory Assistant	560
7	Graduate Engineer/ Geologist	960
8	Horticulture Assistant / Photographer	500

SI No.	CATEGORY OF WORKER	S.Rate for the year 2018-19 (Rs)
9	ITI certificate holder / Tracer / Printer	575
10	Literate mazdoor	425
11	Stenographer / Computer Operator	600
12	Telephone / Wireless Operator	550
13	Typist/Job Typist	550
14	CAD operator with diploma in Engineering/General degree with CAD Certificate	750
15	Jeep Driver	525
16	Data Processing Operator	700

Note : 1)The wage should not be less than the minimum wages of schedule of employment,subject to out turn.

2)25%extra over the corresponding labour rates in respect of the work to be done during night timesubject to issue of certificate accordingly by the concerned estimate sanctioning authority for providingin the data and by concerned Executive Engineer in charge of the work for payment.The night time allowance is applicable only to the works done under Greater Hyderabad Municipal Corporation and Greater Warangal Muncipal Corporation limits only.

HIRE CHARGES

HIRE CHARGES OF MACHINERY**FOR THE YEAR : 2018-19**

S.No	Description of machinery	Unit	Hire charge in Rs	Fuel charge in Rs	Crew Charge in Rs.	Total in Rs
1	2	3	4	5	6	7
1	Agitator car / Transit mixer 2 cum	Hour	739.60	1091.60	308.90	2140.10
2	Air compressor 5 cmm (electric)	Hour	101.00	302.10	185.30	588.40
3	Air compressor 7 cmm (diesel)	Hour	228.50	893.10	237.10	1358.70
4	Air compressor 7 cmm (electric)	Hour	123.00	402.80	185.30	711.10
5	Air compressor 8.5 cmm (diesel)	Hour	260.90	1116.40	237.10	1614.40
6	Air compressor 8.5 cmm (electric)	Hour	159.30	503.60	185.30	848.20
7	Air compressor 15 cmm (electric)	Hour	124.40	1119.00	197.60	1441.00
8	Angle Dozer 90 hp	Hour	1640.20	763.60	257.40	2661.20
9	Batching plant 0.5 cum(6 cum/hr)	Hour	103.20	134.30	370.60	608.10
10	Batching plant 2 x 1.00 cum(15 cum/hr)	Hour	365.10	402.80	370.60	1138.50
11	Batching plant 2 x 1.50 cum(50 cum/hr)	Hour	466.60	492.40	370.60	1329.60
12	Bending machine 3000 x 12 mm	Hour	38.30	134.30	148.20	320.80
13	Clamp shell and hoisting ropes	Hour	5.40	0.00	0.00	5.40
14	Concrete bucket 1.5 cum	Hour	15.20	0.00	0.00	15.20
15	Concrete hand mixer 45 / 30 ltr	Hour	5.30	0.00	0.00	5.30
16	Concrete mixer 300 / 200 (diesel)	Hour	51.30	99.20	247.00	397.50
17	Concrete mixer 300 / 200 ltr (electric)	Hour	49.50	44.80	247.00	341.30
18	Concrete mixer 600 / 400 (diesel)	Hour	88.80	198.50	247.00	534.30
19	Concrete mixer 600 / 400 ltr (electric)	Hour	87.10	89.50	247.00	423.60
20	Concrete paver 100 sqm / hr	Hour	326.40	0.00	474.20	800.60
21	Convey mucker	Hour	783.50	311.50	197.60	1292.60
22	Core drilling machine	Hour	314.10	297.70	308.90	920.70
23	Diesel generating set 30 KVA	Hour	65.10	793.90	148.20	1007.20
24	Diesel generating set 50 KVA	Hour	92.80	1190.80	148.20	1431.80
25	Diesel Loco 45 hp	Hour	359.70	669.80	185.30	1214.80
26	Dewatering pump 5 hp (diesel)	Hour	8.20	99.20	124.80	232.20
27	Dewatering pump 5 hp (electric)	Hour	2.80	44.80	93.60	141.20
28	Dewatering pump 10 hp (diesel)	Hour	14.40	198.50	124.80	337.70
29	Dewatering pump 10 hp (electric)	Hour	6.20	89.50	93.60	189.30
30	Dewatering pump 20 hp (diesel)	Hour	45.70	396.90	124.80	567.40
31	Dewatering pump 20 hp (electric)	Hour	11.30	179.00	93.60	283.90
32	Drifter	Hour	312.80	0.00	386.10	698.90
33	Drilling jumbo	Hour	365.50	53.60	197.60	616.70
34	Dumper 4.5 cum	Hour	579.40	500.10	247.10	1326.60
35	Geophysical Electric resistivity meter	Hour	99.80	0.00	0.00	99.80
36	Grouting pump	Hour	34.10	44.80	296.40	375.30
37	Guniting / sand blast equipment	Hour	105.90	0.00	247.00	352.90
38	Ice plant & accessories 30 t / day	Hour	152.20	1275.70	148.20	1576.10
39	Jack hammer	Hour	19.90	0.00	370.50	390.40
40	Needle vibrator 40 mm (petrol)	Hour	5.40	21.80	177.80	205.00
41	Needle vibrator 40 mm (electric)	Hour	5.00	9.00	177.80	191.80
42	Needle vibrator 60 mm (petrol)	Hour	6.10	32.80	177.80	216.70
43	Needle vibrator 60 mm (electric)	Hour	5.70	13.40	177.80	196.90
44	Planing machine 4 m stroke	Hour	107.80	134.30	237.10	479.20
45	Plate shearing machine upto 12 mm	Hour	40.80	179.00	154.40	374.20
46	Pneumatic placer 0.5 cum	Hour	167.40	0.00	97.50	264.90
47	Pneumatic tamper	Hour	19.30	0.00	296.40	315.70
48	Pug cutting machine	Hour	6.70	4.50	0.00	11.20
49	Pusher leg	Hour	11.80	0.00	0.00	11.80
50	Road roller diesel 10 t	Hour	202.10	893.10	247.10	1342.30
51	Shovel 0.50 cum 75 hp	Hour	951.60	595.40	257.40	1804.40
52	Shovel 0.85 cum 110 hp	Hour	1618.90	1091.60	257.40	2967.90
53	Stationary derrick crane	Hour	79.40	0.00	0.00	79.40
54	Tipper 5 cum	Hour	436.20	375.10	193.10	1004.40
55	Tipping tub 1.5 cum	Hour	66.60	0.00	0.00	66.60
56	Tower crane 5 tonne	Hour	807.10	232.80	205.90	1245.80
57	Transformer 250 KVA	Hour	4737.50	0.00	0.00	4737.50
58	Truck 10 t	Hour	401.00	375.10	193.10	969.20

HIRE CHARGES OF MACHINERY

FOR THE YEAR : 2018-19

S.No	Description of machinery	Unit	Hire charge in Rs	Fuel charge in Rs	Crew Charge in Rs.	Total in Rs
1	2	3	4	5	6	7
59	Truck mounted derrick crane 5 t	Hour	559.70	375.10	193.10	1127.90
60	Upright drilling machine/Grinder	Hour	21.30	44.80	210.60	276.70
61	Ventilation fan 20 hp	Hour	10.60	179.00	32.30	221.90
62	Vibratory pad foot roller 8 t	Hour	1292.50	1290.00	296.40	2878.90
63	Wagon drill	Hour	177.50	0.00	308.90	486.40
64	Water tanker 8000 ltr	Hour	393.70	375.10	193.10	961.90
65	Welding set	Hour	15.00	107.40	0.00	122.40
66	Winch 35 hp (electric)	Hour	123.00	219.30	296.40	638.70
67	Tractor with 2T roller	Hour				345.00
68	Hydraulic Truck Crane 30T	Hour	2874.40	118.80	584.10	3577.30
69	Hydraulic Truck Crane 16T	Hour	2107.70	75.00	584.10	2766.80
70	Heavy Duty Airless Spray Painting Equipment	Hour	118.70			118.70

**CONVEYANCE
CHARGES OF MATERIALS**

COM-LDLFT

Abstract
**LEAD, LIFT, LOADING AND UNLOADING CHARGES FOR MATERIALS
FOR THE YEAR: 2018-19**

- COM-LDLFT
- 1 For total lead upto 150 m (including initial lead) lead charges by head load only shall be adopted irrespective of mode of conveyance.
 - 2 For total lead exceeding 150 m conveyance by mechanical means only shall be adopted irrespective of mode of conveyance.
 - 3 The rates for loading at quarry including idle hire charges of trucks and hire charges per for each kilometer and upto 5 km are cumulative and inclusive of total charges for preceding lead.
 - 4 Unless otherwise specified lead charges for Earth / Sand / Gravel / Aggregates and Stones are for loose volume and not for compacted or in-situ volume.
 - 5 The rates for lift charges, lead charges hire charges are cumulative and inclusive of rates for preceding lift, load and hire charges
 - 6 Lift charges are not payable where conveyance of materials is by mechanical means to final placing point.
 - 7 Loading and unloading charges are not payable for conveyance by head load.
 - 8 Loading charges are not payable for conveyance by mechanical means for disposal of excavated materials beyond initial lead of 50 m wherever specified.
 - 9 Loading and unloading charges are not payable for conveyance by mechanical means for disposal of excavated materials beyond initial lead of 1 km wherever specified.
 - 10 The rates for unloading of materials except earth, sand, gravel, coarse aggregate, rubble, size stone and cut stone are inclusive of stacking.
 - 11 Hire charges are per 1KM for tippers and trucks for transport of materials from work site to dump yard and other places are cumulative & includes previous km upto 5 kms
 - 12 **The lead & lift charges are inclusive of contractor's profit and overhead charges of 13.615%**
 - 13 **During the BoCE meeting held on 26-05-2016, it is observed that in some of the estimates, Lead Charges are being added directly to the material basic rates for arriving the finished item rate. In view of that, the BoCE has instructed to see that while arriving the finished item rate, the lead charges are to be added to the material basic rates only after deducting the provision of "Contractor's Profit and Overhead charges"**

**COM-LDLFT-1 A. (Lead) Conveyance Charges for materials by head load
FOR THE YEAR: 2018-19**

Sl No.	Total distance (Total lead includes initial lead)	Earth / Sand /Gravel / Murrum/ Lime/ Surki/ Size stone / Cut stone Rubble / Coarse	Cement / Reinforce-ment steel Str steel Rs / tonne	PCC slab/ Shahbad slab / CC block/ BS slab/ Late- rite / Wood Rs / cum
1	2	3	4	5
1	Total lead upto 50 m (covered by item rate)	initial lead	initial lead	initial lead
2	Total lead upto 100 m	69.00	40.20	87.80
3	Total lead upto 150 m	138.00	80.50	175.60

Notes: 1. No loading or unloading charges are admissible for conveyance by head load.

2. For total lead exceeding 150 m conveyance charges by mechanical means only shall be adopted irrespective of mode of conveyance.

3. The Lead & Lift Charges are inclusive of 13.615% Contractor's Profit and Over Head Charges

COM-LDLFT-2 B.(Lead) Conveyance charges for machinery per kilometer for transporting materials

by tippers and trucks excluding loading, unloading and idle hire charges of machinery

(No loading and unloading charges allowed for machinery loading and unloading)

Sl No.	Distance	(Lead) charges for trucks and tippers for Earth / Sand /Gravel / Murrum/ Lime/ Surki/ per cu.meter	(Lead) charges for trucks and tippers for Rubble/Size stones/ Cut Stones/ Coarse aggregate per cu.meter	(Lead) charges for trucks and tippers for Cement/ Steel/ RCC poles/ AC & GI sheets/ Packed materials/ton- ne	(Lead) charges for trucks and tippers per cu.meter for PCC slabs/ Shahabad slabs/ CC & Laterite blocks/ Wood/ cum	(Lead) charges for trucks and tippers per cu.meter for water/ 1000 litres	(Lead) charge s for trucks per 1000 Nos. of Bricks
1	2	3	4	5	6	7	8
1	Lead upto 1 km	34.20	33.00	20.60	48.60	20.50	55.10
2	Lead upto 2 km	47.90	46.20	28.90	68.00	28.70	77.10
3	Lead upto 3 km	63.90	63.90	39.90	94.00	38.30	102.80
4	Lead upto 4 km	77.60	77.60	48.50	114.10	46.40	124.80
5	Lead upto 5 km	91.30	91.30	57.10	134.30	54.60	146.80
6	for Every km beyond 5 km upto 30 km	13.70	13.70	8.60	20.10	8.20	22.00
7	for Every km beyond 30 km	11.40	11.40	7.10	16.80	6.80	18.40

Note: The Lead & Lift Charges are inclusive of 13.615% Contractor's Profit and Over Head Charges

COM-LDLFT-3 C. LOADING AND UNLOADING CHARGES BY MANUAL MEANS (idle hire charges of trucks are not added)

Sl No.	Description of item	Earth / Sand /Gravel /Murrum/ / Surki/ Rs / cum	Rubble/ size stone/ cut stone/ Coarse aggregate,Lime in Rs/cum	cement in Rs/tonne	steel in Rs./tonne	brick work Rs/1000 No
1	2	3	4	5	6	7
1	Loading	22.90	45.80	75.50	90.50	62.90
2	Unloading	11.45	22.90	75.50	90.50	62.90

Note:The Lead & Lift Charges are inclusive of 13.615% Contractor's Profit and Over Head Charges

COM-LDLFT-4 D. LOADING AND UNLOADING CHARGES BY MANUAL MEANS (including idle hire charges of trucks)

Sl No.	Description of item	Earth / Sand /Gravel /Murrum/ / Surki/ Rs / cum	Rubble/ size stone/ cut stone/ Coarse aggregate,Lime in Rs/cum	cement in Rs/tonne	steel in Rs./tonne	brick work Rs/1000 No
1	2	3	4	5	6	7
1	Loading	123.00	145.90	185.60	200.60	244.60
2	Unloading	44.70	72.95	185.60	200.60	244.60

Note:The Loading & Unloading Charges are inclusive of 13.615% Contractor's Profit and Over Head Charges

COM-LDLFT-5 E. LOADING AND UNLOADING CHARGES BY MECHANICAL MEANS (including idle hire charges of trucks)

Sl No.	Description of item	Earth / Sand /Gravel /Murrum/ / Surki/ Rs / cum	Rubble/ size stone/ cut stone/ Coarse aggregate,Lime in Rs/cum
1	2	3	4
1	Loading	55.50	110.60
2	Unloading	17.30	17.30

Note:The Loading & Unloading Charges are inclusive of 13.615% Contractor's Profit and Over Head Charges

COM-LDLFT-6 F. LIFT CHARGES FOR MATERIALS BY HEAD LOAD

Sl No.	Total lift (Total lift includes initial lift)	Earth / Sand /Gravel /Murrum/ Lime/ Surki/ Size stone / Cut stone Rubble / Coarse aggregate Rs / cum	Cement / Reinforce-ment steel Str steel Rs / tonne	PCC slab/ Shahbad slab / CC block/ BS slab / Laterite / Wood Rs / cum
1	2	3	4	5
1	Total lift upto 3 m (covered by item rate)	Initial lift	Initial lift	Initial lift
2	For Every 1.00 Lift beyond initial lift of 3 meters	8.00	5.80	10.70

Note:The Lead & Lift Charges are inclusive of 13.615% Contractor's Profit and Over Head Charges

PART - II

ROADS & BRIDGES

WORKS

LABOUR RATES
FOR ROAD AND BRIDGE WORKS FOR THE YEAR 2018-19

S No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19	Remarks
1	2	3	4		7
(A) SKILLED WORKMEN					
First Class					
1	a	Mason and stone cutter	Day	500	As per I&CAD (S.No.39)
2	b	Brick Layer	Day	470	As per I&CAD (S.No.11)
3	c	Carpenter	Day	565	As per I&CAD (S.No.4)
4	d	Painter	Day	540	As per I&CAD (S.No.35)
5	e	Plumber	Day	540	As per I&CAD (S.No.36)
6	f	Welder	Day	500	As per I&CAD (S.No.41)
7	g	Fitter	Day	540	As per I&CAD (S.No.6)
8	h	Electrician	Day	540	As per I&CAD (S.No.5)
9	1	Cook	Day	450	As per I&CAD (S.No.2) Other Category
10	2	Mechanic	Day	500	As per I&CAD (S.No.12)
12	6	Blaster(licensed)	Day	565	As per I&CAD (S.No.3)
13	3	Barbender	Day	565	As per I&CAD (S.No.1)
14	7	Tipper and Heavy Vehicle Driver above 12 T	Day	540	As per I&CAD (S.No.15)
15		Road Roller Driver (7.5 T to 12 T)	Day	540	As per I&CAD (S.No.27)
Operator					
16		Concrete Mixer	Day	500	As per I&CAD (S.No.16)
17		Vibrator	Day	500	As per I&CAD (S.No.32)
18		Jack Hammer	Day	500	As per I&CAD (S.No.23)
19		Driller	Day	540	As per I&CAD (S.No.34)
20	11	Pump operator	Day	500	As per I&CAD (S.No.24)
21	13	Wireless Operator	Day	550	As per I&CAD (S.No.12) Other Category
22	15	Jeep Driver	Day	525	As per I&CAD (S.No.15) Other Category
23	16	Work Inspector with I.T.I qualification	Day	575	As per I&CAD (S.No.9) Other Category
24	17	Work Inspector with LCE, LME,L.E.E qualification	Day	750	As per I&CAD (S.No.4) Other Category
25	18	Work Inspector with B.E (Civil Mechanical and Electrical qualification	Day	960	As per I&CAD (S.No.7) Other Category
26	19	Work Inspector with Non-technical qualification SSLC/SSC/HSC	Day	565	As per I&CAD (S.No.10)
27	27 a(i)	Typist/Job Typist	Day	550	As per I&CAD (S.No.13) Other Category
28	a (ii)	Computer operator	Day	600	As per I&CAD (S.No.11) Other Category

S No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19	Remarks
1	2	3	4		7
29	b	"CAD Operator with Diploma in Engineering /General degree with CAD certificate"	Day	750	As per I&CAD (S.No.14) Other Category
(B) SEMI –SKILLED WORKMEN					
SECOND CLASS					
30	1	Mason	Day	450	As per I&CAD (S.No.35) Semi-Skilled
31	b	Brick Layer and Stone Cutter	Day	450	As per I&CAD (S.No.35) Semi-Skilled
32	c	Carpenter	Day	450	As per I&CAD (S.No.4) Semi-Skilled
33	d	Painter	Day	450	As per I&CAD (S.No.37) Semi-Skilled
34	10	Telephone Operator	Day	550	As per I&CAD (S.No.12) Other Category
35	13	Hammer Man	Day	450	As per I&CAD (S.No.40) Semi-skilled
37	1	Head Mazdoor (Mukaddar)	Day	450	As per I&CAD (S.No.10) Semi Skilled
(C) UNSKILLED WORKMEN					
38	2	Man Mazdoor	Day	425	As per I&CAD (S.No.3) Un-Skilled
39	3	Watch Man	Day	425	As per I&CAD (S.No.5) Un-Skilled
40	5	Woman Mazdoor	Day	425	As per I&CAD (S.No.4) Un-Skilled
Note : Whenever unskilled workmen are engaged for cleaning of Sewers & Septic Tanks, they may be paid double of the above wages.					
(D) OTHER CONVEYANCE ITEMS					
41	1	Single bullock with driver and cart	Day	450	As per I&CAD (S.No.6) Semi Skilled
42	3	Bullock pair with driver and cart	Day	500	As per I&CAD (S.No.5) Semi Skilled
43	6	Nava with crew	Day	450	As per I&CAD (S.No.3) Semi Skilled

Note :-

1) The wage should not be less than the minimum wages of schedule of employment, subject to out turn.

2) 25% extra over the corresponding labour rates in respect of the work to be done during night time subject to issue of certificate accordingly by the concerned estimate sanctioning authority for providing in the data and by concerned Executive Engineer in charge of the work for payment. The night time allowance is applicable only to the works done under Greater Hyderabad Municipal Corporation and Greater Warangal Municipal Corporation limits only.

MATERIAL RATES
FOR ROAD AND BRIDGE WORKS FOR THE YEAR 2018-19

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
		(A) STONE AND ROAD MATERIALS		
		ROUGH STONE QUARRIED INCLUDING WEDGING, BREAKING, BURNING, SPLITTING		
1	22.a	For R.R Masonary Work (other than Granite, Dolomite and Trap	1 cum	152
2	b.I	For SS Revetment work 225 mm	1 cum	152
3	b.ii	For SS Revetment work 300 mm	1 cum	156
4	b.iii	For SS Revetment work 450 mm	1 cum	129
5	c	Jeddy Stone above 450 mm to 600 mm	1 cum	179
6	d I.	Laterite for revetment 225 mm	1 cum	112
7	d II.	Laterite for revetment 300 mm	1 cum	131
8	d.iii	Granite for SS revetment 225 mm	1 cum	146
9	d.iv	Granite for SS revetment 300 mm	1 cum	148
		Note:- Only when other than granite is not available		
10	e	Laterite for masonry	1 cum	129
11	f	Cyclopean stones above 0.2 cum	1 cum	241
12	g	For R.R.Masonry works (granite, dolomite and trap variety) including loading & unloading	1 cum	239
13		NOTE:- For items 22(a) to 22(c) ,22d.iii,22d.iv 22(f) and 22(g) add extra Rs /cum, wherever quarrying is done by blasting	1 cum	67
		COURSED RUBBLE STONE QUARRYING WEDGING, BREAKING, BURNING AND SPLITTING FOR SS FIRST SORT WORKS		
14	23.a	Granite, dolomite and trap	1 cum	249
15	b	For other varieties	1 cum	179
16	27	Granite stone slabs for culverts, lintels and copings (3 faces dressed coarsed rubble masonry)	1 cum	1642
17		NOTE: - For items 23(a), 23(b) and 27 add extra Rs. Per Cum, wherever quarrying is done by blasting	1 cum	67
18	28	Bond stones (600 x 200 x 200 mm)	each	29
19	b	Chainage stones and Centre line stones (750x150x150mm)	each	35
	29 (a)	Kilometers stones (1100 x 370 x 250 mm)	each	Based on detailed analysis as per MoRTH Data
	b	5th Kilometers stones (1520 x 520 x 250 mm)	each	
	30 (a)	Hectometers stones (900 x 200 x 200 mm)	each	
20	31	Demarcation Stones (900 x 150 x 150 mm)	each	67
21	32.a	Guard Stones (1200 x 200 x 200 mm)	each	97
22	b	Guide Stones (800 x 150 x 150 mm)	each	67
23	c	Carving letters and figures in stone up to 100 mm size	each	8
24	d	Carving letters and figures in stone above 100 mm size	each	9

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
		HARD BROKEN STONE OF GRANITE, TRAP AND DOLERITE FREE FROM DUST OBTAINED BY QUARRYING, WEDGING, BREAKING, BURNING AND SPLITTING .		
25	33.a	- do - 6mm size (IS383,1970)	1 cum	505
26	b	- do - 10mm size (IS383,1970)	1 cum	657
27	c	- do - 12mm size (IS383,1970)	1 cum	781
28	d	- do - 20mm size (IS383,1970)	1 cum	870
29	e	- do - 25mm size (IS383,1970)	1 cum	830
30	f	- do - 40mm size (IS383,1970)	1 cum	505
31	g	- do - 50mm size (IS383,19705)	1 cum	433
32	h	- do - 60mm size (IS383,1970)	1 cum	398
33	I	- do - 65mm size (IS383,1970)	1 cum	360
34	j	- do - 75mm size (IS383,1970)	1 cum	289
35	k	- do - 75 to 100mm size (IS383,1970)	1 cum	236
36		NOTE:- (1) Add extra Rs. /- per cum for items 33 (a) to 33 (k) if the metal is obtained by blasting		67
37		(2) Add 25% extra per cum if the metal is obtained by machine crushing excluding cost of blasting.		25%
38		(3) Deduct Rs. /- per cum if the metal or rubble is obtained from surface stone and boulders.		9.9
39		(4) Add Rs. /- per cum for selection of stones and boulders from excavated spoil dumps for items 33 a to 33 k, when this addition of Rs. /- per Cum is allowed deduction of Rs. /- per Cum mentioned under Note (3) above should invariably be made.		17
		SOFT BROKEN STONE SCREENED AND FREE FROM DUST		
40	33.l	- do - 40 mm size (IS383,1970)	1 Cum	117
41	33.m	- do - 50 mm size (IS383,1970)	1 Cum	105
42	33.n	- do - 60 mm size (IS383,1970)	1 Cum	83
43	33.o	- do - 65 mm size (IS383,1970)	1 Cum	74
44	33.p	- do - 75 mm size (IS383,1970)	1 Cum	69
		HARD BROKEN STONE OF GRANITE TRAP DOLERITE AND DOLAMITE FREE FROM DUST OBTAINED BY QUARRYING WEDGING, BREAKING, BURNING AND SPLITTING (QUARTZITE AND BASALT WITH AGGREGATE IMPACT OF LESS THAN 20)		
45	33a	-do- 2.36 mm to 5 mm size (IRC, MORTH & MORD)	1 cum	485
	b	-do- 5 mm to 7 mm size (IRC, MORTH & MORD)	1 cum	485
46	c	-do- 9.5 mm to 11.2 mm size (IRC, MORTH & MORD)	1 cum	620
47	d	-do- 12mm to 14 mm size (IRC, MORTH & MORD)	1 cum	700

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
48	e	-do- 19 mm to 22 mm size (IRC,MORTH & MORD)	1 cum	821
49	f	-do- 25 mm to 27 mm size (IRC,MORTH &MORD)	1 cum	790
50	g	-do- 40 mm to 45 mm size (IRC , MORTH &MORD)	1 cum	520
51	h	-do- 50 mm to 55 mm size (IRC,MORTH & MORD)	1 cum	440
52	i	-do- 60 mm to 63 mm size (IRC, MORTH &MORD)	1 cum	400
53	j	-do- 65 mm size (IRC ,MORTH &MORD)	1 cum	360
54	k	-do- 75 mm size (IRC,MORTH &MORD)	1 cum	290
55	1	NOTE:- Add extra Rs. /- per cum for items 33 (a) to 33 (j) if the metal is obtained by blasting	1 cum	67
56	2	Add 25% extra per cum if the metal is obtained by machine crushing excluding cost of blasting.	1 cum	25%
57	3	Deduct Rs. /- per cum if the metal or rubble is obtained from surface stones and boulders	1 cum	9.9
58	4	Add Rs. /- per cum for selection of stones and boulders from excavated soil dumps for items 33 (a) to 33 (k), when this addition of Rs. /- per cum allowed deduction of Rs. /- per cum mentioned under note (3) above should invariably be made	1 cum	17
		HARD BROKEN STONE OTHER THAN GRANITE SUCH AS QUARTZ, QUARTZ-NAPA AND BASALT SCREENED AND FREE FROM DUST		
59	33.q	- do - 10 mm size (IS383,1970)	1 Cum	367
60		-do- 9.5 mm to 11.2 mm size (IRC,MORTH & MORD)	1 Cum	367
61	r	- do - 12 mm size (IS383,1970)	1 Cum	344
62		-do- 12mm to 14 mm size (IRC , MORTH & MORD)	1 Cum	344
63	s	- do - 20 mm size (IS383,1970)	1 Cum	278
64		-do- 19 mm to 22 mm size (IRC,MORTH & MORD)	1 Cum	278
65	t	- do - 25 mm size (IS383,1970)	1 Cum	273
66	u	- do - 40 mm size (IS383,1970)	1 Cum	162
67		-do- 40 mm to 45 mm size (IRC , MORTH & MORD)	1 Cum	162
68	v	- do - 50 mm size (IS383,1970)	1 Cum	143
69		-do- 50 mm to 55 mm size (IRC,MORTH &MORD)	1 Cum	143
70	33.w	- do - 65 mm size (IS383,1970)	1 Cum	135
71		-do- 60 mm to 65 mm size (IRC, MORTH &MORD)	1 Cum	135
72	x	- do - 75 mm size (IS383,1970)	1 Cum	111
73		- do - 75 mm size (IRC ,MORTH & MORD)	1 Cum	111
74	y	- do - 75 to 100 mm size (IS383,1970)	1 Cum	87
75		- do - 75 to 100 mm (IRC, MORTH & MORD)	1 Cum	87
		OTHER ITEMS		
76	33.z1	Laterite 40 to 75 mm (ring)	1 Cum	96
77	z2	kankar, hard broken kankar 40 to 75 mm (ring)	1 Cum	71
78	z3	Soling stone of 150 mm size of granite, trap and Dolomite varieties.	1 Cum	90

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
79		NOTE:- (1) Add extra for items to 33(z3) Rs /- Per cum, wherever quarrying is done by blasting. (2) Wherever controlled blasting is resorted to the Chief Engineer concerned shall approve the observed data in support of SS item No. 22 a to 22 c , 22g, 23	1 Cum	67
80	z4	Soling stone of 150 mm size other than granite variety	1 Cum	63
81	z5	Soling Stone laterite, Kankar 150mm, surface stone	1 Cum	39
82	z6	Field picked metal unbroken 20 mm size	1 Cum	52
83	z7	- do - 25 mm size	1 Cum	40
84	z8	- do - 40 mm size	1 Cum	46
85	z9	- do - 50 mm size	1 Cum	40
86	z10	- do - 60 mm size	1 Cum	34
87	z11	- do - 80 mm size	1 Cum	30
88		NOTE:- Add Rs. /- Per Cum for selection of stone and boulders from excavated spoil dumps for items 33 (Q) TO 33 Z , when this addition of Rs. /- Per cum is allowed deduction of Rs. /- per cum should invariably be made towards the metal or rubble if it is obtained from surface stone and boulders.		16
89	34	Gravel	1 Cum	98
90	35 a	Quarry rubbish	1 Cum	77
91	b	HBG Stone Chips 2.36mm and below	1 Cum	485
92	36.a	Sand for mortar, ceiling coat including washing screening etc.,	1 Cum	760
93	36.b	Sand for Concrete	1 Cum	570
94	36.c	Sand for filling and blindage	1 Cum	570
95	37	Clay for puddle and masonry Items 38 (a) to 39 (h) As per local prevailing rates based on competitive quotations.	1 Cum	33
		(C) LIME AND CEMENT		
96	40 to 41(c)			
97	42	Cement	Metric Tonne	Monthly Rates as communicated by Govt.

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
		NOTE: (1) The rate is material at site (No conveyance charges to be allowed) 2)As per the rates applicable to the District. 3) Least of the (1) and (2) above may allowed 4) The price of cement will be reviewed and fixed on monthly basis as per G.O.Ms.No.94 T,R&B Dept Dt16-4-2008 and rates will be communicated separately.		
98	42.a	Labour for mixing cement mortar	1 Cum	Based on detailed analysis as per MoRTH Data
99	b	Mixing of cement mortar by machine	1 Cum	
100	c	Grinding lime mortar or Surkhi mortar	1 Cum	89
101	d	Shell lime slaked and screened	1 Cum	893
102	e	White cement	1 Kg.	
		(D) MORTARS		
103	43 to 45	Items 43 to 45		
		(E) METAL AND IRON WORKS		
104		Mild steel rods 6mm dia.	One Metric Tonne	Monthly Rates as communicated by Govt.
105		Mild steel flats	One Metric Tonne	
106		Mild Steel, Structural Steel, I.e., Angles, Channels and I sections.	One Metric Tonne	
107		High Yield Strength Deformed Bars	One Metric Tonne	
108		Mild Steel Plates	One Metric Tonne	
		NOTE: (1) The rate are inclusive of sales tax. 2) As per the rates applicable to the District. 3) Least of the (1) and (2) above may allowed 4) The prices of steel will be reviewed and fixed on monthly basis as per G.O.Ms.No.94 T,R&B Dept, Dt 16-4-2008 and rates will be communicated separately.		
		III RATES OF WORKS		
		(A) CLEARING SITE		
109	1.a	Clearing heavy Jungle	1 Sqm	Based on detailed analysis as per MoRTH Data
110	b	Clearing light Jungle	1 Sqm	
111	c	Clearing Scrub Jungle	1 Sqm	
112	d	Clearing Juliflora (Prosafis) jungle including up-rooting and removing of Juliflora stumps.	1 Sqm	3.5
113	2.a.I	Cutting and removing Palmyrah trees including stacking of girth 30 to 100 cm.	Each	18
114	ii	- do - 100 to 200 cm.	Each	42
115	2.b.I	Uprooting and removing Palmyrah stumps including stacking of girth 30 to 100 cm.	Each	44
116	ii	- do - 100 to 200 cm.	Each	46
117	2.c.I	Cutting and removing date trees including stacking of girth 30 to 100 cm	Each	23
118	ii	- do - 100 to 200 cm	Each	33
119	d.I	Uprooting and removing stumps of date trees including stacking of girth 30 to 100 cm.	Each	23

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
120	ii	- do - 100 to 200 cm	Each	29
121	e I	Cutting and removing other kind of trees including stacking of girth 30 to 100 cm	Each	29
122	ii	- do - 100 to 200 cm	Each	44
123	iii	- do - above 200 cm	Each	71
124	f.I	Uprooting and removing stumps of other kind of trees including stacking of girth 30 to 100 cm.	Each	23
125	ii	- do - 100 to 200 cm	Each	31
126	iii	- do - above 200 cm	Each	39
127	3.a	Uprooting and clearing prickly pear jungle	1 Sq.m	2
128	b	- do - under 2.5 meters height including burning and burying as directed.	1 Sq.m	2.9
129	c	- do - over 2.5 meters height including burning and burying with an initial lead of conveyance	1 Sq.m	3.3
130	4.a	Removing of natchu, goobi, thooti etc., from drains, channels including clearance if not more than 1 metre depth of water with an initial lead of 10 metres and lift of 2 metres.	1 Sq.m	1.8
131	b.I	Clearing alchi, tilla	1 Sq.m	3.6
132	b.ii	Removal of Jammu	1 Sq.m	3.1
133	c.I	Removal of imponea, cornea	1 Sq.m	3.4
134	c.ii	Removal of water hyacinth up to 30 cm thick.	1 Sq.m	3.5
135	c.iii	- do - more than 30 cm thick	1 Sq.m	4.8
136	d	Removal of natchu, goobi, thooti etc., for every extra lead or lift over the initial lead or lift.	1 Sq.m	1.3
		(B) DISMANTLING		
	5	DISMANTLING, CLEARING AWAY MATERIALS USEFUL FOR REUSE.		
137	n.(i)	Dry rough stone revetment for aprons and stacking within 40 metres	1 cum	59
		(C) QUARRYING AND BLASTING		
138	6	Blasting and removing hard granite measured in solid	1 cum	Based on detailed analysis as per MoRTH Data
	7	Drilling holes in hard granite or sheet rock		
	a)	Manually (Hand)		
139	I)	20 mm dia meter	1 RM	118
140	ii)	25 mm dia meter	1 RM	124
141	iii)	36 mm dia meter	1 RM	143
	b)	Pneumatic Compressor		
142	I)	20 mm dia meter	1 RM	133
143	ii)	25 mm dia meter	1 RM	144
144	iii)	36 mm dia meter	1 RM	157
	8	Grouting the holes with neat cement slurry excluding cost of steel		
145	I)	20 mm dia meter	1 RM	84
146	ii)	25 mm dia meter	1 RM	105

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
147	iii)	36 mm dia meter	1 RM	131
		(D) EARTH WORK		
148		NOTE:- 1. Standard Specification No.20-A requires breaking clods, ramming and sectioning of spoil bank etc.,		
149		2. Standard Specification No.20-B does not require that three items of work detailed above, but does require neat banking in accordance with the standard specification.		
150		3. A separate rate for these three items of work will not be necessary where the earth work is executed under the standard specification No. 20-A.		
151a		Allowances for Excavation and Forming Embankment:		
		(I) Top soil removal - up to 5%		
		(ii) Consolidation allowance to Proctor's Density - 10%		
		(iii) Shrinkage Allowance - 2 to 2.5%		
		(iv) Wastage - 1%		
		(v) Allowance for removal of boulders - Nil		
151b		Conveyance by Lorries not applicable to head leads		
		(vi) Clay 25%		
		loamy, Red Earth, Gravel, Homogeneous soils- 18%		
		(vii) Allowance for compaction and Shrinkage- 12 to 12.5%		
		EARTH WORK EXCAVATION AND DEPOSITING ON BANK WITH AN INITIAL LEAD OF 10 METRES AND AN INITIAL LIFT OF 2 METRES IN CASE OF HEAD LEAD ONLY.		
152	8.a	Sand or loose soils wet sand not under water, silt in canals, channels and drains SS 20-A.	1 cum	
153	b	- do - 20-B	1 cum	
154	9.a	Loamy and Clayey soils like black cotton soils, red earth and ordinary g	1 cum	
155	b	- do - 20-B	1 cum	
156	10.b	Slushy soil and silt clearance up to 0.60 metres depth SS 20-B	1 cum	
157	11.b	Clayey Soil in wet and slushy condition SS 20-B	1 cum	
158	12.a	Hard Gravelly Soils SS 20-A	1 cum	
159	b	- do - SS 20-B	1 cum	
160	13.a	Mixture of gravel and soft disintegrated rock like shales ordinary gravel, stoney earth and earth mixed with fair sized boulders SS 20-A	1 cum	
161	b	- do - 20-B	1 cum	
162	14	Soft disintegrated rock (removable by pick axes and crow bars)	1 cum	
163	15	Stone matrix	1 cum	
164	16	Hard disintegrated rock or soft rock or conglomerate rock etc., removable by pick axes and crow bars	1 cum	
165	17	Hard disintegrated rock or soft rock or conglomerate rock and Hard lime kankar requiring partial blasting.	1 cum	
166	18.a.I	Fissured and fractured rock and boulders up to 3 cum in size requiring blasting including stacking	1 cum	
167	a.ii	- do - Stacking is not done	1 cum	

Based on detailed analysis as per MoRTH Data

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
168	18.b.I	Excavation of Nandyal Slabs more than 3 cum in size requiring blasting including stacking	1 cum	Based on detailed analysis as per MoRTH Data
169	b.ii	- do - Stacking is not done	1 cum	
170	19.a.I	Hard rock and boulders more than 3 cum in size requiring blasting including stacking	1 cum	
171	a.ii	- do - Stacking is not done	1 cum	
	a.iii	Hard rock and boulders more than 3 cum in size wherever quarrying is done by controlled blasting.	1 cum	
	a.iv	- do - Stacking is not done	1 cum	
172	19.b	Benching, chiseling, wedging and boring in rock in foundation grade levelling.	1 cum	
		FOR ALL SOILS, SOFT DISINTEGRATED ROCK AND STONE MATRIX (ITEM N0s 8-b to 15 ABOVE)		
173	20.a.I	Extra for every additional 10 metres lead or part there of over the initial lead for the first 3 extra leads	1 cum	Based on detailed analysis as per MoRTH Data
174	ii	-do- from 4 th extra lead to 6 th extra lead	1 cum	
175	iii	-do- from 7 th extra lead to 9 th extra lead	1 cum	
		FOR HARD DISINTEGRATED ROCK (ITEM 16 TO 17 ABOVE)		
176	20bi	(Extra for every additional 10 metres lead or part there of) over the initial lead for the first 3 extra leads	1 cum	
177	ii	Extra for every additional 10 mtrs. Lead or part there of from 4 th extra lead to 6 th extra lead	1 cum	
178	iii	-do- from 7 th extra lead to 9 th extra lead	1 cum	
		FOR FISSURED AND FRACTURED HARD ROCK AND BOULDERS ETC., (ITEM 18 & 19 a ABOVE)		-
179	20.c.I	(Extra for every additional 10 metres lead or part there of) over the initial lead for the first 3 extra leads	1 cum	Based on detailed analysis as per MoRTH Data
180	ii	Extra for every additional 10 mtrs. Lead or part there of from 4 th extra lead to 6 th extra lead	1 cum	
181	iii	-do- from 7 th extra lead to 9 th extra lead	1 cum	
		FOR ALL SOILS, SOFT DISINTEGRATED ROCK AND STONE MATRIX (ITEM N0s 8-b to 15 ABOVE)		-
182	21.a.I	Extra for every additional 1 metre lift or part there of over the initial lift for the first 3 extra lifts	1 cum	Based on detailed analysis as per MoRTH Data
183	ii	Extra for every additional 1 mtrs. lift or part there of from 4 th extra lift to 6 th extra lift	1 cum	
184	iii	-do- from 7 th extra lift and above	1 cum	
		FOR HARD DISINTEGRATED ROCK (ITEM 16 & 17 ABOVE)		-
185	21.b. I	Extra for every additional 1 metres Lift or part there of over the initial lift for first 3 extra lifts	1 cum	Based on detailed analysis as per MoRTH Data
186	ii	Extra for every additional 1 mtrs. lift or part there of from 4 th extra lift to 6 th extra lift	1 cum	
187	21.b.iii	-do- from 7 th extra lift and above	1 cum	

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
		FOR FISSURED AND FRACTURED, HARD ROCK AND BOULDERS ETC., (ITEM 18 TO 19 a ABOVE).		-
188	21.c.I	Extra for every additional lift of 1 metre or part there of over the initial lift for the first 3 extra lifts	1 cum	Based on detailed analysis as per MoRTH Data
189	ii	Extra for every additional lift of 1metre or part there of over from 4th extra lift to 6 th extra lift	1 cum	
190	iii	-do- from 7 th extra lift and above	1 cum	
		Note: The lift charges mentioned in SS item Nos 21a,21 b, and 21c under (D) Earth work are applicable to delifts also.		
191	22.a	Add to relevant SS 20-A rates for new tank bunds, closing breaches, road formation and embankments for extra watering and consolidation by stone roller up to 1 tonne.	1 cum	
192	b	- do - with stone roller 2 tonnes or cattle treading	1 cum	
193	b(I)	Add to relevant SS 20-A rates for new tank bunds, closing breaches, road formation and embankments for extra watering and consolidation by pneumatic tampers at 90% proctor's density.	1 cum	
194	c	Add to relevant SS 20-A rates for new tank bunds, closing breaches, road formation and embankments for extra watering and consolidation of proctor's density with 8 to 10 tonne power roller including watering and conveyance of water for initial lead of 1/2 Kilometer.	1 cum	
195		Note: The element of Hire charges is Rs 51.76 per 10 cum corresponding to the hire charges of 8 to 10 Tonne power roller fixed at Rs. 2200 /- per day of 8 hours. The rate shall be increased when the element of hire charges increases for item No. 22 c above, if the roller is lent to the contractor at a rate of Rs 275/- per hour (i.e.,) Rs 2200 /- per day of 8 hours may be effected.)		
196	22.d	Extra for every additional 1/2 km lead for water over the initial lead of 1/2 Km for consolidation of banks .	1 cum	
197	23.a	Benching old embankment slopes 0.45 x 0.45 metres.	1 RM	
198	23.b	Puddle wall work	1 cum	
199	24	Turfing slopes including watering for 3 months with initial lead for conveyance of water and grass for 1 hectometer.	1 Sq.m	
200	25	Refilling with the excavated sand complying with the standard specifications for filling foundations	1 cum	
201	26.a	Refilling with the excavated soils (other than sand) complying with the standard specifications for filling foundations.	1 cum	
202	b	Trimming of slopes of embankments and depositing the soils on the top of the bank.	1 cum	
203	c	Ploughing	1 Sq.m	

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
		(E) CONCRETE AND (G) STONE MASONRY		
203		SSI NOS 31a to 39 and SSI Nos. 60 to 87		
		Note:		
204		1. Add for vibrating concrete	1 cum	Based on detailed analysis as per MoRTH Data
205		2. Add for machine mixing of concrete.	1 cum	
206		3. Add where the power is available for operating the mixer, the rate is,	1 cum	
207	a I	White washing and colour banding for guard and guide stones including cost of materials	each	
208	b I	Screening sand and gravel	1 cum	
209	b 2	Screening chips and metal	1 cum	
210	c 1	Removing and refixing Hectometer or Demarcation stones	each	
		CENTERING CHARGES		
211	L 1	Centering charges for culvert slabs and other structures of 3 mts. span and above	1 cum	
212	L 2	Centering charges for bed blocks and culvert slabs and other structures of less than 3 mts. span.	1 cum	
		CENTERING CHARGES FOR MINOR AND MAJOR BRIDGE WORKS		
213	L3	For mass concrete piers, abutments and steining well curbs, well caps etc.,	1 cum	Based on detailed analysis as per MoRTH Data
214	L 4	For RCC piers, abutments, wing wall, steining, well curbs, well caps etc.,	1 cum	
215		NOTE:- The rates under L3 and L 4 are applicable to Roads and Buildings and Irrigation structures up to 2 metres width		
216	L 5	For RCC deck slabs	1 cum	
217	L 6	For RCC beams	1 cum	
218	L 7	For RCC hand rails	1 cum	
219	L 8	For CC pavements, wearing coats, approach, slabs, guide stone, J. M. stone etc.,	1 cum	
	n	Laying and fixing RCC Hume pipes in position including lifting, aligning etc., complete with (fixing) collars for the following diametres of pipes but excluding cost of materials (NP2 Class)		
220	n 1	250 mm diameter	1 Rm	Based on detailed analysis as per MoRTH Data
221	n 2	300 mm diameter	1 Rm	
222	n 3	450 mm diameter	1 Rm	
223	n 4	600 mm diameter	1 Rm	
224	n 5	750 mm diameter	1 Rm	
225	n 6	800 mm diameter	1 Rm	
226	n 7	1000 mm diameter	1 Rm	
227	n 8	1220 mm diameter	1 Rm	
228		Note:- For NP3 class 50% extra over the rates of NP2. Class may be allowed.		

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
		(S) ROAD WORK ITEMS		
		PICKING OLD METALLED SURFACE TO DEPTH OF 40 TO 100 mm SPREADING OLD METAL AND NEW METAL SECTIONING INCLUDING EDGEBUNDS AND SUBGRADE ROLLING, SPREADING METAL INCLUDING BLINDAGE OF GRAVEL WATERING WITH AN INITIAL LEAD OF 2 HECTOMETERS AND HAND ROLLER (1.5 TO 2 TONNES) ROLLING ETC., INCLUDING BARRICADING, DIVERSION OF TRAFFIC AND WETTING THE NEW CONSOLIDATION FOR A FORTNIGHT COMPLETE.		
		(For a compact thickness)		
	1 (I)	HARD METAL		
229	a	40 mm thickness	10 sqm	Based on detailed analysis as per MoRTH Data
230	b	50 mm thickness	10 sqm	
231	c	75 mm thickness	10 sqm	
232	d	100 mm thickness	10 sqm	
	1 (ii)	For compact thickness of soft metal		
233	a	50 mm thickness	10 sqm	Based on detailed analysis as per MoRTH Data
234	b	75 mm thickness	10 sqm	
235	c	100 mm thickness	10 sqm	
236	2	Picking 5 to 100 mm old metal surface and sectioning	10 sqm	
237	3	Picking gravelled surface 25 mm deep and levelling and sectioning	10 sqm	
238	4	Picking the existing B.T. surface and removal of chips	10 sqm	
239	5	Picking old metal surface to a depth of 40 to 100 mm and spreading metal including watering with an initial lead of 2 Hectometers and rolling with power rollers watering and spreading gravel for blindage and power roller rolling including hire charges of power roller rolling including hire charges of power roller (8 to 10 T) barricading and diversion of traffic and wetting the new consolidation for a fortnight (for compacted thickness of)		
		HARD METAL		
240	5 (a)	40 mm thickness	10 sqm	Based on detailed analysis as per MoRTH Data
241	(b)	50 mm thickness	10 sqm	
242	(c)	75 mm thickness	10 sqm	
243	(d)	100 mm thickness	10 sqm	
244	(e)	150 mm thick excluding hire charges	10 sqm	

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
		Spreading gravel watering with an initial lead of 2 hectometers and power roller (8 to 10 T) rolling excluding hire charges of power roller and barricading etc., (for a compact thickness of)		
245	6a	50 mm thickness	10 sqm	-
246	b	75 mm thickness	10 sqm	-
247	c	100 mm thickness	10 sqm	-
248	d	150 mm thickness	10 sqm	-
249	7a	Blinding the road surface 6 mm thick with gravel or sand available at site after remaining loose stones including watering.	10 sqm	-
250	b	-do- without watering	10 sqm	-
251	8a	Blinding the road surface 6 mm thick with gravel or sand dug from road site including watering.	10 sqm	-
252	b	-do- without watering	10 sqm	-
253		Spreading gravel sand including watering and roller rolling (for compacted thickness of)		-
254	9a	-do- 6mm to 20 mm thick	1 cum	-
255	b	-do- from 20 to 25 mm thick	1 cum	-
256	c	-do- from 25 to 40 mm thick	1 cum	-
257	d	-do- from 40 to 50 mm thick	1 cum	-
258	10	Picking 50 to 100 mm Old metalled surface, spreading metal and blindage watering tamping for patch repairs (labour only)	10 sqm	-
259	11	Picking old metalled surface 50 to 100 mm deep spreading gravel watering and tamping (labour only)	10 sqm	-
260	12	Levelling ruts and tamping gravelled roads	10 sqm	-
261	13	Levelling ruts and tamping metalled roads	10 sqm	-

S. No	S.S. Item No.	Description	Unit	SoR Rate for 2018-19 (Rs)
1	2	3	4	6
262	14	Spreading gravel or sand including watering and rolling with hand roller irrespective of thickness in layer	10 cum	-
263	15(I)	Carrying for water for WBM consolidation metal and blindage of 40 to 150 mm thickness for every one hectometer beyond initial lead of 2 hectometers beyond initial lead of 2 hectometers	10 sqm	-
	(ii)	Rate towards the cost of water to be consumed for Cement Concrete Roads(including curing) under Greater Hyderabad Municipal Corporation limits only, subject to issue of certificate by the concerned Executive Engineer in charge of the work that water required for the work is to be purchased from other source.	1 sqm	-
264		Gelatin(For MORTH data,for works of state & national high ways only)	Per Kg	Rate as per local Market
265		Electric Detonators(For MORTH data,for works of state & national high ways only)	each	
266		Hot applied thermoplastic compound(For MORTH data, for works of state & national high ways only)	Per Litre	
267		Reflectionising glass beads of 2 mm thick(For MORTH data, for works of state & national high ways only)	Per Kg	
268		Road marking paint conforming to IS 164(For MORTH data, for works of state & national high ways only)	Per Kg	
		BAILING OUT WATER CHARGES FOR CD & CM WORKS (WHEREVER REQUIRED)		-
267	I 14	For earth work excavation for foundations below low water level	1 cum	Based on detailed analysis as per MoRTH Data
268	I 15	For cement concrete for foundation below low water level	1cum	
269	n	Labour charges for laying filters with coarse aggregate.	1 cum	
270	o	Labour charges for laying filter with sand.	1 cum	
271		Jute Rope	Mtr	8.3
272		De bonding Strips	Mtr	10
273		Selent	Ltr	66
274		Ply sheet 125 micron	1 Sqm	17
275		Rural water	1 kl	73
276		Urban water	1 kl	98

HIRE CHARGES OF PLANT AND MACHINERY
FOR ROAD AND BRIDGE WORKS FOR THE YEAR 2018-19

Sl. No.	Description		Unit	Hire Charges for 2018-19	Remarks
	Machine	Activity		(Rs)	
1	2	3	4	6	7
1	Dozer(D 80)	Spreading	Per Hour		As per I&CAD S.No 8
		Cutting			
		Cleaning			
2	Dozer(D 50)	Spreading Cutting Cleaning	Per Hour	1758.4	
3	Mortor Grader	Clearing	Per Hour	3601.92	
		Spreading			
		GSB			
		WMM			
4	Hydraulic Excavator	Soil Ordinary	Per Hour		As per I&CAD S.No.52
		Soil Marshy			
		Soil unsuitable			
5	Front end loader	Soil loading	Per Hour	1843.52	
		Aggregate loading	Per Hour		
6	Tipper- 5.5 Cum	Transportation of soil, GSB,WMM, Hot mix etc	Per Hour		As per I&CAD S.No.54
7	Vibratory roller 8 tonne	Earth/Soil, GSB,	Per Hour		As per I&CAD S.No.62
		WMM			
8	Smooth wheeled roller 8 tonne	Soil compaction ,BM compaction	Per Hour		As per I&CAD S.No.50
9	Water tanker 8 Kilolitre	Water transport	Per Hour		As per I&CAD S.No.64
10	Water tanker 6 Kilolitre	Water transport	Per Hour	698.88	
11	Tractor	Pulling	Per Hour	464.8	
12	Tractor with rotavator	Scarifying	Per Hour	472.64	
13	Tractor with ripper attachment	Scarifying	Per Hour	568.232	
14	Air Compressor	General purpose	Per Hour		As per I&CAD S.No.2
15	Wet mix plant 60 TPH	Wet mix	Per Hour	1843.52	
16	Mechanical broom Hydraulic	Surface cleaning	Per Hour	399.84	
17	Bitumen Pressure Distributor	Applying bitumen tack coat	Per Hour	1677.76	
18	Emulsion Pressure Distributor	Applying emulsion tack coat	Per Hour	963.2	
19	Hot mix Plant – 120 TPH capacity	DBM/BM/SDC /Premix	Per Hour	31556	
20	Hot mix Plant – 100 TPH capacity	DBM/BM/SDC /Premix	Per Hour	27071.52	
21	Hot mix Plant – 60 TPH capacity	DBM/BM/SDC	Per Hour	24268.16	
		/Premix			
22	Hot mix Plant – 40 to 60 TPH capacity	DBM/BM/SDC	Per Hour	21414.4	
		/Premix			

Sl. No.	Description		Unit	Hire Charges for 2018-19	Remarks
	Machine	Activity		(Rs)	
1	2	3	4	6	7
23	Paver Finisher Hydrostatic with sensor	DBM/BM/SDC /Premix	Per Hour	3426.6512	
24	Paver finisher Mechanical 100	Paving of WMM, paving of DLC	Per Hour	2518.88	
25	Hydraulic Chip Spreader	Surface dressing	Per Hour	2875.04	
26	Tandem Road roller	Rolling of Asphaltic surface	Per Hour	1843.52	
27	Pneumatic Road roller	Rolling of Asphaltic surface	Per Hour	1436.96	
28	Pot-Hole repair machine	Repair of pot-holes	Per Hour	946.4	
29	Bitumen boiler oil fired	Bitumen Spraying	Per Hour	234.08	
30	GSB Plant 50 Cum	Producing GSB	Per Hour	1280.16	
31	Mastic Cooker	Mastic wearing coat	Per Hour	72.8	
32	Batching and Mixing Plant (a) 30 Cum capacity	Concrete mixing	Per Hour	1379.728	
	(b) 15 - 20 Cum capacity	Concrete mixing	Per Hour		As per I&CAD S.No.10
33	Transit mixer	Transportation of concrete mix	Per Hour		As per I&CAD S.No.1
34	Concrete pump of 45 and 30 cum	Pumping of Concrete	Per Hour	899.36	
35	Cranes				
	(a) 80 tonnes	Lifting purpose	Per Hour	1311.52	
	(b) 35 tonnes			885.92	
	(c) 3 tonnes			394.24	
	(d)Crane with grab bucket 0.75 cum	Well foundation	Per Hour	2419.2	
	(e)Crane with grab bucket 1 cum	Well foundation	Per Hour	3955.84	
36	Concrete bucket	For pouring concrete	Per Hour		As per I&CAD S.No.14
37	Kerb casting machine	Kerb making	Per Hour	348.32	
38	Concrete mixer	Concrete mixing	Per Hour		As per I&CAD S.No.18
	(a)0.28 cum				
	(b) 1.0 cum	Concrete mixing	Per Hour	726.88	
39	Piling rig with bantonite pump	0.75 m dia to 1.20 m dia boring attachment	Per Hour	6132	
40	Concrete paver finisher with 40 HP motor	Paving of concrete surface	Per Hour	3248	
41	Integrated stone crusher	Crushing of spalls 100 TPH	Per Hour	9757.44	
		Crushing of spalls 200 TPH	Per Hour	20573.28	
42	Pre stressing jack with pump and access	Stressing of steel wires/stands	Per Hour	157.92	

Sl. No.	Description		Unit	Hire Charges for 2018-19	Remarks
	Machine	Activity		(Rs)	
1	2	3	4	6	7
43	Generator	Generation of electric energy	per hour	2072	As per I&CAD S.No.23
	250 KVA			1478.4	
	125 KVA			1261.12	
	100 KVA				
	30 KVA		per hour		
44	Pneumatic sinking of Plants	Pneumatic sinking of wells	Per K.m.	62.72	
45	Truck 5.5 cum per 10 tonnes	Material transport	Per Km.		As per I&CAD S.No.58
46	Road marking machine	Road marking	Per Hour	124.32	
47	Mobile slurry seal equipment	Mixing and laying slurry seal	Per Hour	1261.12	
48	Plate compacter	For compacting in medians	Per Hour	53.76	
49	Drilling equipment	For drilling	Per Hour		As per I&CAD S.No.22

Note: The above hire charges of machinery & plant includes crew, oils, conveyance of machinery to site and all other incidental charges.

PART - III

BUILDING WORKS

GOVERNMENT OF TELANGANA



BUILDINGS – SoR: 2018-2019

COMMITTEE OF CHIEF ENGINEERS

**SCHEDULE OF RATES
FOR
BUILDINGS WORKS**

**FOR THE YEAR 2018-2019
(Effective from 1st June, 2018)**

ALL ENGINEERING DEPARTMENTS

Office of the Engineer-in-Chief (R&B)
NH, CRF, LWE & Buildings
Convener-Member,
Committee of Chief Engineers-Buildings-SoR

Procs.No.EE(B)/DEE2AEE/B-SoR/2018-19, Dt: 08-06-2018.

Sub:- Printing of Buildings-SoR for all the Engineering Departments specific to the functioning of Building works - Telangana Buildings-SoR:2018-19 - Communication of Buildings-SoR - Reg.,

Ref:- 1. G.O.Rt.No.471, T,R&B (R.1) Dept., Dt:20-04-2007.
2. Minutes of Committee of Chief Engineers meetings for finalizing the Building-SoRs held on Dt: 28-05-2018.

* * * * *

The Government have constituted a Committee of Chief Engineers of Engineering departments dealing with Building works for finalizing and communicating Buildings-SoR (Civil & Electrical) vide G.O. 1st cited. In accordance therewith the Committee of Chief Engineers has finalized and approved the Telangana Buildings-SoR: 2018-19 in the Minutes of Meeting held on 28-05-2018.

The rates for the Building items (Civil, Water Supply & Sanitary and Electrical items) are to be followed henceforth by all the concerned departments for building works. The rates of Labour Rates, Common Material & Work items, Public Health items, Conveyance Rates of Materials & Hire charges of Telangana Common SoR-2018-19 remain unchanged. No other items other than the items communicated in this Buildings-SoR shall be introduced.

The Heads of Departments mentioned below are authorized to print the Telangana Buildings-SoR: 2018-19. The unauthorized printing & selling of the Buildings-SoR is strictly prohibited. The revised rates will come into force with immediate effect. The receipt of the proceedings may please be acknowledged.

Enclosed: Buildings SoR: **2018-19**-CD as above

**Sri. I. Ganapathi Reddy
Engineer-in-Chief (R&B)
NH, CRF, LWE & Buildings
Convener-Member,
Committee of Chief Engineers-Buildings-SoR**

To

1. Engineer-in-Chief (R&B) (State Roads, CRN), Roads & Buildings Department, Errummanzil, Hyderabad-82.
2. Engineer-in-Chief (IW) I&CAD, Irrigation Department, Errummanzil, Hyderabad-82.
3. Chief Engineer (R&B) (D&P), Roads & Buildings Department, Errummanzil, Hyderabad-82.
4. Chief Engineer (R&B) (Admn & QC), Roads & Buildings Department, Errummanzil, Hyderabad-82.
5. Chief Engineer (R&B) (Rural Roads) Roads & Buildings Department, Errummanzil, Hyderabad-82
6. Engineer-in-Chief, (PHE) Public Health Engineering. Department, A,C, Guards, Hyderabad-4.
7. Engineer-in-Chief (Admn) Panchayat Raj Department, Errummanzil, Hyderabad-82.
8. Engineer-in-Chief, Tribal Welfare & Social Welfare Department, DSS Bhavan, Masab tank, Hyderabad.
9. Engineer-in-Chief, Greater Hyderabad Municipal Corporation (GHMC), CC Complex, Tankbund Road Hyderabad
10. Chief Engineer (Telangana State Housing Board) Gruhakalpa, Nampally, Hyderabad
11. Chief Engineer (Telangana State Housing Corporation) Urdugally, Himayatnagar, Hyderabad
12. Chief Engineer (TSSRTC), RTC 'X' Roads, Musheerabad, Hyderabad.
13. Chief Engineer (TSMSIDC), IIIrd Floor, DM&HS Campus, Sultanbazar, Koti, Hyderabad.
14. Chief Engineer (Telangana State Police Housing & Welfare Corporation), Lakdi-ka-pool, Hyderabad.
15. Superintending Engineer (R&B), Head Quarters Circle, Khairatabad, Hyderabad
16. Superintending Engineer (R&B), Electrical Circle, Errummanzil, Hyderabad-82.

INDEX FOR CIVIL ITEMS OF TELANGANA BUILDINGS SoR: 2018-19

Sl. No	SECTION	ITEM CODE	DESCRIPTION OF THE ITEM	FROM	TO
A	SECTION		BRICKS & BUILDING BLOCKS		
			(Ex-quarry price - including loading excluding material GST, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	TBSC-A.I-01 - 02	ORDINARY CLAY BRICKS		
II	SUB-SECTION	TBSC-A.II-01 - 14	FLY-ASH CEMENT/LIME SOLID BLOCKS		
III	SUB-SECTION	TBSC-A.III-01 - 04	AUTOCLAVED CONCRETE BLOCKS		
B	SECTION		NATURAL FLOORING STONES		
			(Ex-quarry price - including loading excluding material GST, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	TBSC-B.I-01-09	LOCALLY AVAILABLE FLOORING STONES		
II	SUB-SECTION	TBSC-B.II-01-04	NATURAL FLOORING STONES - MARBLE		
III	SUB-SECTION	TBSC-B.III-01-04	NATURAL FLOORING STONES - GRANITE		
C	SECTION		WALL & FLOOR TILES		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-C.I-01 -04	NON-PORCELAIN CERAMIC FLOOR TILES		
II	SUB-SECTION	TBSC-C.II-01-16	PORCELAIN VITRIFIED FLOOR TILES		
III	SUB-SECTION	TBSC-C.III-01-03	CERAMIC WALL TILES		
IV	SUB-SECTION	TBSC-C.IV-01-14	PORCELAIN WALL TILES		
V	SUB-SECTION	TBSC-C.V-01-04	GLASS MOSAIC TILES		
VI	SUB-SECTION	TBSC-C.VI-01-04	WALL CLADDING TILES		
VII	SUB-SECTION	TBSC-C.VII-01-03	TERRAZZO FLOOR TILES (PLAIN & CHEQUERED)		
VIII	SUB-SECTION	TBSC-C.VIII-01-08	CEMENT CONCRETE FLOOR TILES (PLAIN & CHEQUERED)		
IX	SUB-SECTION	TBSC-C.IX-01-06	PRE-CAST CONCRETE BLOCKS FOR PAVING		
X	SUB-SECTION	TBSC-C.X-01-03	VINYL FLOORING		
D	SECTION		TIMBER & ROOFING MATERIALS		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
			Note: Before proposing the Teak Wood Items, the estimating authorities shall obtain prior approval from the competent authority		
I	SUB-SECTION	TBSC-D.I-01-04	MEDIUM TEAK WOOD		
II	SUB-SECTION	TBSC-D.II-01-04	BEST TEAK WOOD		
III	SUB-SECTION	TBSC-D.III-01-04	BURMA TEAK WOOD		
IV	SUB-SECTION	TBSC-D.IV-01-02	ASSAM TEAK WOOD		
V	SUB-SECTION	TBSC-D.V-01-02	SAL/ COUNTRY WOOD		
VI	SUB-SECTION	TBSC-D.VI-01-19	ROOFING MATERIAL		
E	SECTION		STEEL MATERIALS		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-E.I-01-15	MILD STEEL MATERIALS		
II	SUB-SECTION	TBSC-E.II-01-11	GALVANIZED STEEL MATERIALS		

III	SUB-SECTION	TBSC-E.III-01-02	STAINLESS STEEL MATERIALS		
F	SECTION		GLASS MATERIALS		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-F.I-01-06	PLAIN GLASS PANES		
II	SUB-SECTION	TBSC-F.II-01-02	PIN HEADED GLASS PANES		
III	SUB-SECTION	TBSC-F.III-01-06	TINTED GLASS PANES		
IV	SUB-SECTION	TBSC-F.IV-01-02	FROSTED/ GROUND GLASS PANES		
V	SUB-SECTION	TBSC-F.V-01-05	TOUGHENED GLASS PANES		
G	SECTION		PAINTS & POLISHES		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-G.I-01-19	PRIMERS, FILLERS & BASES		
II	SUB-SECTION	TBSC-G.II-01-04	DISTEMPER PAINTS		
III	SUB-SECTION	TBSC-G.III-01-03	EMULSION BASED PAINTS		
IV	SUB-SECTION	TBSC-G.IV-01-02	SOLVENT BASED PAINTS		
V	SUB-SECTION	TBSC-G.V-01-02	OIL BASED ENAMEL PAINTS		
VI	SUB-SECTION	TBSC-G.VI-01-02	TEXTURE PAINTS		
VII	SUB-SECTION	TBSC-G.VII-01-04	SPECIAL PAINTS		
H	SECTION		PARTICLE BOARDS		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-H.I-01-10	MELAMINE FACED PLAIN PARTICLE BOARD		
II	SUB-SECTION	TBSC-H.II-01-06	INSULATING PARTICLE BOARDS		
III	SUB-SECTION	TBSC-H.III-01-52	MEDIUM DENSITY FIBRE BOARDS		
IV	SUB-SECTION	TBSC-H.IV-01-25	CEMENT BONDED PARTICLE BOARDS		
J	SECTION		PLYWOODS, LAMINATES & VENEERS		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-J.I-01-07	MOISTURE RESISTANT (MR) GRADE		
II	SUB-SECTION	TBSC-J.II-01-07	BOILING WATER RESISTANT (BWR) GRADE		
III	SUB-SECTION	TBSC-J.III-01-06	VENEERED DECORATIVE PLYWOOD		
IV	SUB-SECTION	TBSC-J.IV-01-06	LAMINATES		
V	SUB-SECTION	TBSC-J.V-01-02	COMMERCIAL VENEERS		
K	SECTION		CEILINGS, WALL PARTITIONS & WALL LININGS		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-K.I-01-30	FALSE CEILINGS - TILES/ SHEETS		
II	SUB-SECTION	TBSC-K.II-01-24	FALSE CEILINGS - SECTIONS & ACCESSORIES		
III	SUB-SECTION	TBSC-K.III-01-12	WALL LINING & PANELLING		
IV	SUB-SECTION	TBSC-K.IV-01-18	PARTITIONS		
L	SECTION		DOORS, SHUTTERS & FRAMES		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-L.I-01-20	DOOR FRAMES		
II	SUB-SECTION	TBSC-L.II-01-26	DOOR SHUTTERS WITHOUT FRAMES		
III	SUB-SECTION	TBSC-L.III-01-29	DOORS WITH SHUTTERS & FRAMES		
IV	SUB-SECTION	TBSC-L.IV-01-04	CUP-BOARD DOORS		
M	SECTION		WINDOWS		

			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-M.I-01-29	OPENABLE WINDOWS		
II	SUB-SECTION	TBSC-M.II-01-15	SLIDING WINDOWS		
III	SUB-SECTION	TBSC-M.III-01-08	VENTILLATORS		
N	SECTION		STRUCTURAL GLAZING & CURTAIN WALLING		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-N.I-01-05	FIXED GLAZING		
II	SUB-SECTION	TBSC-N.II-01-02	STRUCTURAL GLAZING		
III	SUB-SECTION	TBSC-N.III-01-01	CURTAIN WALLING		
P	SECTION		FIXTURES FOR DOORS & WINDOWS		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSC-P.I-01-24	TOWER BOLTS		
II	SUB-SECTION	TBSC-P.II-01-22	HINGES		
III	SUB-SECTION	TBSC-P.III-01-18	DOOR HANDLES		
IV	SUB-SECTION	TBSC-P.IV-01-12	ALDROPS		
V	SUB-SECTION	TBSC-P.V-01-08	LATCHES		
VI	SUB-SECTION	TBSC-P.VI-01-04	DOOR CLOSURES		
VII	SUB-SECTION	TBSC-P.VII-01-05	FLOOR SPRINGS		
VIII	SUB-SECTION	TBSC-P.VIII-01-02	MORTICE LOCKS		
IX	SUB-SECTION	TBSC-P.IX-01-09	OTHER ACCESSORIES		
Q	SECTION		CONSTRUCTION CHEMICALS & ADMIXTURES		
			Literature for usage / application of construction / water proofing materials, epoxies etc, may be obtained from manufacturers.		
I	SUB-SECTION	TBSC-Q.I-01-07	PLASTICIZERS		
II	SUB-SECTION	TBSC-Q.II-01-11	WATER PROOFING COMPOUNDS		
III	SUB-SECTION	TBSC-Q.III-01-06	BONDING AGENTS		
IV	SUB-SECTION	TBSC-Q.IV-01-04	ANTI-CORROSIVE AGENTS		
V	SUB-SECTION	TBSC-Q.V-01-05	GROUTS		
VI	SUB-SECTION	TBSC-Q.VI-01-22	MISCELLANEOUS CHEMICALS		
VII	SUB-SECTION	TBSC-Q.VII-01-12	REPAIRING & TREATMENT WORKS		
VIII	SUB-SECTION	TBSC-Q.VIII-01-11	EXPANSION JOINTS		
R	SECTION	TBSC-R.I-01-51	MISCELLANEOUS ITEMS		
S	SECTION	TBSC-S.I-01-14	MACHINERY & OTHER HIRE CHARGES		
T	SECTION	TBSC-T.I-01-55	LABOUR CHARGES		
U	SECTION	TBSC-U.I-01-15	DISMANTLING		

CIVIL ITEMS

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
A	SECTION	BRICKS & BUILDING BLOCKS		
		(Excluding taxes, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	ORDINARY CLAY BRICKS		
1	TBSC-A.I-01	Common burnt clay bricks of class as per Table-1 of IS:1077-1992 Non-Modular or traditional size 23 x 11 x 7 cm	Each	5.70
2	TBSC-A.I-02	Common burnt clay bricks of class as per Table-1 of IS:1077-1992 Modular or traditional size 19 x 9 x 9 cm	Each	6.70
II	SUB-SECTION	FLY-ASH CEMENT/LIME SOLID BLOCKS		
3	TBSC-A.II-01	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 290 x 225 x 140 mm	Each	25.00
4	TBSC-A.II-02	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 290 x 200 x 140 mm	Each	23.00
5	TBSC-A.II-03	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 290 x 150 x 140 mm	Each	20.00
6	TBSC-A.II-04	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 290 x 112/100 x 140 mm	Each	14.00
7	TBSC-A.II-05	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 225 x 100 x 60 mm	Each	8.00
8	TBSC-A.II-06	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 145 x 225 x 140 mm	Each	15.00
9	TBSC-A.II-07	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 145 x 200 x 140 mm	Each	12.00
10	TBSC-A.II-08	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 290 x 225 x 140 mm	Each	24.00
11	TBSC-A.II-09	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 290 x 200 x 140 mm	Each	19.00
12	TBSC-A.II-10	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 290 x 150 x 140 mm	Each	20.00
13	TBSC-A.II-11	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 290 x 112/100 x 140 mm	Each	11.00
14	TBSC-A.II-12	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 225 x 100 x 60 mm	Each	6.00
15	TBSC-A.II-13	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 145 x 225 x 140 mm	Each	12.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
16	TBSC-A.II-14	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 145 x 200 x 140 mm	Each	11.00
III	SUB-SECTION	AUTOCLAVED CONCRETE BLOCKS		
17	TBSC-A.III-01	Supply of Aerated (Cellular) Autoclaved Concrete Blocks conforming to IS:2185 (Part-3) - 1984 and IS:6441-1972 of Compressive strength 3 N/mm ² (landing cost - including cost of conveyance, loading & unloading) 600 x 200 x 100 mm	Each	47.00
18	TBSC-A.III-02	Supply of Aerated (Cellular) Autoclaved Concrete Blocks conforming to IS:2185 (Part-3) - 1984 and IS:6441-1972 of Compressive strength 3 N/mm ² (landing cost - including cost of conveyance, loading & unloading) 600 x 200 x 150 mm	Each	69.00
19	TBSC-A.III-03	Supply of Aerated (Cellular) Autoclaved Concrete Blocks conforming to IS:2185 (Part-3) - 1984 and IS:6441-1972 of Compressive strength 3 N/mm ² (landing cost - including cost of conveyance, loading & unloading) 600 x 200 x 200 mm	Each	93.00
20	TBSC-A.III-04	Supply of Aerated (Cellular) Autoclaved Concrete Blocks conforming to IS:2185 (Part-3) - 1984 and IS:6441-1972 of Compressive strength 3 N/mm ² (landing cost - including cost of conveyance, loading & unloading) 600 x 200 x 230 mm	Each	106.00
B	SECTION	NATURAL FLOORING STONES		
		(Excluding taxes, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	LOCALLY AVAILABLE FLOORING STONES		
21	TBSC-B.I-01	Shahabad /Tandur Rough Stone slabs of all sizes up to 25 mm in thickness	1 Sqm	95.00
22	TBSC-B.I-02	Shahabad / Tandur Rough Stone slabs of all sizes between 25 mm - 40 mm thickness	1 Sqm	123.00
23	TBSC-B.I-03	Polished Shahabad/ Tandur stone slabs of all sizes between 15 - 18 mm thickness	1 Sqm	164.00
24	TBSC-B.I-04	Kadapa slabs of 40 mm thick of all sizes	1 Sqm	95.00
25	TBSC-B.I-05	Kadapa slabs of 50 mm thick of all sizes	1 Sqm	110.00
26	TBSC-B.I-06	Polished black Kadapa slabs of all sizes between 15 - 18 mm thickness	1 Sqm	137.00
27	TBSC-B.I-07	Polished black Kadapa slabs of all sizes between 25 - 30 mm thickness	1 Sqm	164.00
28	TBSC-B.I-08	Polished White Bethamcherla (marble type) stone of all sizes and between 22-25 mm thickness	1 Sqm	382.00
29	TBSC-B.I-09	Polished Coloured Bethamcherla (marble type) stone of all sizes and between 22-25 mm thickness	1 Sqm	273.00
II	SUB-SECTION	NATURAL FLOORING STONES - MARBLE		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
30	TBSC-B.II-01	Polished Marble slabs of Dongari/ Adanga/ Marodh/ Rajgangpur etc., variety of thickness between 16 mm to 20 mm of sizes from 600 mm to 900 mm	1 Sqm	661.00
31	TBSC-B.II-02	Polished Marble slabs of Dongari/ Adanga/ Marodh/ Rajgangpur etc., variety of thickness between 16 mm to 20 mm of sizes up to 600 mm	1 Sqm	534.00
32	TBSC-B.II-03	Polished Marble slabs of any variety and gang saw cut (Such as Dongari/ Adanga/ Marodh/ Rajgangpur etc) 16 mm to 20 mm (average) thick (0.610 M width of any length)	1 Sqm	907.00
33	TBSC-B.II-04	Polished Marble Tiles of 8 - 10 mm thickness of all sizes and varieties	1 Sqm	432.00
III	SUB-SECTION	NATURAL FLOORING STONES - GRANITE		
34	TBSC-B.III-01	High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) other than black/ premium colours	1 Sqm	3,118.00
35	TBSC-B.III-02	High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) other than black and regular colours	1 Sqm	2,709.00
36	TBSC-B.III-03	High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) black	1 Sqm	2,303.00
37	TBSC-B.III-04	Granite stone tiles 8 mm thick (mirror polished of all shades)	1 Sqm	1,057.00
C	SECTION	WALL & FLOOR TILES		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	NON-PORCELAIN CERAMIC FLOOR TILES		
38	TBSC-C.I-01	Supply of Non-skid red or white full body Ceramic floor tiles of size 300 x 300 mm and thickness between 7-8 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	300
39	TBSC-C.I-02	Supply of Non-skid red or white full body Ceramic floor tiles of size 400 x 400 mm and thickness between 7-8 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	310
40	TBSC-C.I-03	Supply of Non-skid red or white full body Ceramic floor tiles of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	485
41	TBSC-C.I-04	Supply of Non-skid red or white full body Ceramic floor tiles of scratch free-stain free and scratch free-Nano finish of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	485

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
II	SUB-SECTION	PORCELAIN VITRIFIED FLOOR TILES		
42	TBSC-C.II-01	Supply of ordinary soluble salt porcelain vitrified tiles screen printed and polished of size 400 x 400 mm and thickness between 8-9 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	Deleted
43	TBSC-C.II-02	Supply of soluble salt porcelain vitrified tiles screen printed and polished of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	421
44	TBSC-C.II-03	Supply of Nano polished /stain free soluble salt porcelain vitrified tiles screen printed of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	421
45	TBSC-C.II-04	Supply of Nano polished soluble salt porcelain vitrified tiles screen printed of size 800 x 800 mm and thickness between 9-11 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	500
46	TBSC-C.II-05	Supply of Double charged / multi charged stain free full body porcelain vitrified tiles with double layer pigment of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	550
47	TBSC-C.II-06	Supply of Double charged / multi charged stain free full body porcelain vitrified tiles with double layer pigment of size 800 x 800 mm and thickness between 9-11 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	600
48	TBSC-C.II-07	Supply of Double charged / multi charged stain free full body porcelain vitrified tiles with double layer pigment of size 1000 x 1000 mm and thickness between 12-15 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	700

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
49	TBSC-C.II-08	Supply of digital / polished glazed full body porcelain vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 800 x 800 mm and thickness between 9-11 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	650
50	TBSC-C.II-09	Supply of digital / polished glazed full body porcelain vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 900 x 900 mm and thickness between 9-11 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	800
51	TBSC-C.II-10	Supply of digital / polished glazed full body porcelain vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 1000 x 1000 mm and thickness between 12-15 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	1000
52	TBSC-C.II-11	Supply of digital / polished glazed full body porcelain vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 1200 x 600 mm and thickness between 12-15 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	750
53	TBSC-C.II-12	Supply of full body heavy duty industrial variety porcelain vitrified tile of size 300 x 300 / 200 x 100 mm and thickness between 10-12 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	Deleted
54	TBSC-C.II-13	Supply of full body heavy duty industrial variety / tact porcelain vitrified tile of size 300 x 300 / 200 x 100 mm and thickness between 12-15 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	
55	TBSC-C.II-14	Supply of full body heavy duty industrial variety porcelain vitrified tile of size 300 x 300 / 200 x 100 mm and thickness between 18-20 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
56	TBSC-C.II-15	Supply of full body heavy duty industrial variety porcelain vitrified tile of size 400 x 400 mm and thickness between 10 -12 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	
57	TBSC-C.II-16	Supply of full body heavy duty industrial variety porcelain vitrified tile of size 600 x 600 mm and thickness between 10 - 12 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	
III	SUB-SECTION	CERAMIC WALL TILES		
58	TBSC-C.III-01	Supply of glazed red or white full body ceramic wall tiles of size 200 x 300 mm / 245 mm x 325 mm and thickness 6 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	300
59	TBSC-C.III-02	Supply of glazed red or white full body ceramic wall tiles of size 300 x 450 mm / 320 mm x 400 mm and thickness 6 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	400
60	TBSC-C.III-03	Supply of glazed red or white full body ceramic wall tiles of size 300 x 600 mm and thickness between 6-8 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	550
IV	SUB-SECTION	PORCELAIN WALL TILES		
61	TBSC-C.IV-01	Supply of glazed full body porcelain wall tiles of size 300 x 600 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 6-8 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	550
62	TBSC-C.IV-02	Supply of digital / polished glazed full body porcelain wall tiles of size 300 x 600 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 6-8 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	500

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
63	TBSC-C.IV-03	Supply of digital / polished glazed full body porcelain highlighter wall tiles of size 300 x 600 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 6-8 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	500
64	TBSC-C.IV-04	Supply of screen printed glazed full body porcelain wall tiles of size 300 x 600 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 6-8 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	550
65	TBSC-C.IV-05	Supply of glazed full body porcelain wall tiles of size 400 x 600 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 6-8 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	650
66	TBSC-C.IV-06	Supply of glazed full body porcelain wall tiles of size 600 x 800 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 7-9 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	deleted
67	TBSC-C.IV-07	Supply of glazed full body porcelain premium plain design highlighter combination floor and wall tiles set with floor tiles of thickness 14-16 mm and wall tiles of thickness 8-10 mm but excluding highlighters 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	deleted
68	TBSC-C.IV-08	Supply of glazed full body porcelain premium plain design highlighter combination floor and wall tiles set with floor tiles of thickness 14-16 mm and wall tiles of thickness 8-10 mm but including highlighters 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	Deleted
69	TBSC-C.IV-09	Providing and fixing wall dado with epoxy emulsion grout/ synthetic/ resin based adhesive in specified thick and pointing with specified colour epoxy grout excluding cost of tiles	1 Sqm	300.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
70	TBSC-C.IV-10	Providing and fixing wall dado with cement based adhesive in specified thick and pointing with specified colour epoxy grout excluding cost of tiles	1 Sqm	152.00
71	TBSC-C.IV-11	Providing and fixing flooring with full depth jointing and pointing to the Vitrified/ Ceramic Tile flooring in specified thick for tiles of any sizes with epoxy emulsion grout/ synthetic / resin adhesive in width of 3-5 mm with Nylon spacers excluding cost of tiles.	1 Sqm	317.00
72	TBSC-C.IV-12	Providing and fixing flooring with full depth jointing and pointing to the Vitrified/ Ceramic Tile flooring in specified thick for tiles of any sizes with cement based adhesive in width of 3-5 mm with Nylon spacers excluding cost of tiles .	1 Sqm	160.00
73	TBSC-C.IV-13	Providing and fixing flooring with full depth jointing and pointing to the Marble/ Granite flooring for any sizes with epoxy emulsion grout/ synthetic / resin based adhesive in width of 3-5 mm excluding cost of tiles.	1 Sqm	633.00
74	TBSC-C.IV-14	Providing and fixing flooring with full depth jointing and pointing to the Marble/ Granite flooring for any sizes with cement based adhesive in width of 3-5 mm excluding cost of tiles.	1 Sqm	320.00
V	SUB-SECTION	GLASS MOSAIC TILES		
75	TBSC-C.V-01	Supply of glazed full body glass mosaic tiles of 20 x 20 x 4 mm thick in specified pattern 1st Quality of any colour and design	1 Sqm	Deleted
76	TBSC-C.V-02	Providing Glass Mosaic tiles using specified pattern fixing in specified thick epoxy emulsion grout of epoxy resins and filler powder of approved colour grout including all taxes excluding cost of tiles	1 Sqm	
77	TBSC-C.V-03	Providing Glass Mosaic tiles using specified pattern fixing in specified thick cementitious powder mix cement grout and approved colour grout including all taxes excluding cost of tiles	1 Sqm	
VI	SUB-SECTION	WALL CLADDING TILES		
78	TBSC-C.VI-01	Supply of glazed full body porcelain tiles for external cladding purposes of any size and thickness between 6-10 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	550
79	TBSC-C.VI-02	Supply of glazed red or white full body ceramic tiles for external cladding purposes of any size and thickness between 5-7 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	480

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
80	TBSC-C.VI-03	Supply of glazed red or white full body ceramic tiles for external cladding purposes of any size and thickness between 10-12 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	520
81	TBSC-C.VI-04	Supply of glazed red or white full body ceramic tiles for external cladding purposes of any size and thickness between 18-20 mm 1st quality conforming to IS:13711, IS:13712, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	Deleted
VII	SUB-SECTION	TERRAZZO FLOOR TILES (PLAIN & CHEQURED)		
82	TBSC-C.VII-01	Supplying precast terrazzo tiles conforming to IS: 13801 using marble aggregates of size 10 mm , sand, marble powder, white cement pigments etc., with terrazzo topping not less than 6 mm of tiles overall size not less than 20 mm thick white shades.	1 Sqm	261.00
83	TBSC-C.VII-02	Supplying precast terrazzo plain tiles conforming to IS: 13801 using marble aggregates of size 10 mm , sand, marble powder, white cement pigments etc., with terrazzo topping not less than 6 mm of tiles overall size not less than 20 mm thick any coloured shades.	1 Sqm	278.00
84	TBSC-C.VII-03	Supplying precast terrazzo chequered tiles conforming to IS: 13801 using marble aggregates of size 10 mm , sand, marble powder, white cement pigments etc., with terrazzo topping not less than 6 mm of tiles overall size not less than 20 mm thick of any coloured shades.	1 Sqm	285.00
VIII	SUB-SECTION	CEMENT CONCRETE FLOOR TILES (PLAIN & CHEQUERED)		
85	TBSC-C.VIII-01	Supplying plain Cement Concrete general purpose tiles conforming to IS: 13801 using aggregates, cement, pigments of size 300 x 300 mm and thickness 20 mm of any shades.	1 Sqm	245.00
86	TBSC-C.VIII-02	Supplying Chequered Cement Concrete heavy duty tiles conforming to IS: 13801 using aggregates, cement, pigments of size 300 x 300 mm and thickness 20 mm of any shades.	1 Sqm	258.00
87	TBSC-C.VIII-03	Supplying plain Cement Concrete general purpose tiles conforming to IS: 13801 using aggregates, cement, pigments of size 300 x 300 mm and thickness 25 mm of any shades.	1 Sqm	261.00
88	TBSC-C.VIII-04	Supplying Chequered Cement Concrete heavy duty tiles conforming to IS: 13801 using aggregates, cement, pigments of size 300 x 300 mm and thickness 25 mm of any shades.	1 Sqm	274.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
89	TBSC-C.VIII-05	Supplying plain Cement Concrete general purpose tiles conforming to IS: 13801 using aggregates, cement, pigments of size 400 x 400 mm and thickness 25 mm of any shades.	1 Sqm	285.00
90	TBSC-C.VIII-06	Supplying Chequered Cement Concrete heavy duty tiles conforming to IS: 13801 using aggregates, cement, pigments of size 400 x 400 mm and thickness 25 mm of any shades.	1 Sqm	300.00
91	TBSC-C.VIII-07	Supply of high strength Cement Concrete plain Step tiles with edge half rounded and grooved conforming to IS: 13801 using aggregates, cement, pigments of regular colour, design and of 25 mm thickness	1 Sqm	427.00
92	TBSC-C.VIII-08	Supply of high strength Cement Concrete terrazzo/pre-polished/ chequered Step tiles with edge rounded and grooved conforming to IS: 13801 using aggregates, cement, pigments of any premium colour, design and of 25 mm thickness	1 Sqm	449.00
IX	SUB-SECTION	PRE-CAST CONCRETE BLOCKS FOR PAVING		
93	TBSC-C.IX-01	Supply of precast concrete blocks for paving of M-30 grade and thickness not less than 50 mm for Non-traffic areas conforming to IS 15658:2006 in all shapes and designs as per the manufacturer's specification	1 Sqm	304.00
94	TBSC-C.IX-02	Supply of precast concrete blocks for paving of M-35 grade and thickness not less than 60 mm for Light traffic areas conforming to IS 15658:2006 in all shapes and designs as per the manufacturer's specification	1 Sqm	328.00
95	TBSC-C.IX-03	Supply of precast concrete blocks for paving of M-40 grade and thickness not less than 80 mm for Medium traffic areas conforming to IS 15658:2006 in all shapes and designs as per the manufacturer's specification	1 Sqm	470.00
96	TBSC-C.IX-04	Supply of precast concrete blocks for paving of M-50 grade and thickness not less than 100 mm for Heavy traffic areas conforming to IS 15658:2006 in all shapes and designs as per the manufacturer's specification	1 Sqm	518.00
97	TBSC-C.IX-05	Supply of precast concrete blocks for paving of M-55 grade and thickness not less than 120 mm for very heavy traffic areas conforming to IS 15658:2006 in all shapes and designs as per the manufacturer's specification	1 Sqm	589
98	TBSC-C.IX-06	Labour charges for laying & fixing of precast concrete blocks for paving of all grades, any thickness, all sizes & shapes including all labour charges for loading & unloading, laying to desired lines and levels complete excluding cost of cement, sand, water, electricity etc	1 Sqm	181.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
X	SUB-SECTION	VINYL FLOORING		
99	TBSC-C.X-01	Vinyl Flooring Sheets/ tiles having a nominal total thickness of 2 mm with a wearing surface impregnated polyurethane homogeneous mixture of PVC, Plasticizers, Urethane, color pigments with wearing resistance and Fire Resistance as per standards	1 Sqm	771.00
100	TBSC-C.X-02	Vinyl Composition Floor Tiles of size 305 mm x 305 mm having an overall thickness of 2.0mm with a wearing surface impregnated polyurethane homogeneous mixture of PVC, Plasticizers, Urethane, color pigments with wearing resistance and Fire Resistance as per standards	1 Sqm	528.00
101	TBSC-C.X-03	Vinyl Flooring Sheets or tiles having a nominal total thickness of 1.5 mm with a wearing surface impregnated polyurethane homogeneous mixture of PVC, Plasticizers, Urethane, color pigments with wearing resistance and Fire Resistance as per standards	1 Sqm	383.00
D	SECTION	TIMBER & ROOFING MATERIALS		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
		Note: Before proposing the Teak Wood Items, the estimating authorities shall obtain prior approval from the competent authority		
I	SUB-SECTION	MEDIUM TEAK WOOD		
102	TBSC-D.I-01	Medium Teak Wood scantlings: up to 2.0 M	1 cum	72,620.00
103	TBSC-D.I-02	Medium Teak Wood scantlings: 2.0 to 3.0 M	1 cum	80,689.00
104	TBSC-D.I-03	Medium Teak Wood scantlings: above 3.0 M	1 cum	88,759.00
105	TBSC-D.I-04	Medium Teak Wood Planks: any thickness	1 cum	1,45,240.00
II	SUB-SECTION	BEST TEAK WOOD		
106	TBSC-D.II-01	Best Teak Wood scantlings: up to 2.0 M	1 cum	1,25,068.00
107	TBSC-D.II-02	Best Teak Wood scantlings: 2.0 to 3.0 M	1 cum	1,33,137.00
108	TBSC-D.II-03	Best Teak Wood scantlings: above 3.0 M	1 cum	1,41,206.00
109	TBSC-D.II-04	Best Teak Wood Planks: any thickness	1 cum	1,57,344.00
III	SUB-SECTION	BURMA TEAK WOOD		
110	TBSC-D.III-01	Burma Teak Wood scantlings: up to 2.0 M	1 cum	1,71,857.00
111	TBSC-D.III-02	Burma Teak Wood scantlings: 2.0 to 3.0 M	1 cum	1,76,765.00
112	TBSC-D.III-03	Burma Teak Wood scantlings: above 3.0 M	1 cum	1,85,920.00
113	TBSC-D.III-04	Burma Teak Wood Planks: any thickness	1 cum	2,01,319.00
IV	SUB-SECTION	ASSAM TEAK WOOD		
114	TBSC-D.IV-01	Assam Teak Wood scantlings: any length	1 cum	46,071.00
115	TBSC-D.IV-02	Assam Teak Wood Planks: any thickness	1 cum	66,803.00
V	SUB-SECTION	SAL/ COUNTRY WOOD		
116	TBSC-D.V-01	Sal Wood scantlings: any length	1 cum	44,785.00
117	TBSC-D.V-02	Sal Wood Planks: any thickness	1 cum	59,715.00
VI	SUB-SECTION	ROOFING MATERIAL		
118	TBSC-D.VI-01	A.C sheet Corrugated 6 mm thick	1 Sqm	220
119	TBSC-D.VI-02	A.C sheet plain 4 m thick	1 Sqm	158

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
120	TBSC-D.VI-03	A.C sheet plain 6 m thick	1 Sqm	164
121	TBSC-D.VI-04	Plain or Corrugated Galvanized iron sheets as per IS 277 (0.1 mm to 0.8 mm thickness)	1 kg	60
122	TBSC-D.VI-05	Supply of Pre-painted Galvalume Trapezoidal Profile Roofing sheets with 0.50mm thickness, Coating: Alu-Zinc coating AZ150 GSM. Tensile Strength: 550 MPA. Paint coating: Regular Modified Polyester painting. Painting Thickness (Top): 18 to 20 Microns, (Bottom): 5 to 7 Microns. Sheet Width: 1.020, Length: Maximum 12 Meters with Regular Range Colours	1 Sqm	387
123	TBSC-D.VI-06	Supply of Pre-painted Galvalume Trapezoidal Profile Roofing sheets with 0.47mm thickness, Coating: Alu-Zinc coating AZ150 GSM. Tensile Strength: 550 MPA. Paint coating: Regular Modified Polyester painting. Painting Thickness (Top): 18 to 20 Microns, (Bottom): 5 to 7 Microns. Sheet Width: 1.020, Length: Maximum 12 Meters with Regular Range Colours	1 Sqm	377
124	TBSC-D.VI-07	Supply of Pre-painted Galvanized Trapezoidal Profile Roofing sheets with 0.50mm thickness, Coating: Zinc coating Z120 GSM. Tensile Strength: 300 MPA. Paint coating: Regular Modified Polyester painting. Painting Thickness (Top): 18 to 20 Microns, (Bottom): 5 to 7 Microns. Sheet Width: 1.020, Length: Maximum 12 Meters with Regular Range Colours	1 Sqm	339
125	TBSC-D.VI-08	Supply of Pre-painted Galvanized Trapezoidal Profile Roofing sheets with 0.47mm thickness, Coating: Zinc coating Z120 GSM. Tensile Strength: 300 MPA. Paint coating: Regular Modified Polyester painting. Painting Thickness (Top): 18 to 20 Microns, (Bottom): 5 to 7 Microns. Sheet Width: 1.020, Length: Maximum 12 Meters with Regular Range Colours	1 Sqm	319
126	TBSC-D.VI-09	Supply of Roof Accessories medium size: Ridge, Barge Cap, Corner Trim, L-Flashing, Down Pipes, Gutter etc., with 0.50mm thick, Width: 0.585, Length: Maximum 2½ Meters	1 RM	260
127	TBSC-D.VI-10	Supply of Roof Accessories medium size: Ridge, Barge Cap, Corner Trim, L-Flashing, Down Pipes, Gutter etc., with 0.47mm thick, Width: 0.585, Length: Maximum 2½ Meters	1 RM	232
	TBSC-D.VI-11	Supply of fibre reinforced corrugated sheets 6mm thick(Non asbestos) in compliance with Type-A Category -C class-7 of IS 14871 for roofing	1 Sqm	320.00
	TBSC-D.VI-12	Supply of pre painted fibre reinforced corrugated sheets 6mm thick(Non asbestos) in compliance with Type-A Category -C class-7 of IS 14871 for roofing	1 Sqm	380.00
128	TBSC-D.VI-11	Supply of UV resistant multi-wall polycarbonate sheets for roofing of any colour - 6 mm thick	1 Sqm	1,276.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
129	TBSC-D.VI-12	Aluminium universal glazing set 40 mm wide for jointing and fixing polycarbonate sheets	1 RM	127.00
130	TBSC-D.VI-13	75 mm long screws -	1 Each	5
131	TBSC-D.VI-14	G.I scam bolts & nuts	1 Each	6
132	TBSC-D.VI-15	G.I bolts & nuts	1 Each	6
133	TBSC-D.VI-16	G.I 'J' bolts 8 mm Diameter	1 Each	10.00
134	TBSC-D.VI-17	G.I Washers	1 Each	2
135	TBSC-D.VI-18	Limpet washers (for scam & 'J' bolts)	1 Each	2.00
136	TBSC-D.VI-19	Bitumen washers	1 Each	2.00
E	SECTION	STEEL MATERIALS		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	MILD STEEL MATERIALS		
137	TBSC-E.I-01	Supply & fixing of Rolling shutter made of 80 x 1.25 mm machine rolled CRCA laths, interlocked together through their entire length and jointed together at the ends by end-locks, mounted on specially designed pipe shaft of 50mm Diameter nominal bore MS B class pipe with brackets, plates, guide channels, stoppers, bottom locking plates and arrangements for inside & outside locking with push-pull operations including cost of hood cover and springs complete, painted with one coat of approved steel primer, locks, ball bearings, all accessories etc complete for finished item of work as per special Spec: 1108	1 Sqm	3,890.00
138	TBSC-E.I-02	Supplying & fixing collapsible steel shutters with vertical, double channel of 20 x10x2 mm of 100 mm centre ,Bracers with flat iron 40x40x6 mm with 38 mm Diameter steel pulleys, the top, bottom and side vertical frames of the collapsible gate with 65x65mmx8mm MS Angle and middle guide rail at site height with 65mmx8mm MS flat for the pulleys to guide and fixed with necessary hold fasts, bolts, nuts, rivets, locking arrangements, stoppers, handles, all accessories all fixtures and painted with one coat of approved steel primer etc., complete for finished item of work as per special Spec 1105	1 Sqm	3,403.00
139	TBSC-E.I-03	Expanded metal sheets as per IS-412-1962- Light Weight-25 mm(SWM)x75 mm (LWM)3.25 mm Wide and 1.25 mm thick	1 Sqm	160.00
140	TBSC-E.I-04	Expanded metal sheets as per IS-412-1962- Light Weight-20 mm(SWM)x60 mm(LWM) 2.50 mm Wide and 1.25 mm thick	1 Sqm	160.00
141	TBSC-E.I-05	Expanded metal sheets as per IS-412-1962- Light Weight-20 mm(SWM)x50 mm(LWM) 2.50 mm Wide and 1.25 mm thick	1 Sqm	160.00
142	TBSC-E.I-06	Expanded metal sheets as per IS-412-1962- Medium Weight-25 mm(SWM)x75 mm(LWM) 3.25 mm Wide and 1.60 mm thick	1 Sqm	218.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
143	TBSC-E.I-07	Expanded metal sheets as per IS-412-1962-Medium Weight-20 mm(SWM)x60 mm(LWM) 2.50 mm Wide and 1.60 mm thick	1 Sqm	218.00
144	TBSC-E.I-08	Expanded metal sheets as per IS-412-1962-Medium Weight-20 mm(SWM)x50 mm(LWM) 2.50 mm Wide and 1.60 mm thick	1 Sqm	218.00
145	TBSC-E.I-09	Expanded metal sheets as per IS-412-1962-Heavy Weight-25 mm(SWM)x75 mm(LWM) 3.25 mm Wide and 2.24 mm thick	1 Sqm	249.00
146	TBSC-E.I-10	Expanded metal sheets as per IS-412-1962-Heavy Weight-20 mm(SWM)x60 mm(LWM) 2.50 mm Wide and 2.24 mm thick	1 Sqm	249.00
147	TBSC-E.I-11	Expanded metal sheets as per IS-412-1962-Heavy Weight-20 mm(SWM)x50 mm(LWM) 2.50 mm Wide and 2.24 mm thick	1 Sqm	249.00
148	TBSC-E.I-12	Rabbit wire mesh (chicken mesh) of not less than 30 gauge	1 Sqm	19.00
149	TBSC-E.I-13	Country Nails	1 Kg	61.00
150	TBSC-E.I-14	Wire Nails	1 Kg	61.00
151	TBSC-E.I-15	Mild Steel Tubes & pipes of all Diameters as per IS-1161	1 Kg	61.00
II	SUB-SECTION	GALVANIZED STEEL MATERIALS		
152	TBSC-E.II-01	Supplying Galvanized Steel Barbed wire conforming to IS 278 - 1978 : Type A - IOWA Type Designation as per standard specification	1 Kg	90.00
153	TBSC-E.II-02	Supplying Galvanized Steel Barbed wire conforming to IS 278 - 1978 : Type B - Glidden Type Designation as per standard specification	1 Kg	90.00
154	TBSC-E.II-03	Galvanized Iron fly proof wire mesh of not less than 20 gauge	1 Sqm	236.00
155	TBSC-E.II-04	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979: 2"x2" (50 mm x 50 mm) - 8 Gauge	1 Sqm	519.00
156	TBSC-E.II-05	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979: 2½"x2½" (63 mm x 63 mm) - 8 Gauge	1 Sqm	411.00
157	TBSC-E.II-06	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979: 3"x3" (76 mm x 76 mm) - 8 Gauge	1 Sqm	351.00
158	TBSC-E.II-07	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979: 4"x4" (102 mm x 102 mm) - 8 Gauge	1 Sqm	261.00
159	TBSC-E.II-08	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979 - PVC Coated - 2"x2" (50 mm x 50 mm) - 8 Gauge	1 Sqm	626.00
160	TBSC-E.II-09	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979 - PVC Coated - 2½"x2½" (63 mm x 63 mm) - 8 Gauge	1 Sqm	519.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
161	TBSC-E.II-10	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979 - PVC Coated - 3"x3" (76 mm x 76 mm) - 8 Gauge	1 Sqm	428.00
162	TBSC-E.II-11	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979 - PVC Coated - 4"x4" (102 mm x 102 mm) - 8 Gauge	1 Sqm	334.00
III	SUB-SECTION	STAINLESS STEEL MATERIALS		
163	TBSC-E.III-01	Stainless Steel Tubes, sections, plates, sheets & pipes of all sizes & Diameters for - 304 Grade	1 Kg	387
164	TBSC-E.III-02	Stainless steel fly proof wire mesh of not less than 20 gauge	1 Sqm	522
F	SECTION	GLASS MATERIALS		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	PLAIN GLASS PANES		
165	TBSC-F.I-01	Plain Float Glass 4 mm thick	1 Sqm	400.00
166	TBSC-F.I-02	Plain Float Glass 5 mm thick	1 Sqm	507.00
167	TBSC-F.I-03	Plain Float Glass 6 mm thick	1 Sqm	629.00
168	TBSC-F.I-04	Plain Float Glass 8 mm thick	1 Sqm	845.00
169	TBSC-F.I-05	Plain Float Glass 10 mm thick	1 Sqm	890.00
170	TBSC-F.I-06	Plain Float Glass 12 mm thick	1 Sqm	1,067.00
II	SUB-SECTION	PIN HEADED GLASS PANES		
171	TBSC-F.II-01	Pin headed Glass 4 mm thick	1 Sqm	300.00
172	TBSC-F.II-02	Pin headed Glass 5 mm thick	1 Sqm	390.00
III	SUB-SECTION	TINTED GLASS PANES		
173	TBSC-F.III-01	Tinted - Bronze/ Green Glass 4 mm thick	1 Sqm	467.00
174	TBSC-F.III-02	Tinted - Bronze/ Green Glass 5 mm thick	1 Sqm	584.00
175	TBSC-F.III-03	Tinted - Bronze/ Green Glass 6 mm thick	1 Sqm	700.00
176	TBSC-F.III-04	Tinted - Bronze/ Green Glass 8 mm thick	1 Sqm	1,002.00
177	TBSC-F.III-05	Tinted - Bronze/ Green Glass 10 mm thick	1 Sqm	1,168.00
178	TBSC-F.III-06	Tinted - Bronze/ Green Glass 12 mm thick	1 Sqm	1,402.00
IV	SUB-SECTION	FROSTED/ GROUND GLASS PANES		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
179	TBSC-F.IV-01	Frosted / Ground Glass 4 mm thick	1 Sqm	539.00
180	TBSC-F.IV-02	Frosted / Ground Glass 5 mm thick	1 Sqm	678.00
V	SUB-SECTION	TOUGHENED GLASS PANES		
181	TBSC-F.V-01	Toughened Plain Glass 5 mm (including Glass)	1 Sqm	812.00
182	TBSC-F.V-02	Toughened Plain Glass 6 mm (including Glass)	1 Sqm	938.00
183	TBSC-F.V-03	Toughened Plain Glass 8 mm (including Glass)	1 Sqm	1,251.00
184	TBSC-F.V-04	Toughened Plain Glass 10 mm (including Glass)	1 Sqm	1,500.00
185	TBSC-F.V-05	Toughened Plain Glass 12 mm (including Glass)	1 Sqm	1,749.00
G	SECTION	PAINTS & POLISHES		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	PRIMERS, FILLERS & BASES		
186	TBSC-G.I-01	Supply of water based Cement Primer of Interior Grade- 1	1 Kg	150.00
187	TBSC-G.I-02	Supply of water based Cement Primer of Exterior Grade- 2	1 Kg	191.00
188	TBSC-G.I-03	Supply of wall putty of White Cement or Polymer or Cement based	1 Kg	41.00
189	TBSC-G.I-04	Acrylic spray plaster in paste form made with specially selected inert mineral fillers, antifungal agents to protect the material the acrylic binding medium used gives good surface adhesion any grade	1 Kg	64.00
190	TBSC-G.I-05	Supply of Red Oxide Primer Paint for iron works of Grade -1	1 Lit	129.00
191	TBSC-G.I-06	Supply of Zinc Chromate Yellow Oxide Primer paint for iron works	1 Lit	185.00
192	TBSC-G.I-07	Supply of Wood Primer	1 Lit	144.00
193	TBSC-G.I-08	Supply of Metal paste (Putty) for steel works	1 Kg	144.00
194	TBSC-G.I-09	Supply of Putty for wood work (Powder chalk)	1 Kg	144.00
195	TBSC-G.I-10	Supply of White Lead	1 Kg	103.00
196	TBSC-G.I-11	Supply of Synthetic clear Varnish	1 Lit	144.00
197	TBSC-G.I-12	Supply of Spirit	1 Lit	101.00
198	TBSC-G.I-13	Supply of Linseed Oil	1 Lit	58.00
199	TBSC-G.I-14	Supply of thinner for melamine polish/ French polish	1 Lit	133.00
200	TBSC-G.I-15	Supply of thinner for Poly-urethane polish	1 Lit	272.00
201	TBSC-G.I-16	Supply of French Polish	1 Lit	188.00
202	TBSC-G.I-17	Supply of ready made Wax Polish	1 Kg	572.00
203	TBSC-G.I-18	Supply of wood adhesive compound	1 Kg	224.00
204	TBSC-G.I-19	Supply of anti-corrosive grade - 1 bitumen paint of black colour	1 Lit	516.00
II	SUB-SECTION	LIME, DISTEMPERS & CEMENT PAINTS		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
205	TBSC-G.II-01	Supply of paint grade lime for white / colour wash	1 Kg	22.00
206	TBSC-G.II-02	Supply of Dry Powder Distemper	1 Kg	43.00
207	TBSC-G.II-03	Supply of acrylic based Oil Bound washable Distemper	1 Kg	82.00
208	TBSC-G.II-04	Supply of Water proof Cement paint	1 Kg	51.00
III	SUB-SECTION	EMULSION BASED PAINTS		
209	TBSC-G.III-01	Supply of acrylic emulsion paint interior grade having VOC (Volatile Organic Compound) content less than 50 grams/ Lit.	1 Lit	195.00
210	TBSC-G.III-02	Supply of acrylic emulsion paint exterior grade with silicon additives having VOC (Volatile Organic Compound) content less than 50 grams/ Lit.	1 Lit	204.00
211	TBSC-G.III-03	Supply of acrylic emulsion paint weather proof water-based, modified acrylic with silicon additives exterior grade having VOC (Volatile Organic Compound) content less than 50 grams/ Lit.	1 Lit	225.00
IV	SUB-SECTION	SOLVENT BASED PAINTS		
212	TBSC-G.IV-01	Supply of solvent based latex paint having VOC (Volatile Organic Compound) content less than 50 grams/ Lit.	1 Lit	245.00
213	TBSC-G.IV-02	Supply of synthetic polymer luxury plastic emulsion / solvent based lustre paint of superior grade having VOC (Volatile Organic Compound) content less than 50 grams/ Lit.	1 Lit	430.00
V	SUB-SECTION	OIL BASED ENAMEL PAINTS		
214	TBSC-G.V-01	Supply of ready mixed Synthetic Enamel paints in all shades Grade - I having VOC (Volatile Organic Compound) content less than 50 grams/ Lit.	1 Lit	251.00
215	TBSC-G.V-02	Supply of ready mixed Synthetic Enamel paints in all shades Grade - II having VOC (Volatile Organic Compound) content less than 50 grams/ Lit.	1 Lit	191.00
VI	SUB-SECTION	TEXTURE PAINTS		
216	TBSC-G.VI-01	Exterior grade Texture ready mixed paint with sand texture added sand particles Acrylic copolymers and mineral compounds, bactericides and various additives.	1 Kg	37.00
217	TBSC-G.VI-02	Exterior grade Texture ready mixed plaster made with natural minerals - granite flakes/ marble flakes/ powder, sand and other carefully selected and sieved minerals in an acrylic binding medium	1 Kg	47.00
VII	SUB-SECTION	SPECIAL PAINTS		
218	TBSC-G.VII-01	Supply of Melamine Polish	1 Lit	317.00
219	TBSC-G.VII-02	Supply of Interior Grade Poly-Urethane Polish	1 Lit	645.00
220	TBSC-G.VII-03	Supply of Exterior Grade Poly-Urethane Polish	1 Lit	788.00
221	TBSC-G.VII-04	Supply of grade-1 aluminium paint	1 Lit	258.00
H	SECTION	PARTICLE BOARDS		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	MELAMINE FACED PLAIN PARTICLE BOARD		
222	TBSC-H.I-01	Melamine faced Single Deco Plain Particle Board-8 mm thick conforming to IS 3129	1 Sqm	613.00
223	TBSC-H.I-02	Melamine faced Single Deco Plain Particle Board-12 mm thick conforming to IS 3129	1 Sqm	696.00
224	TBSC-H.I-03	Melamine faced Single Deco Plain Particle Board-18 mm thick conforming to IS 3129	1 Sqm	806.00
225	TBSC-H.I-04	Melamine faced Single Deco Plain Particle Board-25 mm thick conforming to IS 3129	1 Sqm	914.00
226	TBSC-H.I-05	Melamine faced Single Deco Plain Particle Board-35 mm thick conforming to IS 3129	1 Sqm	1,519.00
227	TBSC-H.I-06	Melamine faced Twin Deco Plain Particle Board-8 mm thick conforming to IS 3129	1 Sqm	706.00
228	TBSC-H.I-07	Melamine faced Twin Deco Plain Particle Board-12 mm thick conforming to IS 3129	1 Sqm	806.00
229	TBSC-H.I-08	Melamine faced Twin Deco Plain Particle Board-18 mm thick conforming to IS 3129	1 Sqm	933.00
230	TBSC-H.I-09	Melamine faced Twin Deco Plain Particle Board-25 mm thick conforming to IS 3129	1 Sqm	1,033.00
231	TBSC-H.I-10	Melamine faced Twin Deco Plain Particle Board-35 mm thick conforming to IS 3129	1 Sqm	1,941.00
II	SUB-SECTION	INSULATING PARTICLE BOARDS		
232	TBSC-H.II-01	Natural Colour-Insulating Board - 12 mm thick conforming to IS 3348	1 Sqm	229.00
233	TBSC-H.II-02	Natural Colour-Insulating Board - 18 mm thick conforming to IS 3348	1 Sqm	338.00
234	TBSC-H.II-03	Natural Colour-Insulating Board - 25 mm thick conforming to IS 3348	1 Sqm	431.00
235	TBSC-H.II-04	White Insulating Board - 12 mm thick conforming to IS 3348	1 Sqm	279.00
236	TBSC-H.II-05	White Insulating Board - 18 mm thick conforming to IS 3348	1 Sqm	398.00
237	TBSC-H.II-06	White Insulating Board - 25 mm thick conforming to IS 3348	1 Sqm	354.00
III	SUB-SECTION	MEDIUM DENSITY FIBRE BOARDS		
238	TBSC-H.III-01	Medium Fibre Board: Interior Grade - 6 mm thick conforming to IS 15932	1 Sqm	373.00
239	TBSC-H.III-02	Medium Fibre Board: Interior Grade - 8 mm thick conforming to IS 15932	1 Sqm	423.00
240	TBSC-H.III-03	Medium Fibre Board: Interior Grade - 12 mm thick conforming to IS 15932	1 Sqm	566.00
241	TBSC-H.III-04	Medium Fibre Board: Interior Grade - 15 mm thick conforming to IS 15932	1 Sqm	720.00
242	TBSC-H.III-05	Medium Fibre Board: Interior Grade - 18 mm thick conforming to IS 15932	1 Sqm	803.00
243	TBSC-H.III-06	Medium Fibre Board: Interior Grade - 25 mm thick conforming to IS 15932	1 Sqm	1,140.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
244	TBSC-H.III-07	Medium Fibre Board: Interior Grade - 30 mm thick conforming to IS 15932	1 Sqm	1,377.00
245	TBSC-H.III-08	Medium Fibre Board: Interior Grade - 35 mm thick conforming to IS 15932	1 Sqm	1,503.00
246	TBSC-H.III-09	Medium Fibre Board: Exterior Grade - 6 mm thick conforming to IS 15932	1 Sqm	507.00
247	TBSC-H.III-10	Medium Fibre Board: Exterior Grade - 8 mm thick conforming to IS 15932	1 Sqm	590.00
248	TBSC-H.III-11	Medium Fibre Board: Exterior Grade - 12 mm thick conforming to IS 15932	1 Sqm	782.00
249	TBSC-H.III-12	Medium Fibre Board: Exterior Grade - 15 mm thick conforming to IS 15932	1 Sqm	983.00
250	TBSC-H.III-13	Medium Fibre Board: Exterior Grade - 18 mm thick conforming to IS 15932	1 Sqm	1,100.00
251	TBSC-H.III-14	Medium Fibre Board: Exterior Grade - 25 mm thick conforming to IS 15932	1 Sqm	1,466.00
252	TBSC-H.III-15	Medium Fibre Board: Exterior Grade - 30 mm thick conforming to IS 15932	1 Sqm	1,825.00
253	TBSC-H.III-16	Medium Fibre Board: Exterior Grade - 35 mm thick conforming to IS 15932	1 Sqm	2,156.00
254	TBSC-H.III-17	MDF Board: Plain-Interior - 9 mm thick conforming to IS 15932	1 Sqm	342.00
255	TBSC-H.III-18	MDF Board: Plain-Interior - 12 mm thick conforming to IS 15932	1 Sqm	389.00
256	TBSC-H.III-19	MDF Board: Plain-Interior - 18 mm thick conforming to IS 15932	1 Sqm	481.00
257	TBSC-H.III-20	MDF Board: Plain-Interior - 25 mm thick conforming to IS 15932	1 Sqm	578.00
258	TBSC-H.III-21	MDF Board: Plain-Interior - 30 mm thick conforming to IS 15932	1 Sqm	880.00
259	TBSC-H.III-22	MDF Board: Plain-Interior - 35 mm thick conforming to IS 15932	1 Sqm	1,040.00
260	TBSC-H.III-23	MDF Board: Plain-Exterior - 9 mm thick conforming to IS 15932	1 Sqm	447.00
261	TBSC-H.III-24	MDF Board: Plain-Exterior - 12 mm thick conforming to IS 15932	1 Sqm	481.00
262	TBSC-H.III-25	MDF Board: Plain-Exterior - 18 mm thick conforming to IS 15932	1 Sqm	631.00
263	TBSC-H.III-26	MDF Board: Plain-Exterior - 25 mm thick conforming to IS 15932	1 Sqm	792.00
264	TBSC-H.III-27	MDF Board: Plain-Exterior - 30 mm thick conforming to IS 15932	1 Sqm	1,040.00
265	TBSC-H.III-28	MDF Board: Plain-Exterior - 35 mm thick conforming to IS 15932	1 Sqm	1,200.00
266	TBSC-H.III-29	MDF Board: Interior-One Side Laminated -9 mm thick conforming to IS 15932	1 Sqm	536.00
267	TBSC-H.III-30	MDF Board: Interior-One Side Laminated -12 mm thick conforming to IS 15932	1 Sqm	606.00
268	TBSC-H.III-31	MDF Board: Interior-One Side Laminated -18 mm thick conforming to IS 15932	1 Sqm	705.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
269	TBSC-H.III-32	MDF Board: Interior-One Side Laminated -25 mm thick conforming to IS 15932	1 Sqm	792.00
270	TBSC-H.III-33	MDF Board: Interior-One Side Laminated -30 mm thick conforming to IS 15932	1 Sqm	1,145.00
271	TBSC-H.III-34	MDF Board: Interior-One Side Laminated -35 mm thick conforming to IS 15932	1 Sqm	1,221.00
272	TBSC-H.III-35	MDF Board: Exterior-One Side Laminated -9 mm thick conforming to IS 15932	1 Sqm	616.00
273	TBSC-H.III-36	MDF Board: Exterior-One Side Laminated -12 mm thick conforming to IS 15932	1 Sqm	692.00
274	TBSC-H.III-37	MDF Board: Exterior-One Side Laminated -18 mm thick conforming to IS 15932	1 Sqm	783.00
275	TBSC-H.III-38	MDF Board: Exterior-One Side Laminated -25 mm thick conforming to IS 15932	1 Sqm	916.00
276	TBSC-H.III-39	MDF Board: Exterior-One Side Laminated -30 mm thick conforming to IS 15932	1 Sqm	1,221.00
277	TBSC-H.III-40	MDF Board: Exterior-One Side Laminated -35 mm thick conforming to IS 15932	1 Sqm	1,297.00
278	TBSC-H.III-41	MDF Board: Interior-Both Side Laminated -9 mm thick conforming to IS 15932	1 Sqm	612.00
279	TBSC-H.III-42	MDF Board: Interior-Both Side Laminated -12 mm thick conforming to IS 15932	1 Sqm	692.00
280	TBSC-H.III-43	MDF Board: Interior-Both Side Laminated -18 mm thick conforming to IS 15932	1 Sqm	792.00
281	TBSC-H.III-44	MDF Board: Interior-Both Side Laminated -25 mm thick conforming to IS 15932	1 Sqm	995.00
282	TBSC-H.III-45	MDF Board: Interior-Both Side Laminated -30 mm thick conforming to IS 15932	1 Sqm	1,221.00
283	TBSC-H.III-46	MDF Board: Interior-Both Side Laminated -35 mm thick conforming to IS 15932	1 Sqm	1,297.00
284	TBSC-H.III-47	MDF Board: exterior-Both Side Laminated -9 mm thick conforming to IS 15932	1 Sqm	692.00
285	TBSC-H.III-48	MDF Board: exterior-Both Side Laminated -12 mm thick conforming to IS 15932	1 Sqm	783.00
286	TBSC-H.III-49	MDF Board: exterior-Both Side Laminated -18 mm thick conforming to IS 15932	1 Sqm	926.00
287	TBSC-H.III-50	MDF Board: exterior-Both Side Laminated -25 mm thick conforming to IS 15932	1 Sqm	1,012.00
288	TBSC-H.III-51	MDF Board: exterior-Both Side Laminated -30 mm thick conforming to IS 15932	1 Sqm	1,281.00
289	TBSC-H.III-52	MDF Board: exterior-Both Side Laminated -35 mm thick conforming to IS 15932	1 Sqm	1,374.00
IV	SUB-SECTION	CEMENT BONDED PLAIN & PARTICLE BOARDS		
290	TBSC-H.IV-01	Cement Bonded Board conforming to IS:14862-2000 - 4mm Thick	1 Sqm	145.00
291	TBSC-H.IV-02	Cement Bonded Board conforming to IS:14862-2000 - 6mm Thick	1 Sqm	207.00
292	TBSC-H.IV-03	Cement Bonded Board conforming to IS:14862-2000 - 8mm Thick	1 Sqm	266.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
293	TBSC-H.IV-04	Cement Bonded Board conforming to IS:14862-2000 - 10mm Thick	1 Sqm	306.00
294	TBSC-H.IV-05	Cement Bonded Board conforming to IS:14862-2000 - 12mm Thick	1 Sqm	382.00
295	TBSC-H.IV-06	Cement Bonded Board conforming to IS:14862-2000 - 14mm Thick	1 Sqm	426.00
296	TBSC-H.IV-07	Cement Bonded Board conforming to IS:14862-2000 - 16mm Thick	1 Sqm	485.00
297	TBSC-H.IV-08	Cement Bonded Board conforming to IS:14862-2000 - 18mm Thick	1 Sqm	550.00
298	TBSC-H.IV-09	Cement Bonded Board conforming to IS:14862-2000 - 20mm Thick	1 Sqm	583.00
299	TBSC-H.IV-10	Cement bonded particle board conforming to IS 14276-6 mm thick	1 Sqm	225.00
300	TBSC-H.IV-11	Cement bonded particle board conforming to IS 14276- 8 mm thick	1 Sqm	303.00
301	TBSC-H.IV-12	Cement bonded particle board conforming to IS 14276- 10 mm thick	1 Sqm	382.00
302	TBSC-H.IV-13	Cement bonded particle board conforming to IS 14276- 12 mm thick	1 Sqm	464.00
303	TBSC-H.IV-14	Cement bonded particle board conforming to IS 14276- 16 mm thick	1 Sqm	625.00
304	TBSC-H.IV-15	Cement bonded particle board conforming to IS 14276- 20 mm thick	1 Sqm	752.00
305	TBSC-H.IV-16	Cement bonded particle board conforming to IS 14276- 25 mm thick	1 Sqm	952.00
306	TBSC-H.IV-17	Cement bonded particle board conforming to IS 14276- 30 mm thick	1 Sqm	1,142.00
307	TBSC-H.IV-18	Cement bonded particle board conforming to IS 14276- 40 mm thick	1 Sqm	1,523.00
308	TBSC-H.IV-19	Pre-laminated cement bonded particle board-6 mm thick	1 Sqm	526.00
309	TBSC-H.IV-20	Pre-laminated cement bonded particle board-8 mm thick	1 Sqm	568.00
310	TBSC-H.IV-21	Pre-laminated cement bonded particle board- 10 mm thick	1 Sqm	610.00
311	TBSC-H.IV-22	Pre-laminated cement bonded particle board- 12 mm thick	1 Sqm	667.00
312	TBSC-H.IV-23	Pre-laminated cement bonded particle board- 16 mm thick	1 Sqm	741.00
313	TBSC-H.IV-24	50 mm thick SOLID WALL PANEL Sandwich panels made of light weight FRACC non-asbestos fibre reinforced cement concrete	1 Sqm	971.00
314	TBSC-H.IV-25	75 mm thick SOLID WALL PANEL Sandwich panels made of light weight FRACC non-asbestos fibre reinforced cement concrete	1 Sqm	1,166.00
J	SECTION	PLYWOODS, LAMINATES & VENEERS		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	MOISTURE RESISTANT (MR) GRADE		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
315	TBSC-J.I-01	3 Ply - 4 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	369.00
316	TBSC-J.I-02	5 Ply - 6 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	408.00
317	TBSC-J.I-03	5 Ply - 8 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	479.00
318	TBSC-J.I-04	5 Ply - 9 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	479.00
319	TBSC-J.I-05	9 Ply - 12 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	601.00
320	TBSC-J.I-06	9 Ply - 15 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	885.00
321	TBSC-J.I-07	9 Ply - 18 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	867.00
II	SUB-SECTION	BOILING WATER RESISTANT (BWR) GRADE		
322	TBSC-J.II-01	3 Ply - 4 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	422.00
323	TBSC-J.II-02	5 Ply - 6 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	495.00
324	TBSC-J.II-03	5 Ply - 8 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	617.00
325	TBSC-J.II-04	5 Ply - 9 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	583.00
326	TBSC-J.II-05	9 Ply - 12 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	762.00
327	TBSC-J.II-06	9 Ply - 15 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	1,093.00
328	TBSC-J.II-07	9 Ply - 19 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	1,097.00
III	SUB-SECTION	VENEERED DECORATIVE PLYWOOD		
329	TBSC-J.III-01	3 Ply-4 mm thick One side Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	546.00
330	TBSC-J.III-02	5 Ply - 6 mm thick One side Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	711.00
331	TBSC-J.III-03	5 Ply - 9 mm thick One side Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	912.00
332	TBSC-J.III-04	9 Ply - 12 mm thick One side Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	1,161.00
333	TBSC-J.III-05	5 Ply - 9 mm thick Both sides Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	1,190.00
334	TBSC-J.III-06	9 Ply - 12 mm thick Both sides Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	1,387.00
IV	SUB-SECTION	LAMINATES		
335	TBSC-J.IV-01	Melamine Laminate Sheets - Glossy Finish: 1.00 mm thick	1 Sqm	366.00
336	TBSC-J.IV-02	Melamine Laminate Sheets - Glossy Finish: 1.50 mm thick	1 Sqm	524.00
337	TBSC-J.IV-03	Melamine Laminate Sheets - Glossy Finish: 1.80 mm thick	1 Sqm	575.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
338	TBSC-J.IV-04	Melamine Laminate Sheets - Mat Finish: 1.00 mm thick	1 Sqm	389.00
339	TBSC-J.IV-05	Melamine Laminate Sheets - Mat Finish: 1.50 mm thick	1 Sqm	541.00
340	TBSC-J.IV-06	Melamine Laminate Sheets - Mat Finish: 1.80 mm thick	1 Sqm	583.00
V	SUB-SECTION	COMMERCIAL VENEERS		
341	TBSC-J.V-01	Teak Veneer Lamination of 4 mm thick with Pencil Grains conforming to IS 14315	1 Sqm	409.00
342	TBSC-J.V-02	Teak Veneer Lamination of 4 mm thick with Natural Grains conforming to IS 14315	1 Sqm	752.00
K	SECTION	CEILINGS, WALL PARTITIONS & WALL LININGS		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	FALSE CEILINGs - TILES/ SHEETS		
343	TBSC-K.I-01	Gypsum Board tiles of size not less than 0.595 M x 0.595 M of 12.5 mm thick as per IS 2095 -1992	1 Sqm	255.00
344	TBSC-K.I-02	Gypsum Board tiles of size not less than 0.595 M x 0.595 M of 9 mm thick as per IS 2095 -1992	1 Sqm	249.00
345	TBSC-K.I-03	Gypsum Board Plain sheet 12.5 mm thick as per IS 2095 -1993	1 Sqm	225.00
346	TBSC-K.I-04	DELETED		
347	TBSC-K.I-05	14 mm - Mineral Fibre sheet 600 x 600 of Board / Tegular Edge tiles with a Humidity Resistance of 90% RH, Average NRC 0.50, Light Reflectance >80%, Thermal Conductivity $\lambda = 0.052$ to 0.057 w/mk, Fire Performance Class 0/Class 1	1 Sqm	535.00
348	TBSC-K.I-06	15 mm - Mineral Fibre sheet 600 x 600 of Board / Tegular Edge tiles with a Humidity Resistance of 95% RH, Average NRC 0.50, Light Reflectance >85%, Thermal Conductivity $\lambda = 0.052$ to 0.057 w/mk, Fire Performance Class 0/Class 1	1 Sqm	626.00
349	TBSC-K.I-07	16 mm - Tegular Edge 600 x 600 of Board / Tegular/ Micro look Edge tiles with a Humidity Resistance of 99% RH, Average NRC 0.60, Light Reflectance >85%, Thermal Conductivity $\lambda = 0.052$ to 0.057 w/mk, Fire Performance Class 0/Class 1	1 Sqm	674.00
350	TBSC-K.I-08	Designer ceiling Cement Boards -thickness 3.2 mm	1 Sqm	235.00
351	TBSC-K.I-09	High pressure steam cured Cement Boards 4 mm thick	1 Sqm	126.00
352	TBSC-K.I-10	High pressure steam cured Cement Boards 6 mm thick	1 Sqm	189.00
353	TBSC-K.I-11	High pressure steam cured Cement Boards 8 mm thick	1 Sqm	251.00
354	TBSC-K.I-12	High pressure steam cured Cement Boards 10 mm thick	1 Sqm	314.00
355	TBSC-K.I-13	High pressure steam cured Cement Boards 12 mm thick	1 Sqm	376.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
356	TBSC-K.I-14	High pressure steam cured Cement Boards 14 mm thick	1 Sqm	439.00
357	TBSC-K.I-15	High pressure steam cured Cement Boards 16 mm thick	1 Sqm	503.00
358	TBSC-K.I-16	High pressure steam cured Cement Boards 18 mm thick	1 Sqm	564.00
359	TBSC-K.I-17	High pressure steam cured Cement Boards 20 mm thick	1 Sqm	628.00
360	TBSC-K.I-18	High pressure steam cured designer Cement Boards 4 mm thick	1 Sqm	185.00
361	TBSC-K.I-19	High pressure steam cured designer Cement Boards 6 mm thick	1 Sqm	272.00
362	TBSC-K.I-20	Calcium Silicate Boards - 6mm thick	1 Sqm	209.00
363	TBSC-K.I-21	Calcium Silicate Boards - 8mm thick	1 Sqm	279.00
364	TBSC-K.I-22	Calcium Silicate Boards - 10mm thick	1 Sqm	349.00
365	TBSC-K.I-23	Calcium Silicate Boards - 12mm thick	1 Sqm	418.00
366	TBSC-K.I-24	Supply of Thermocol 12 mm thick sheets	1 Sqm	24.00
367	TBSC-K.I-25	Supply of Thermocol 19 mm thick sheets	1 Sqm	42.00
368	TBSC-K.I-26	Supplying and fixing of false ceiling using Plaster of Paris Boards 12 mm thick with standard GI ceiling angles, sections perimeter channels including cost and conveyance of all materials and labour charges etc complete	1 Sqm	400.00
369	TBSC-K.I-27	Supplying and fixing of false ceiling using Plaster of Paris Boards 10 mm thick with standard GI ceiling angles, sections perimeter channels including cost and conveyance of all materials and labour charges etc complete	1 Sqm	333.00
370	TBSC-K.I-28	Supply and fixing false ceiling using 8 mm thick Cement Bonded particle boards conforming to IS 14276 with galvanized and pre painted steel T section of size 24mm x 38mm x 0.3 mm for main T duty pre punched to accept cross T section of size 24mm x 30mm x 0.3 mm duly punched at both ends for insertion into main T. The grid size will be 610mm x 610mm. The frame work (grid) is suspended to the roof by using G.I flat of 0.60mm or 14-gauge G.I wire with necessary fixers to the roof and frame work the cost is inclusive of necessary hardware, labour, one coat of primer (Both side) and two coats of smooth finish on visible side.	1 Sqm	1,140.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
371	TBSC-K.I-29	Providing and fixing false ceiling consisting of 600 mm x 600 mm, Solid PVC insulation panels having wall thickness of 1mm thick plain PVC rigid foam sheet and EPS as defined in of desired thickness depending on insulation required shall be insert in a frame work made using anodized aluminium Tee section of sizes 1"X1" (25X25mm, 19 gauge or 1mm thick) in square pattern of grid sizes of 2'X2' (600X600mm). The aluminium framework is supported from the ceiling with the help of G.I. hook and G.I. wire/6mm.M.S. rods of required sizes to maintain proper level etc. the aluminium framework is supported on side wall with the use of aluminium 1"X1" (25X25mm) angles, complete as per direction of Engineer-in-Charge & drawing	1 Sqm	1,224.00
372	TBSC-K.I-30	Supply and fixing of PVC false ceiling on MS/GI made skeleton framework. The frame shall be 24 X 48mm MS tube section fixed along with the wall. The entire frame work shall be concealed with PVC section having overall dimensions of 6 X 250 mm with a wall thickness of 1mm ± 0.3mm with tongue and groove system, provided with necessary arrangements for electrical connections, complete, for finished item of work.	1 Sqm	1,359.00
373		15 mm - Micro Look Edge 600 x 600 of Board / Tegular/ Micro look Edge tiles with a Humidity Resistance of 95% RH, Average NRC 0.90, Light Reflectance >88%, Thermal Conductivity $\lambda = 0.032$ w/mk, Fire Performance Class 0/Class 1 suitable for Green Building application, with Recycled content of 88% (FG)	1 Sqm	1,403.00
374		16 mm - Tegular Edge 600 x 600 of Board / Tegular/ Micro look Edge tiles with a Humidity Resistance of 99% RH, Average NRC 0.55, Light Reflectance >84%, Thermal Conductivity $\lambda = 0.052$ to 0.057 w/mk, Fire Performance Class 0/Class 1	1 Sqm	622.00
375		Providing & Fixing of Lay-in-metal plain ceiling System consisting of 600 x 600mm Lay in GI tiles of pre coated galvanised steel in 0.5 mm thickness in white colour to be laid on grid systems with 15mm wide T - section flanges but excluding cost of Grid systems complete for finished item of work	1 Sqm	677.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
376		Providing & Fixing of GI Lay in Standard Perforated(2.5mm diameter-16% open area) metal ceiling consisting of 600 x 600 mm Lay in tiles of pre coated galvanized steel in 0.5 mm thickness in Global white color acoustical fleece hot pressed to the back of the perforated tile to be laid on grid systems with 0.5 mm thickness in white colour with 15mm wide T - section flanges but excluding cost of Grid systems and having rotary stitching on the Main Runner, 1200 mm & 600 mm Cross Tees and the tiles with NRC of 0.70, Fire Performance of Class A2-s1.d0 as per EN13501 standard in module size of 600 X 600 mm suitable for Green Building application, with Recycled content of 25% complete for finished item of work	1 Sqm	969.00
II	SUB-SECTION	FALSE CEILINGs - SECTIONS & ACCESSORIES		
377	TBSC-K.II-01	G.I. Ceiling Angle - 25 mm x 10 mm x 0.55 mm	1 RM	67.00
378	TBSC-K.II-02	G.I. Ceiling Section 51.5 mm x 26 mm x 10.5 mm x 0.55 mm thick	1 RM	78.00
379	TBSC-K.II-03	G.I. intermediate Section 45 mm x 15 mm x 15 mm x 0.9 mm	1 RM	77.00
380	TBSC-K.II-04	G.I. Perimeter Channel - 20 mm x 27 mm x 30 mm (web) of 0.55 mm thick	1 RM	67.00
381	TBSC-K.II-05	G.I.-Precoated Fine line Grid 25 mm x 25 mm x 0.7 mm	1 RM	38.00
382	TBSC-K.II-06	G.I.-Precoated Fine line Grid 15 mm x 25 mm x 0.7 mm	1 RM	34.00
383	TBSC-K.II-07	GI - Precoated - T-Sec- 24 mm x 38 mm x 0.7 mm thick	1 RM	50.00
384	TBSC-K.II-08	Hot dipped GI Angle - Precoated - Grid: 19 mm x 19 mm	1 RM	37.00
385	TBSC-K.II-09	Polyester painted GI - T Section - 24 x 32 mm	1 RM	45.00
386	TBSC-K.II-10	Polyester painted GI - T Section - 24 x 25 mm	1 RM	41.00
387	TBSC-K.II-11	Polyester painted GI - T Section - 24 mm x 27 mm	1 RM	42.00
388	TBSC-K.II-12	Aluminium Angle : 24 mm x 24 mm	1 RM	24.00
389	TBSC-K.II-13	Anodized Aluminium T Section : 24 x 24.5 x 2.4 mm	1 RM	31.00
390	TBSC-K.II-14	Connecting Clips	1 Each	3.00
391	TBSC-K.II-15	Rawl Plug	1 Each	3.00
392	TBSC-K.II-16	6 mm Nylon Rawl Plug	1 Each	3.00
393	TBSC-K.II-17	Soffit Cleats	1 Each	3.00
394	TBSC-K.II-18	Drywall Screws - 25 mm	1 Each	3.00
395	TBSC-K.II-19	Jointing Compound	1 Kgs	27.00
396	TBSC-K.II-20	Jointing Paper Tape	1 RM	5.00
397	TBSC-K.II-21	Drywall Top Coat	1 Lit	129.00
398	TBSC-K.II-22	Universal Holding Clips	1 Each	3.00
399	TBSC-K.II-23	4 mm Diameter GI Connecting Rod	1 RM	11.00
400	TBSC-K.II-24	2 mm Diameter GI Connecting Rod	1 RM	10.00
III	SUB-SECTION	WALL LINING & PANNELING		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
401	TBSC-K.III-01	Providing wooden panelling 12 mm thick prelaminated particle board fixed on wooden frame of BT wood size 50.8 mm x 25.4 mm (2"x1") at distance of 609.6mm (2'-0") intervals of both ways providing 3/4" x 1/2" (19.05 mm x 12.7 mm) size BT wood ornamental cover beading and necessary screws, synthetic glue complete for finished item of work.	1 Sqm	1,642.00
402	TBSC-K.III-02	Perforated wall panels channelled wood works sheets of width 128 mm, thickness of 16mm and length 2440 mm made of a high density particle board substrate with a laminated facing as per the approved shade/ species & finish and a melamine balancing layer on the reverse side, with a special perforation pattern fluted perforation on the visible surface with a minimum sag resistance of RH90 and a fire rating class of 1 as per Part 7 of BS 476 with a "tongue-and-grooved" edges and the back of the perforated panel is with sound absorbing non-woven acoustical fleece	1 Sqm	3,169.00
403	TBSC-K.III-03	Supply and fixing of wall lining fixing to GI channels of perimeter channel 30mm x 27mm x 0.55 thick and ceiling channels of 51.1mm x 26mm x 10.5mm x 0.55mm thick and fixing and finishing using joint compound and glass fibre tape complete finish as per specification without painting for finished item of work: using 8mmthick Calcium silicate boards	1 Sqm	694.00
404	TBSC-K.III-04	Supply and fixing of wall lining fixing to GI channels of perimeter channel 30mm x 27mm x 0.55 thick and ceiling channels of 51.1mm x 26mm x 10.5mm x 0.55mm thick and fixing and finishing using joint compound and glass fibre tape complete finish as per specification without painting for finished item of work: Using 10mm thick Calcium silicate boards	1 Sqm	765.00
405	TBSC-K.III-05	Supply and fixing of wall lining fixing to GI channels of perimeter channel 30mm x 27mm x 0.55 thick and ceiling channels of 51.1mm x 26mm x 10.5mm x 0.55mm thick and fixing and finishing using joint compound and glass fibre tape complete finish as per specification without painting for finished item of work: Using 12mm thick Calcium silicate boards	1 Sqm	834.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
406	TBSC-K.III-06	Supply and fixing of cement board (conforming to IS:14862:2000) wall panelling with frame work made of GI stud profile of size 48 x 40 x 10 x 0.55 mm thick placed at every 610 mm C/C intervals fixed vertically in between floor and roof 'U' track of size 50 x 30 x 0.6 mm thick duly fixed with self expansion screws and fixing with self tapping self embedding screws fixed at every 300 mm (centres) leaving a 3 mm gap between two panels of width 2'-0". The Gap will be covered with a decorative beading. Surface will be given a smooth finish over a coat of primer. - With 8 mm Cement Bonded Board	1 Sqm	836.00
407	TBSC-K.III-07	Supply and fixing of cement board (conforming to IS:14862:2000) wall panelling with frame work made of GI stud profile of size 48 x 40 x 10 x 0.55 mm thick placed at every 610 mm C/C intervals fixed vertically in between floor and roof 'U' track of size 50 x 30 x 0.6 mm thick duly fixed with self expansion screws and fixing with self tapping self embedding screws fixed at every 300 mm (centres) leaving a 3 mm gap between two panels of width 2'-0". The Gap will be covered with a decorative beading. Surface will be given a smooth finish over a coat of primer. - With 10 mm Cement Bonded Board	1 Sqm	962.00
408	TBSC-K.III-08	Supply and fixing Cement Bonded Particle Board conforming to IS 14276 wall panelling using 10 mm Cement Bonded Particle Board conforming to IS 14276 with frame work made of GI stud section of size 48mm x 35mm x 0.55mm thick placed at every 610 mm C/C intervals vertically and at 1200mm internals horizontally fixed to the wall by means of self expansion screws and caps and Cement Bonded Particle Board conforming to IS 14276 is to be fixed to frame by means of self taping screws placed at every 300 mm intervals leaving 3mm gap between two panels. The cost inclusive of one coat of synthetic plastered primer and two coats of synthetic smooth finished putty and cost & conveyance of all materials, labour charges etc. complete as per the direction of Engineer in charge.	1 Sqm	1,504.00
409	TBSC-K.III-09	Supply and fixing of Cement Bonded Pre-laminated Particle Board wall panelling using 12 mm Cement Bonded Pre-laminated Particle with frame work made of G.I stud section of size 48mm x 35mm x 0.55mm thick placed at every 610mm intervals vertically and at 1200mm internals horizontally fixed to the wall by means of self expansion screws and caps. Cement Bonded Pre-laminated Particle is to be fixed to frame by means of self-taping screws placed at every 300mm intervals leaving 3mm gap between two panels. The cost inclusive of Conveyance of materials, Labour charges etc.,	1 Sqm	2,117.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		complete as per the direction of Engineer in charge		
410	TBSC-K.III-10	Providing and fixing plain PVC rigid foam sheet wall panelling of thickness 5mm consisting of panels having size 1220mm X2440mm stuck on inner frame work of 25mm wide strips of 5mm thick PVC rigid foam sheet. The strips should have in their centre a groove of 6mm width and 2mm depth for sinking the head of the screw used to fix the strips to the wall and should be placed vertically at equal intervals of 405/407mm centre to centre. The PVC strips shall be fixed to the wall using 65mm long M.S. screws through the groove in the strip by using PVC fasteners. The distance between two screws shall not be more than 300mm. a groove of 2mm may be left at the joint of two panels for aesthetic looks. This framework is done for making existing wall surface in ensured level and for sticking the wall panelling sheet (panel) on it. The exact size of the panel and correspondingly of the grid May be varied depending on the size of the wall. However it must ensured that a strips of 5mm thick PVC sheet of width 75mm feathered at the edges shall be stuck at the places where two panels are joined, using solvent cement. , complete as per direction of Engineer-in-Charge, manufacture's specification & drawing	1 Sqm	1,883.00
411	TBSC-K.III-11	Providing and fixing INSULATED PVC WALL panelling shall consist of PVC insulated panels having wall thickness of 1mm /1.5mm/2mm PVC sheet and the desired thickness of EPS (dependent on the insulation required) screwed into the wall using screws of adequate length. The screws shall be placed at a distance of 150mm and shall be 25mm from the edge of the insulated panel on all from sides of the panel. The PVC strips of 5mm thick PVC sheet of width 75mm feathered at the edges shall be stuck using solvent cement adhesive at the places where two panels are joined, so as to cover the screw of both the panels, using solvent cement. 90 heat bent strips of 5mm thick PVC sheets of width 75mm X75mm feathered at the edges shall be stuck at wall joints / pillars etc. , complete as per direction of Engineer-in-Charge, manufacture's specification & drawing	1 Sqm	1,982.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
412	TBSC-K.III-12	Supply and fixing of wall panelling on the framework of wooded rippers of 24 X 24mm of required size. The entire framework shall be panelled with PVC section having overall dimensions of 6 X 250mm with a wall thickness of 1mm ± 0.3mm. The panels are joined with tongue and groove system. Necessary cut-outs for electrical connections to be provided at required places complete, for finished item of work.	1 Sqm	1,287.00
IV	SUB-SECTION	PARTITIONS		
413	TBSC-K.IV-01	Supply & fixing 75mm thick metal stud partition using 12.5 mm thick Gypboard conforming to IS 2095-1982 screw fixed to either side to 48 mm studs of 0.55 mm thick with the 50 mm floor and ceiling channel 0.55 mm and the joints duly finished with joint compound, paper tape and two coats Dry wall top coat as per specification.	1 Sqm	1,108.00
414	TBSC-K.IV-02	Supply and Fixing 66mm thick metal stud partition screw fixed to either side of 48mm studs of 0.55mm thick with 50mm floor and ceiling channel 0.55mm and the joints duly finished with joining compound, glass fibre tape and two coats dry wall top coat as per specification finished Item of work- using 8mm thick Calcium silicate boards	1 Sqm	1,170.00
415	TBSC-K.IV-03	Supply and Fixing 66mm thick metal stud partition screw fixed to either side of 48mm studs of 0.55mm thick with 50mm floor and ceiling channel 0.55mm and the joints duly finished with joining compound, glass fibre tape and two coats dry wall top coat as per specification finished Item of work - Using 10mm thick Calcium silicate boards	1 Sqm	1,310.00
416	TBSC-K.IV-04	Supply and Fixing 66mm thick metal stud partition screw fixed to either side of 48mm studs of 0.55mm thick with 50mm floor and ceiling channel 0.55mm and the joints duly finished with joining compound, glass fibre tape and two coats dry wall top coat as per specification finished Item of work - Using 12mm thick Calcium silicate boards	1 Sqm	1,448.00
417	TBSC-K.IV-05	Supply and Fixing 66mm thick metal stud partition using 2 layers of 12mm thick Calcium silicate boards screw fixed to either side to 48mm studs of 0.55mm thick with 50mm floor and ceiling channel 0.55mm. The boards joints are to be staggered to avoid through passage. Ceramic wool of 50mm thick, 64kg/m ³ density is to be placed in cavity of the partition. The joints duly finished with joining compound, glass fibre tape and two coats dry wall top coat as per specification with out painting for finished item of work	1 Sqm	3,888.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
418	TBSC-K.IV-06	Supply and fixing double skin cement board (conforming to IS:14862:2000) partition with Frame work made of GI stud profile of size 48 x 40 x 10 x 0.55 mm thick placed at every 610 mm C/C intervals and 1220 mm horizontal intervals duly fixed with self expansion screws, the cement board of 8 mm thick cladded around with self tapping self embedding screws fixed at every 300 mm (centres) leaving 3 mm gap between two panels and the gap will be covered with decorative moulding surface will be given a smooth finish over cement primer. The rate is inclusive of cost and conveyance of all materials and labour charges etc. complete.	1 Sqm	1,459.00
419	TBSC-K.IV-07	Providing and fixing of 50 mm thick SOLID WALL PANEL Sandwich panels made of light Weight FRACC two 5 mm thick non-asbestos fibre reinforced cement sheets (conforming to IS:14862:2000) on either side of the lightweight concrete core composed of Portland cement binders with tongue and groove arrangement. The bottom of the panel shall be fixed to the floor channel made up of 1 mm thick GI channels of size 28x52x31 mm fixed to the existing floor with 6x60mm nylon self expansion screws at 600 mm C/C and top of the panel fixed with ceiling channel made out of 0.8 mm thick GI Channel of size 31x52x31 mm duly fixed to the existing ceiling with 6x60mm nylon self expansion screws at 600 mm C/C. All the tongue and groove joints of the panels have to be properly cleaned and both the panels have to be fixed by applying the mixture of fly ash and sodium silicate in between and Everest jointing compound all the exposed joints. The rate includes cost of 50mm SOLID WALL PANELS, G.I. Floor and ceiling channel. The panels can be flushed by using paper tape and Everest jointing compound all complete	1 Sqm	1,506.00
420	TBSC-K.IV-08	Providing and fixing of 75mm thick SOLID WALL PANEL Sandwich panels made of light Weight FRACC two 5 mm thick non-asbestos fibre reinforced cement sheets (conforming to IS:14862:2000) on either side of the lightweight concrete core composed of Portland cement binders with tongue and groove arrangement. The bottom of the panel shall be fixed to the floor channel made up of 1 mm thick GI channels of size 28x77x31 mm fixed to the existing floor with 6x60mm nylon self expansion screws at 600 mm C/C and top of the panel fixed with ceiling channel made out of 0.80 mm thick GI Channel of size 31x77x31 mm duly fixed to the existing ceiling with 6x60mm nylon self expansion screws at 600 mm C/C. All the tongue and groove joints of the panels have to be	1 Sqm	1,797.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		properly cleaned and both the panels have to be fixed by applying the mixture of fly ash and sodium silicate in between and Everest jointing compound all the exposed joints. The rate includes cost of 75mm SOLID WALL PANEL panels, G.I. Floor and ceiling channel. The panels can be flushed by using paper tape and Everest jointing compound all complete.		
421	TBSC-K.IV-09	Supply & fixing of 50 mm thick partition with composite panel comprise of two 5mm thick Boards (asbestos-free fibre reinforced cement sheets conforming to IS 14862) strongly bonded with core material which is light weight concrete mix of Portland cement, expanded polystyrene bead aggregates and admixture. s with unique semi-circular Tongue & Groove Joining System provides better stability, rapid installation and better workability. The bottom of the panel shall be fixed to the floor channel made up of 1 mm thick GI channels of size 28x52x31 mm fixed to the existing floor with 6x60mm nylon self-expansion screws at 600 mm C/C and top of the panel fixed with ceiling channel made out of 0.8 mm thick GI Channel of size 31 x 52 x 31 mm duly fixed to the existing ceiling with 6x60mm nylon self-expansion screws at 600 mm C/C. All the tongue and groove joints of the panels have to be properly cleaned and both the panels have to be fixed by applying the jointing compound in all the exposed joints. The rate includes cost of 50mm S, G.I. Floor and ceiling Channel.	1 Sqm	1,506.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
422	TBSC-K.IV-10	Supply & fixing of 75 mm thick partition with composite panel comprise of two 5mm thick Boards (asbestos-free fibre reinforced cement sheets conforming to IS 14862) strongly bonded with core material which is light weight concrete mix of Portland cement, expanded polystyrene bead aggregates and admixture. s with unique semi-circular Tongue & Groove Joining System provides better stability, rapid installation and better workability. The bottom of the panel shall be fixed to the floor channel made up of 1 mm thick GI channels of size 28x77x31 mm fixed to the existing floor with 6x60mm nylon self-expansion screws at 600 mm C/C and top of the panel fixed with ceiling channel made out of 0.8 mm thick GI Channel of size 31x77x31 mm duly fixed to the existing ceiling with 6x60mm nylon self-expansion screws at 600 mm C/C. All the tongue and groove joints of the panels have to be properly cleaned and both the panels have to be fixed by applying the jointing compound in all the exposed joints. The rate includes cost of 75mm S, G.I. Floor and ceiling Channel.	1 Sqm	1,797.00
423	TBSC-K.IV-11	Supply and fixing double skin partition using with 10 mm Cement Bonded Particle Board conforming to IS 14276 made out of G.I. track section of size 50mmx 35mm x 0.55 mm for fixing to the roof and floor and stud section of size 48mm x 35mm x 0.55mm placed in track section vertically at 610mm intervals and at 1200mm intervals horizontally fixed to the wall by means of self expansion screws and caps to the wall and roof the panel is to be fixed both sides of frame work by using self taping screws fixed at every 300mm intervals to the frame work leaving 3 mm gap between two panels. The cost inclusive with one coat of synthetic primer and two coats of synthetic plaster smooth finish and cost and conveyance of all materials to site, labour charges etc., complete as per the direction of Engineer in charge.	1 Sqm	2,197.00
424	TBSC-K.IV-12	Supply and fixing of Cement Bonded Prelaminated Particle Board double skin partition using with 10 mm Cement Bonded Prelaminated Particle Board made out of G.I track section of size 50 mm x 35mm x 0.55mm for fixing to the roof and floor and stud section of size 48mm x 35mm x 0.55mm placed in track section vertically at 610mm intervals and at 1200mm internals horizontally. The frame is fixed by means of self expansion screws and caps to the wall / roof. Cement Bonded Prelaminated Particle Board is to be fixed both sides of the frame work by using 2mm thick electro plated CR flat section leaving 3mm gap between two panels. The cost inclusive of cost and conveyance	1 Sqm	3,027.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		of all materials to sites, other materials incidentals and labour charges as per the direction of Engineer in charges.		
425	TBSC-K.IV-13	Supply and fixing of Cement Bonded Prelaminated Particle Board aluminium glazed partitions using 10MM Cement Bonded Prelaminated Particle Board and 5.00 mm thick plain glass to full height. Using with Cement Bonded Prelaminated Particle Board to a height of 0.91 meter at bottom panel and remaining height with glass and aluminium sections anodized to 12 to 15 microns and of sections of size 37mm x 62mm and 1.5mm thickness with one meter centre to centre duly fixed with clip beading on both sides including fixing the frame to pillars by M.S. flats, bolts and nuts including cost and conveyance of all materials etc., complete as directed during execution.	1 Sqm	3,490.00
426	TBSC-K.IV-14	Providing and fixing 50mm thick SEMI HEIGHT SOLID PVC PARTITION consisting of 49mm sandwich PVC panel made out of 36mm high density expanded polystyrene sheet(E.P.S.-Thermocol) stuck on both side with 2mm thick plain/printed /prelam PVC rigid foam sheets reinforced with frame work made from 35mmX5mm M.S. Angle. In between two M.S. Angles 5mm thick plain/printed/prelam heat moulded "" PVC 'C' channel of size 50X100mm with feathered edges shall be fixed on the floor & 50X75mm with feathered edges plain/printed /prelam PVC 'C' channel. In between adjoining EPS sandwiched PVC partitions panel 5mm thickX75mm width plain/printed/prelam PVC sheet feathered at edges shall be stuck on front & back face using solvent cement etc. in places where two partitions meet to form an 'L' shape the panels are joined 5mm thick plain/printed/prelam heat moulded "" PVC 'L' section of size 75mmX75mm with feathered edges shall be fixed on front & back side. This is done to maintain the symmetry of design. An additional 5mm thick PVC strip of 40mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive, complete as per direction of Engineer-in-Charge, manufacture's specification & drawing	1 Sqm	2,675.00
427	TBSC-K.IV-15	Supply and fixing of PVC Double Skin Partition. The entire framework shall be carried out by mild steel section having overall dimensions of 24 X 48mm with a wall thickness of 1.2mm. The entire framework shall be concealed with PVC section having overall dimensions of 6 X 250mm with a wall thickness of 1mm ± 0.3mm both sides. Glass provision/Door provision can be provided along the partition wherever required. Partitions can be made full or half as per	1 Sqm	2,258.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		requirement complete, for finished item of work.		
428	TBSC-K.IV-16	Supply and fixing double skin cement based Board partition with Frame work made of GI stud profile of size 48x40x 10x 0.6 mm thick placed at every 610 mm C/C intervals and 915 mm horizontal intervals duly fixed with self expansion screws, the Cement Bonded Board of 8 mm thick cladded around with self tapping self embedding screws fixed at every 300 mm (centres) leaving a 3 mm gap between two panels of width 2'-0" (610 mm). The Gap will be covered with a decorative moulding surface will be given a smooth finish over cement primer. The rate Inclusive of cost and conveyance of all materials and labour charges etc., Complete. DOUBLE SKIN PARTITION	1 Sqm	1,263.00
429	TBSC-K.IV-17	Supply and fixing of partitions made of seccolor pre-painted steel (base steel as per IS 513 of 0.58 mm thick 'D' quality, galvanized as per IS 277 with Zinc of 120 GSM). Primer coated with epoxy primer of 5-7 microns thick, finish painted with a polyester paint of 12-16 microns thick alkyd backer. Section for outer frame should be 46x52mm, section for shutter should be 46x46mm, section for mullion should be 46x70mm, section for beading should be 18x25mm and section for middle and bottom rail (Lock Rail and Kick Rail) of size should be 23x130mm. The partition should be panelled with 9mm pre-laminated particle board to a height of 0.91m from the bottom, and remaining height with 5mm thick plain glass With Ethyl Propylene Diametermine Monomer (EPDM) Gaskets. The sections are to be cut to length, mitre joined with corner bracket Centre mullions are to be fixed using mullion cap. Gaskets made of Ethyl Propylene Diametermine Monomer (EPDM). Corner brackets made of CRCA with zinc phosphate. Mullion caps made of Glass filled nylon. The above frames should be fixed to the concrete/masonry wall by means of self expanding screws, and complete for finished item of work Fixed Partition: Outer frame section size of 46x52mm, mullion section should be of 46x70mm, fixed beading should be of 18x25mm.	1 Sqm	4,466.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
430	TBSC-K.IV-18	Supply and fixing of partitions made of seccolor pre-painted steel (base steel as per IS 513 of 0.58 mm thick 'D' quality, galvanized as per IS 277 with Zinc of 120 GSM). Primer coated with epoxy primer of 5-7 microns thick, finish painted with a polyester paint of 12-16 microns thick alkyd backer. Section for outer frame should be 46x52mm, section for shutter should be 46x46mm, section for mullion should be 46x70mm, section for beading should be 18x25mm and section for middle and bottom rail (Lock Rail and Kick Rail) of size should be 23x130mm. The partition should be panelled with 9mm pre-laminated particle board to a height of 0.91m from the bottom, and remaining height with 5mm thick plain glass With Ethyl Propylene Diametermine Monomer (EPDM) Gaskets. The sections are to be cut to length, mitre joined with corner bracket Centre mullions are to be fixed using mullion cap. Gaskets made of Ethyl Propylene Diametermine Monomer (EPDM). Corner brackets made of CRCA with zinc phosphate. Mullion caps made of Glass filled nylon. The above frames should be fixed to the concrete/masonry wall by means of self expanding screws, and complete for finished item of work Fixed Partition with Door: Outer frame section size of 46x52mm, mullion section should be of 46x70mm, fixed beading should be of 18x25mm, section for shutter should be of 46x46mm and section for middle & bottom should be of size 23x130mm	1 Sqm	5,093.00
L	SECTION	DOORS, SHUTTERS & FRAMES		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	DOOR FRAMES		
431	TBSC-L.I-01	Mild Steel Hallow single rebate general purpose door frames manufactured using cold roll formed process steel sheet of 1.25 mm thick bright (Cold Rolled Close Annealed (CRCA) and profile-B of size 105 x 60 mm conforming to IS 4351 - 2003 including pre-treatment, phosphating with Hinges, Base Ties, Holdfast Lugs, Mortar Guards, shock absorbers and provision for Tower Bolts, Aldrops, Lock & Strike plates etc. for both single and double shutter doors	1 Rm	343.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
432	TBSC-L.I-02	Powder Coated Mild Steel Hollow single rebate door frames manufactured using cold roll formed process steel sheet of 1.25 mm thick bright (Cold Rolled Close Annealed (CRCA) and profile size of 105 x 60 mm conforming to IS 4351 - 2003 including pre-treatment, Galvanized as per IS:277, zinc phosphating finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability/Epoxy polyester powder for powder coating paint thickness 60 - 65 microns(Dry film thickness)Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame with Hinges, Base Ties, Holdfast Lugs, Mortar Guards, shock absorbers and provision for Tower Bolts, Aldrops, Lock & Strike plates etc. for both single and double shutter doors	1 RM	631.00
433	TBSC-L.I-03	Providing and fixing factory made polyvinyl chloride (PVC) Door Frame of the size 50 x 47mm with a wall thickness of 5mm, made out of extruded 10 mm rigid PVC foam sheet, mitre cut at two corners and joined with 2nos. of 150mm long brackets of 15x15mm M.S. square tube. The two vertical door profiles are to be reinforced with 19x19mm M.S. Square tube of 19 gauge. The door frame shall be fixed to the wall using 65/100mm long M.S. Screws through the frame by using PVC fasteners. A minimum of 4nos. of screws to be provided for each vertical member & minimum 2nos. for horizontal member etc. complete as per manufacturers specification and direction of Engineer-in-Charge for finished item of work	1 Rm	295.00
434	TBSC-L.I-04	SUPPLY &FIXING SINGLE SIDE PRELAM SOLID PANEL PVC DOOR FRAME (CHOUKHAT) Providing and fixing factory made Pac single side Prelam door frame of the size 50X47 mm with a wall thickness of 5mm, made out of extruded 5mm rigid Pac single side prelam sheet, meter cut at two corners and joined with 2nos. of 150mm long brackets of 1515mm MS. Square tube. The two vertical door profiles are to be reinforced with 19X19mm MS. square tube of 19gauge. The door frame shall be fixed to the wall using 65/100mm long MS. Screws through the frame by using Pac fasteners. a minimum of 4nos. of screws to be provided for each vertical member and minimum 2nos. for horizontal member etc. complete as per manufacture specification and direction of Engineer-in-charge.	1 Rm	308.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
435	TBSC-L.I-05	Supply and fixing of door frame made of hollow extruded PVC section having dimensions of 40 X 57mm with the wall thickness of 2mm +/- 0.2mm duly reinforced with seasoned wood plank at the hinges side. The door frame top 2 corners shall be metre-cut/ welded. PVC DOOR FRAME	1 RM	231.00
436	TBSC-L.I-06	Supply and fixing of door frame made of hollow extruded PVC section having dimensions of 40 X 46 mm with the wall thickness of 2mm +/- 0.2mm duly reinforced with seasoned wood plank at the hinges side. The door frame top 2 corners shall be mitre cut/welded	1 RM	182.00
437	TBSC-L.I-07	Supply & fixing of Door frames made of all formed sections of 1.25mm thick CRCA section, size should be 50x60mm with 32mm rebate. The corner of the frame should be welded. The frame should be painted with one coat of primer and finished painted with pure polyester paint. The frame should be provided with approved quality butt hinges of 3 Nos. complete for finished item.: Single shutter 3'-0" x 7'-0" (914.4x2133.6mm) outer frame section size of 50 x 60 mm	1RM	199.00
438	TBSC-L.I-08	Supply & fixing of Door frames made of all formed sections of 1.25mm thick CRCA section, size should be 50x60mm with 32mm rebate. The corner of the frame should be welded. The frame should be painted with one coat of primer and finished painted with pure polyester paint. The frame should be provided with approved quality butt hinges of 3 Nos. complete for finished item.: Double shutter 5'-0" x 7'-0" (1524 x 2133.6mm) outer frame section size of 50 x 60 mm	1 RM	199.00
439	TBSC-L.I-09	Supplying & fixing of Door frame made of roll formed section of 1.25 mm thick CRCA section, size should be 50 x 75 mm with 32 mm rebate. The corner of the frame should be welded. The frame should be painted with one coat of primer and finished painted with pure polyester paint. The frame should be provided with approved quality butt hinges of 3 Nos. Complete for finished item of work.: Single shutter 3'-0" x 7'-0" (914.4x2133.6mm) outer frame section size of 50 x 75 mm	1 RM	225.00
440	TBSC-L.I-10	Supplying & fixing of Door frame made of roll formed section of 1.25 mm thick CRCA section, size should be 50 x 75 mm with 32 mm rebate. The corner of the frame should be welded. The frame should be painted with one coat of primer and finished painted with pure polyester paint. The frame should be provided with approved quality butt hinges of 3 Nos. Complete for finished item of work.: Single shutter 5'-0" x 7'-0" (1524x2133.6mm) outer frame section size of 50 x 75 mm	1 RM	225.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
441	TBSC-L.I-11	Providing and fixing door frames fabricated from sections made of galvanized steel powder coated (base steel as per IS 513, galvanized as per IS 277 with zinc of 120 grams / square metre), the factory made section are powder coated with pure polyester powder of 50-60 microns thick with total coated thickness of 1.25 mm, size of door frame section is of 105 x 60 mm with a rebate of 38 mm to accommodate 35 mm thick door shutter, with groove to insert gasket in the frame section, frame section filled with polyurethane foam, cut to length, and joined by way of welding, each frame provided with: a) 2mm thick MS powder coated butt hinges of 100 mm long - 3 Nos. for single shutter, 6 Nos. for double shutter. b) CRCA electroplates stiffeners of 6 Nos. - 3 in each vertical. c) 40 mm x 200 mm x 1.2 mm hold fasts screwed to stiffeners - 6 Nos. with split end tail. d) Nylon Aldrops Receiver - 1 No. for single shutter frame. e) Tie Rod - 1 No	1 RM	688.00
442	TBSC-L.I-12	Providing and fixing of door frames factory made, internal door frames without threshold, fabricated from pre painted cold roll formed section 100 mm x 60 mm made of galvanized (base steel as per IS-513 'D' quality galvanized as per IS-277 with Zinc of 120 Gms/sqm) steel colour coated sections with total coated thickness of 1 mm primer coated with epoxy primer of 5-7 microns thick finish painted with polyester paint of 12-16 microns and back coated with alkyd backer of 5-7 microns, the frame section filled with polyurethane (PU Foam) of 40 kg/Cum and the sections cut to length and mitre joined by means of 1.25 mm thick CRCA electroplated corner brackets of size 75 x 75 mm and 1.25 mm thick electroplated stiffeners of size 150 mm for fixing hold fasts and hinges with MS Powder coated fittings a) 6 Nos M.S. Z Type hold fasts made of 30 mm x 3 mm MS flat of 230 mm long, 3 Nos each size expandable PVC covered screw type fasteners b) 2.5 mm x 300 mm long 'T' hinges /2.5 mm x 50 mm x 50 mm x 100 mm two way but hinges (3 Nos for single leaf or 2 Nos for Double leaf/leaf) c) 12 mm Diameter MS tie rod at bottom with necessary size of nuts on either side.	1 RM	431.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
443	TBSC-L.I-14	Supply and fixing of factory made Bathroom door frames without threshold, fabricated from pre-painted cold roll formed section 50mm x 50 mm made of galvanized steel as per IS - 513 'D' quality, galvanized as per IS-277 steel colour coated sections primer coated with epoxy primer finish painted with polyester paint the frame section filled with polyurethane (P.U. Foam) of 40 Kg/Cum; and the sections joined by means of 1.25mm thick CRCA electroplated corner brackets of size 75 x 75 mm and 1.25mm thick electroplated stiffeners of size 150mm for fixing hold fasts and hinges together with the following MS Power coated fitting (Supply and fixing) of approved make. a) 6 Nos M.S. Z. Type hold fasts made of 30mm x 3 mm MS flat of 230mm long, 3 Nos each side expandable PVC covered screw type fasteners b) 2.5 mm x 300 mm long 'T' hinges / 2.5mm x 50 mm x 100mm two way but hinges (3 Nos for single leaf or 2 Nos for Double leaf /leaf)c) 12 mm Diameter MS tie rod at bottom with necessary size of nuts on either side.	1 RM	389.00
444	TBSC-L.I-16	Supply of factory made Precast Reinforced Cement concrete door frame of with overall dimension of 60 x 100 mm for single shutter door (+/-2mm) three nos, of 6mm dia steel bars are used for longitudinal reinforcement for each vertical and horizontal member and are held firmly by 3mm dia ties spaced at not more than 300mm c/c Polymer wonder blocks are provided in the frames for tower bolt and hinges provisions made in the frame for Aldrops provisions are made in the vertical member for fixing of 3 nos. hold-fasts with 8 mm dia bolts and the frame surface shall be smooth without any voids and shall confirm to IS 6523 complete finished item including all taxes as per specifications & the directions of the Engineer-in-Charge.	1 RM	300.00
445	TBSC-L.I-18	Supply of factory made Precast Reinforced Cement concrete double door frame of the door frame shall have overall dimension of 60 x 125 for single shutter door(+/-2mm) four nos, of 6mm dia steel bars are used for longitudinal reinforcement for each vertical and horizontal member and are held firmly by 3mm dia ties spaced at not more than 300mm c/c Polymer wonder blocks for fixing of tower bolt and hinges with provision for Aldrops and 3 nos. hold-fasts with 8mm dia bolts and the frame surface shall be smooth without any voids and shall confirm to IS 6523 complete finished item including all taxes as per specifications & the directions of the Engineer-in-Charge.	1 RM	390.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
446	TBSC-L.I-20	Fixing of precast RCC frames (Precast RCC framed members to be supplied at site) including assembling the members for door frames fixing to MS masonry or RCC wall face including providing and fixing Six no. hold-fasts of MS Flat 40x5mm and length 40cm per frame embedding in cement concrete blocks of size 30x10x15 cm of mix (1 cement:3 Coarse sand: 6 graded stone aggregate 20 mm nominal size) complete as per specification & the directions of the Engineer-in-Charge	1 RM	227.00
II	SUB-SECTION	DOOR SHUTTERS WITHOUT FRAMES		
447	TBSC-L.II-01	Flush door shutters, solid bond wood block board type with teak ply on both faces.: 25 mm thick conforming to IS:2202	1 Sqm	1,731.00
448	TBSC-L.II-02	Flush door shutters, solid bond wood block board type with teak ply on both faces.: 30 mm thick conforming to IS:2202	1 Sqm	1,817.00
449	TBSC-L.II-03	Flush door shutters, solid bond wood block board type with teak ply on both faces.: 35 mm thick conforming to IS:2202	1 Sqm	1,984.00
450	TBSC-L.II-04	Flush door shutters, solid bond wood block board type with commercial ply on both faces.: 25 mm thick conforming to IS:2202	1 Sqm	987.00
451	TBSC-L.II-05	Flush door shutters, solid bond wood block board type with commercial ply on both faces.: 30 mm thick conforming to IS:2202	1 Sqm	1,192.00
452	TBSC-L.II-06	Flush door shutters, solid bond wood block board type with commercial ply on both faces.: 35 mm thick conforming to IS:2202	1 Sqm	1,349.00
453	TBSC-L.II-07	Flush door shutters, solid bond wood block board type with commercial ply on both faces.: 40 mm thick conforming to IS:2202	1 Sqm	1,528.00
454	TBSC-L.II-08	Flush door shutters, solid bond wood block board type with teak veneer on one face and commercial ply on another face (lipping): 20 mm thick conforming to IS:2202	1 Sqm	1,901.00
455	TBSC-L.II-09	Flush door shutters, solid bond wood block board type with teak veneer on one face and commercial ply on another face (lipping): 25 mm thick conforming to IS:2202	1 Sqm	1,848.00
456	TBSC-L.II-10	Flush door shutters, solid bond wood block board type with teak veneer on one face and commercial ply on another face (lipping): 30 mm thick conforming to IS:2202	1 Sqm	2,046.00
457	TBSC-L.II-11	Flush door shutters, solid bond wood block board type with teak veneer on one face and commercial ply on another face (lipping): 35 mm thick conforming to IS:2202	1 Sqm	2,231.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
458	TBSC-L.II-12	Flush door shutters, solid bond wood block board type with teak veneer on one face and commercial ply on another face (lipping): 40 mm thick conforming to IS:2202	1 Sqm	2,550.00
459	TBSC-L.II-13	Supply and fixing of Cement Bonded Prelaminated Particle Board single door shutter using 16MM Cement Bonded Prelaminated Particle Board with all round section "U" size of mm thick galvanized pre-painted cold rolled steel profiles Cement Bonded Prelaminated Particle Board with necessary screws fixed at every 1'0" (304.8mm) intervals. The cost inclusive of MS Nickel coated 250mm long Aldrops 2 no's , MS powder coated 250mm long tower bolt 1 no's, 2no's MS powder coated 125mm long grip handle, 1 no's M.S.P.C. Door stopper. Including cost and conveyance of all materials at site labour charges etc., complete finished item of work.	1 Sqm	2,222.00
460	TBSC-L.II-14	Supply and fixing of Cement Bonded Prelaminated Particle Board double door shutter using 16MM Cement Bonded Prelaminated Particle Board with all round "U" section size of 20mm x 18mm x 20mm made from 0.6mm thick galvanized pre-painted cold rolled steel profiles with Cement Bonded Prelaminated Particle Board separating two shutter with 30mm x 20mm x 30mm stepped lipping with necessary screws fixed at every 1'0" (304.8mm) intervals. The cost inclusive of MS Nickel coated 250mm long Aldrops 2no's, MS powder coated 125mm long grip handle, 2 no's M.S.P.C. Door stopper. Including cost and conveyance of all materials at site labour charges etc., complete finished item of work.	1 Sqm	2,822.00
461	TBSC-L.II-15	Supply and fixing of Cement Bonded Prelaminated Particle Board door shutter made out of U sections of size 12x14x12 made from 0.6mm thick pps sections with 12MM Cement Bonded Prelaminated Particle Board with necessary screws fixed at every 1'0" interwells. The hardware consists of 250mm long Aldrops – 2 Nos. 150mm Handle- 1 No , 150 mm long ms powder coated tower bolt 1 no. nickel coated. The cost is inclusive of all incidentals, labour transportation charges.	1 Sqm	2,174.00
462	TBSC-L.II-16	Supply and fixing of Cement bonded Particle BOARD (conforming to IS 14862) door shutter with all-round style "U" lipping size 15 x 18 x 15 mm made from 0.8 mm thick powder coated cold rolled steel profiles with 16 mm thick Cement bonded Particle BOARD with necessary screws fixed at 1'-0" interval 250 mm long Aldrops 2 nos. M.S. nickel coated 250 mm long 1 no. M.S. Tower Bolts Including cost and conveyance of all	1 Sqm	1,496.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		materials at site and applying 1 coat of primer, 2 coats of luppam and 2 coats of synthetic enamel paint as per approved design for finished item of work.		
463	TBSC-L.II-17	Supply and fixing of Cement bonded Particle BOARD (conforming to IS 14862) 12 mm thick door shutter of size 6'0" x 2'6" with all-round style "U" lipping size 15 x 14 x 15 mm made from 0.8 mm thick powder coated cold rolled steel profiles with necessary screws fixed at 1'-0" interval 250 mm long Aldrops 2 nos. M.S. nickel coated 250 mm long 1 no. M.S. Tower Bolts Including cost and conveyance of all materials at site and applying 1 coat of primer, 2 coats of luppam and 2 coats of synthetic enamel paint as per approved design for finished item of work.	1 Sqm	1,281.00
464	TBSC-L.II-18	Supply and fixing door shutter with frame made out of PVC section and panels conforming to IS:10151-1982 having panel sizes of 100 mm x 30 mm with self extruded grooves at 40 mm x 50 mm grooves on front face and the infill panel dimension is 610 mm x 20 mm seamless hallow multi chambered PVC single panel for finished item of work.	1 Sqm	2,367.00
465	TBSC-L.II-19	Moulded panel solid core flush doors using water-resistant hardwood fibre HDF / MDF fibre boards skins of 2.5 mm thick of Masonite or equivalent doors - 30 mm thick	1 Sqm	1,491.00
466	TBSC-L.II-20	Moulded panel solid core flush doors using water-resistant hardwood fibre HDF / MDF fibre boards skins of 2.5 mm thick Masonite or equivalent doors - 35 mm thick	1 Sqm	1,630.00
467	TBSC-L.II-21	Solid core membrane flush doors using rigid PVC membrane of 0.3 mm thick of different elegant shades doors - 30 mm thick	1 Sqm	1,211.00
468	TBSC-L.II-22	Solid core membrane flush doors using rigid PVC membrane of 0.3 mm thick of different elegant shades doors - 35 mm thick	1 Sqm	1,341.00
469	TBSC-L.II-23	Providing and fixing 35mm thick FACTORY MADE MOULDED DOOR SHUTTER consisting of sold core single leaf flush door of 30mm thickness, lipped with 15mm (5mmX3) thick X 30mm width on one stiles and top rails and 10mm (5mmX2) thick X 30mm width on the other stiles and bottom rails. The inner panel laminated with 2mm thick termite proof, water proof and fire resistant moulded Pac sheet with 2,4,6 raised panel design in different panel and / or prelam colours on one side after routing the moulded design on flush door and 2mm prelam Pac sheet on other side using rubber adhesive on flush door and solvent cement adhesive on Pac lipping etc. complete as per direction of Engineer-in-Charge, manufacture specification	1 Sqm	2,630.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		and drawing		
470	TBSC-L.II-24	Supply & Fixing SOLID STEEL DOOR shutter made out of G I Precoated Sheet with an average wall thickness of 0.35 mm on both sides. MS Tube having dimensions of 19 x 19 mm is inserted along the hinge side of the door, core of the door shutter filled with High Density Polyurethane foam injected with the help of hydraulic injection method, four sides of the door covered with G I Precoated Sheet and the hardware locations reinforced with suitable wooden blocks as per drawing and stickers indicating location of the hardware pasted at appropriate places, etc complete	1 Sqm	1,342.00
471	TBSC-L.II-25	Providing of 35mm thick Factory made Prelaminated ABS (Acrolonitrile Butadyne Styrene) Door shutter moulded in different designs, consisting of all round Frame made out of water proof solid foam PVC bar of size 20x32mm, reinforced by 32x 32mm - 2 nos. for vertical made out of LVL (Laminated Veneer Lumber), core material of 32 mm thick high density craft paper honey comb board, sandwiched on both sides with prelaminate ABS sheet thickness of 1.5mm . PVC edge banding of size 0.45mm on the vertical sides for each shutter and ISI make S.S round lock complete for finished item of work	1 Sqm	6,185.00
472	TBSC-L.II-26	Supply and fixing of Cement Bonded Prelaminated Particle Board door shutter conforming to IS-14276 made out of U sections of size 12 x 18 x 12 made from 0.6mm thick PPS sections with 16 mm Cement Bonded Prelaminated Particle Board with necessary screws fixed at every 1'.0"interwells. The hardware consists of 12 mm dia x 200mm long Aluminium Aldrops - 2 Nos. 125 mm long Handle- 2 Nos. 3 mm x 12 mm x 180 mm long 304 SS hinges- 3 Nos with pole receiver of 10mm dia pole X40mm long welded on 2mm X40mm(ss304) plates works as receiver for RT patte hinges. The cost is inclusive of all incidentals, labour transportation charges.	1 Sqm	2,382.00
III	SUB-SECTION	DOORS WITH SHUTTERS & FRAMES		
473	TBSC-L.III-01	Providing and fixing 30mm thick Solid panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x	1 Sqm	2142.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		19mm for stiles, & 15mm x 15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame shall be covered with 5mm thick heat moulded PVC 'C' channel of size 30 x 50mm forming stiles, and 5mm thick, 75mm wide PVC sheets for top rail, lock rail & bottom rail on either side, and 10mm (5mm x 2) thick, 20mm wide cross PVC sheet as gap insert for top rail & bottom rail. Panelling of 5mm thick PVC sheet to be fitted in the M.S. frame welded / sealed to the stiles & rails with 30mm wide x 5mm thick PVC sheet beading on either side, and joined together with solvent cement adhesive etc. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive. Complete as per direction of Engineer-in-charge, manufacturer's specification & drawing for finished item of work .		
474	TBSC-L.III-02	Providing and fixing 30mm thick FACTORY MADE BOTHSIDE PRELAM SOLID PANEL PVC DOOR SHUTTER consisting of frame made out of MS. Tubes of 19gauge thickness and size of 19mmX19mm for stiles, top and bottom rails. MS. Frame shall have a coat of steel primers of approved make and manufacture. MS. Frame covered with 5mm thick heat moulded Prelam Pac 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 450 angle on either side forming stiles; and 5mm thick, 95mm wide Prelam Pac sheet out of which 75mm shall be flat and 20mm shall be tapered in 450 on the inner side to form top and bottom rail 115mm wide Prelam Pac sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rail shall be provided either side of the panel. 10mm (5mmX2) thick, 20mmwide cross Pac sheet shall be provided as gap insert for top and bottom rail. Panelling of 5mm thick both side Prelam Pac sheet to be fitted in the MS. Frame welded/ sealed to the stiles & rails with 7mm(5mm+2mm) thick X 15mm wide Pac sheet beading on inner side, and joined together with solvent cement adhesive etc. an additional 5mm thick Pac strip of 20mm width is to be stuck on the interior side of the 'C' channel using Pac solvent cement adhesive etc. complete as per direction of Engineer - in-charge, manufacture specification and drawing.	1 Sqm	2448.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
475	TBSC-L.III-03	Providing and fixing 30mm thick FACTORY MADE SOLID SINGLE SIDE PRELAM PANEL PVC DOOR SHUTTER consisting of frame made out of MS. Tubes of 19gauge thickness and size of 19mmX19mm for stiles, and 15mmX15mm for top and bottom rails. The MS. Frame shall have a coat of steel primers of approved make and manufacture. MS. Frame covered with 5mm thick heat moulded single side Prelam Pac 'C' channel of size 30mmX50mm to form stiles. 5mm thick & 75mm wide single side prelim Pac sheets shall be for the top, bottom and lock rails. Panelling of 5mm thick one side Pac sheet to be fitted in the MS. Frame and sealed to the front (prelam side) stiles and rails (which should have a 5mm 45 bent portion as beading) and attached to the back (white/ivory) stiles and rails which should have a 10mm 90 bent portion as beading) using 2nos. 15mm wide X 5mm thick Pac sheet beading inside the 90 bent beading. All stiles, rails and beadings are to be joined to the panel using solvent cement etc. an additional 5mm thick Pac strip of 20mm width to be stuck on the interior side of the 'C' channel using Pac solvent cement adhesive and 10mm(5mmX2) thick, 20mm wide cross Pac sheet to be fitted as gap insert for top and bottom rail etc. complete as per direction of Engineer -in-Charge, manufacture specification and drawing.	1 Sqm	2,222.00
476	TBSC-L.III-04	MOULDED PVC DOOR - WOOD FREE Providing and fixing 30mm thick Brand factory made Moulded door shutter- wood free consisting of frame made out of MS. tubes 19gauge thickness and size of 25mmX25mm for stiles, top and bottom rails. MS. Frame shall have a coat of steel primers. The inner panel shall consist of 25mm thick High density EPS conforming to IS 4671-1984 bounded with 2mm thick termite proof, water proof and fire resistant moulded Pac sheet with 2,4,6 raised panel design in different plain and / or prelam colours after routing to the moulded design on one side and 2mm plain and / or prelam Pac sheet on other side of the EPS. The edge of panel to be sealed with lipping of 10mm wide PVC sheet bottom (made by sticking 2 rigid foam sheet of 5mm thickness using Pac solvent cement) and stiles sides 25mm(5mmX5) thick and 30mm width Pac sheet fitted along Ms. Tube for lock provision for lock height 5mm thick Pac sheet of size 150mmX100mm fixed with upper and lower face of inner side of EPS Panel etc. Complete as per direction of Engineer - in-Charge, manufacture specification and drawing	1 Sqm	2,245.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
477	TBSC-L.III-05	Providing and fixing 30mm thick FACTORY MADE WIRE MESH SOLID PVC DOOR SHUTTER consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mmX19mm for stiles and 15mm for top, lock & bottom rails. MS. Frame shall have a coat of steel primers of approved make and manufacture. 19mmX19mm M.S. square tubes shall be covered with 5mm thick heat moulded "" PVC 'C' channel of size 30mm thickness, 90mm width out of which 75mm shall be flat and 15mm shall be flat and 15mm shall be bent in 900 on the inner side to from top and bottom rail land 130mm wide PVC sheet out of which 100mm shall be flat and 154mm shall be bent in 900 on both side to from lock rail, 10mm(5mmX2) thick, 20mm wide cross PVC sheet as gap insert for top rail & bottom rail. Panel will be of G.I. wire mesh of 24gauge to be fitted in by 'C' channel of size 35mm X10mm on the either side in the stiles. The inner side 'C' channel is fixed by 19mmX19mm MS. Tube on both sides with screws. The wire mesh in top bottom & lock rail is sealed with 15mm X 15mm tube with G.I. wire 10mm(5mmX2) thick PVC strip of 25mm width is to be stuck & nails on both side of G.I. wire mesh interior at the top, bottom & lock rail. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' channel using PVC solvent cement adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawings	1 Sqm	1995.00
478	TBSC-L.III-06	Providing and fixing door & shutter of which frame made from 1.2 mm powder coated cold rolled steel profiles of overall section size of 60 mm x 45 mm with 21 mm rebate for shutter with necessary stiffeners hinges and screws with Cement bonded Particle BOARD (IS 14862) shutter with all-round style "U" lipping of size 15 x 18 x 15 mm made from 0.8 mm thick CRCA powder coated steel profile with 16 mm thick Cement bonded Particle board with necessary screws fixed at every 1'-0" interval 250 mm long Aldrops 2 nos. M.S. nickel coated 250 mm long 1 no. M.S. Tower Bolts including cost and conveyance, one coat of primer, 2 coats of luppam and 2 coats of synthetic enamel paint as per approved colour, labour charges etc.	1 Sqm	1,762.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
479	TBSC-L.III-07	Doors Frames (Colour Coated Steel Sections) & Shutter using Cement Bonded Particle Board as per IS 14276 (Cement Bonded Particle Board conforming to IS 14276 or equivalent) : Providing and fixing of door frame made from cold roll formed sections made of galvanized (Base steel as per IS277 with zinc of 120 Gms/sqm) colour coated steel sections with total coated thickness of 1mm, primer coated with epoxy primer coat of 5-7 microns thick, finish paint with polyester paint of 12-16 microns. The Section for door frame is to be filled with polyurethane (P.U) form of 40kg/m ³ . Overall size of frame section should be of 50mm x 50mm. With necessary corner brackets, stiffeners, hinges, and screws. Cement Bonded particle board shutter (Cement Bonded Particle Board conforming to IS 14276 or equivalent) "Single Leaf" with all round styles "U" section of size 12m x 18m x 12mm made from 0.6 mm thick galvanized, colour coated cold rolled steel profiles with 16mm thick Cement Bonded particle Board (Cement Bonded Particle Board conforming to IS 14276 or equivalent) with necessary screws fixed at every 1'-0" (304.8mm) intervals. The cost inclusive of MS nickel coated Aldrops of size 250mm long 2nos. 200mm long tower bolt 1no., 125mm handles 2nos., cost and conveyance of all materials at site and applying one coat primer , one coat of luppam and two coats of synthetic enamel paint as per approved design for finished item of work	1 Sqm	3,486.00
480	TBSC-L.III-08	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) 2 Track-2 Panel Sliding Doors duly manufactured using UPVC reinforced profiles(Composition of profile shall consists a minimum of 5.5 PHR of TiO ₂ and not more than 12 PHR of CaCo ₃ for every 100 parts of PVC resin) of 60 mm x 45 mm x 2.20 mm with reinforcement of 1.2 mm thickness, super sash with overall size of 39 mm x 75 mm x 2.20 mm with for sliding door shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.5 mm prefabricated & welded through fusion welding the door sash shall be fitted with 6 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. Door shall be provided with standard hardware & multi point locking system of bent handle espagulate .the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials,	1 Sqm	5669.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		accessories, labour charges for transportation, erection at site complete for finished item of work.		
481	TBSC-L.III-09	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) 3 track sliding doors with mesh shutter provision - (2-glass shutters)- 95 -Series duly manufactured using UPVC reinforced profiles(Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin) of (108 mm x 45 mm)/(95.50 mm x 60 mm) x 2.20 mm for outer frames, (75 mm x 39 mm)/(66 mm x 42 mm) x 2.20 mm for sliding door shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the door sash shall be fitted with 6 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. Door shall be provided with standard hardware & multi point locking system of Patio/Bent espagulate .the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	6377.00
482	TBSC-L.III-10	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) 3 track sliding doors with mesh shutter - (2-glass shutters and 1-mesh shutter)- 95 - Series duly manufactured using UPVC reinforced profiles (Composition of profile	1 Sqm	7048.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		shall consists a minimum of 5.5 PHR of TiO ₂ and not more than 12 PHR of CaCo ₃ for every 100 parts of PVC resin) of (108 mm x 45 mm)/(95.50 mm x 60 mm) x 2.20 mm for outer frames, (75 mm x 39 mm)/(66 mm x 42 mm) x 2.20 mm for sliding door shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the door sash shall be fitted with 6 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. Mesh shutter shall be made of (48 mm x 30 mm)/(50 mm x 26.5 mm) x 2.0 mm uPVC profile section and fitted with Vinyl Coated Fibre mesh and rollers/pulley duly fixed with TPV Gaskets weathering seal resistant Door shall be provided with standard hardware & multi point locking system of Patio/Roto espagulate and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.		
483	TBSC-L.III-11	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) sliding doors three track - three glass shutters sliding - 112 -Series duly manufactured using UPVC reinforced profiles of 112.0 mm x 60 mm x 2.25 mm for outer frames, 66 mm x 42 mm x 2.25 mm for sliding door shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the window sash shall be fitted with 5 mm thick clear float glass of reputed make and fixed with EPDM weathering seal resistant accessories like clipping locking system made of aluminium 1 No., per set of sashes and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work	1 Sqm	6103.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
484	TBSC-L.III-12	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) openable doors with openable shutters duly manufactured using UPVC reinforced profiles (Composition of profile shall consists a minimum of 5.5 PHR of TiO ₂ and not more than 12 PHR of CaCo ₃ for every 100 parts of PVC resin) of 60 mm x 55 mm x 2.40 mm for outer frames, 74 mm x 60 mm x 2.40 mm for mullion sections as per the need and 102 mm x 60 mm x 2.40 mm for openable shutter frame capable of mounting single glazing system structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the door sash shall be fitted with 6 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gaskets for sash & Glazing bead shall be co-extruded with Grey colour soft PVC System shall be provided with 4 no's of 3D Hinges for each shutter and multipoint locking with keys with raiser wedges for smooth operation and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	7989.00
485	TBSC-L.III-13	Supplying and fixing door shutter, with shutter frame and infill panel made from PVC material conforming to IS: 10151-1982, the shutter frame made out of PVC extruded sections having overall dimension of 47 mm x 33 mm with wall thickness of 1.2mm + 0.3mm with usual process variation, the shutter frame with tapered shape to provide better grip to the infill panel end to drain out the water The Infill panel is made out of PVC Sections having Overall Dimensions of 200 mm x 20 mm with wall thickness of 1mm + 0.2mm, the shutter frames mitre cut and joined at the corner, by providing Polymeric " L " type corners to take hardware & fixtures fixed with 10-20mm counter sunk fully threaded parallel shank steel screws, all the hardware locations reinforced with special polymeric bars as per drawings, stickers showing locations of different hardware pasted on the shutter, the infill panels joined by tongue and groove method.	1 Sqm	941.00
486	TBSC-L.III-14	Supply and fixing of door shutters made of rigid PVC extruded hollow section(Nandi or equivalent) of 20mm X 200 mm with the wall thickness of 1.0mm +/- 0.1mm equally divided into 4 no's with tongue and groove locking arrangements. The shutter frame is made of 30mm X 79mm with the wall thickness of 1.5mm +/-0.15mm section mitre-cut and joined at 4	1 Sqm	1744.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		corners with 125mm X 225mm plastic brackets. The shutter shall be horizontally reinforced with 2 no's of 8mm PVC rods. Teak wood batons shall be reinforced inside the door shutter during the fabrication of the door shutter at those points wherever the hardware is fixed onto the door shutter.		
487	TBSC-L.III-15	Providing & fixing 30 mm thick solid panel PVC door shutter consisting of frame made out of 19 gauge M.S tube of 19 x 19 mm for stiles, top & bottom rail, with a coat of primer of approved make. M.S. Frame covered with 5 mm thick heat moulded PVC "C" channel of size of 30 x 50 mm forming stiles, 5 mm thick 75 mm wide PVC sheet for top, lock & bottom rail on either side 20 mm wide cross PVC sheet as gap insert for top & bottom rail, panelling of 10mm(+/-)(5mm+5mm)" thick PVC sheet fitted in the M.S. frame welded /sealed to the stiles, on either side joined together with solvent cement adhesive etc., additional 5 mm thick PVC strip of 20 mm width stuck on the interior side of the C channel using solvent cement, complete as per direction of Engineer-in-charge, manufacturers specification.	1 Sqm	2748.00
488	TBSC-L.III-16	Supplying & fixing SINGLE PANEL 30 mm thick PVC DOOR, door shutters with shutter frame and Infill panel made from PVC material, the shutter frame made out of PVC extruded sections having overall dimensions of 60mm x 30 mm with wall thickness of 1.3 mm ± 0.3 mm, with the Infill panel made out of multi chambered seamless hollow PVC extruded panel having overall dimensions of 610 mm x 20 mm having wall thickness 1 mm ± 0.2 mm with the shutter frame meter cut and joined at corners and all the hardware locations reinforced with special polymeric bars as per drawing including providing special PVC bracket on hinge side, etc complete	1 Sqm	2362.00
489	TBSC-L.III-17	Providing & fixing internal prelamated PVC door frame of size 100 x 45 mm with a wall thickness of 5mm, made of extruded 5 mm Prelam PVC foam sheet, mitred cut at two corners and joined with two nos. of 150mm long brackets of 15 x 15 mm MS square tube, two vertical door profiles reinforced with 40 x 20 MS Tube of 19 gauge throughout the frame and the door frame fixed to the wall using 65/100mm long MS screws through the frame by using PVC fasteners with a minimum of 3 nos of screws provided for each vertical member and two nos. for horizontal, etc complete as per drawing and direction of Engineer in Charge	1 RM	545.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
490	TBSC-L.III-18	Supply & Fixing of Powder Coated Mild Steel doors, frames & shutters made of Skin pass galvanized Iron sheet conforming to Base Steel as per IS 513 "D" Quality, Galvanized as per IS 277 with Hot Zinc Coating of 120 grams / Sq.Mtr with powder coating of thickness 60-65 Microns, frame with 1.2mm thick Skin pass Galvanized Iron sheet formed to single rebate profile of size 100 mm X 58 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Skin pass Galvanized Iron Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper and coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 - 65 microns and are coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for industrial, commercial, residential, clean room applications	1 Sqm	11,110.00
491	TBSC-L.III-19	Providing & Fixing of Scientific Doors with metal door frames and door shutters made of galvanize steel (base steel as per IS 513 of 0.58 mm thick D quality, galvanized as per IS 277 with Zinc of 120 GSM)coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability/Epoxy polyester powder for powder coating paint thickness 50-60 microns (Dry film thickness) outer frame section of 100 x 58 mm x 1.2 mm thick, shutter section of 0.80 mm thick galvanized steel sheet pressed (roll formed) for 46mm thick fully flush, double skin door shell seam joints at stile edges, in-fill of honeycomb Kraft paper used to give the required rigidity and effective acoustic insulation with 6" Tower bolt - 1 No., 6" D handles - 2 Nos., 10" Aldrops - 1 No., Butt Hinges - 3 Nos, Mortise Lock of approved quality - 1 No, frames fixed to the concrete/masonry wall by means of self expanding screws complete for finished item of work for Single leaf Door	1 Sqm	10256.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
492	TBSC-L.III-20	Providing & Fixing of Scientific Doors with metal door frames and door shutters made of galvanize steel (base steel as per IS 513 of 0.58 mm thick D quality, galvanized as per IS 277 with Zinc of 120 GSM). coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability/Epoxy polyester powder for powder coating paint thickness 50-60 microns (Dry film thickness) outer frame section of 100 x 58 mm x 1.2 mm thick, shutter section of 0.80 mm thick galvanized steel sheet pressed (roll formed) for 46mm thick fully flush, double skin door shell seam joints at stile edges, in-fill of honeycomb Kraft paper used to give the required rigidity and effective acoustic insulation with 6" Tower bolt - 2 Nos., 6" D handles - 2 Nos., 10" Aldrops - 1 No., Butt Hinges - 6 Nos, Mortise Lock of approved quality - 1 No, frames fixed to the concrete/masonry wall by means of self expanding screws complete for finished item of work for Double leaf Door	1 Sqm	10,940.00
493	TBSC-L.III-21	Supply & Fixing of Stainless steel doors, frames & shutters made of stainless steel grade 304 of hairline finish, frame with 1.2mm thick formed to single rebate profile of size 100 mm X 58 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Stainless steel Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for industrial, commercial, residential, clean room applications	1 Sqm	20,830.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
494	TBSC-L.III-22	Supply & Fixing of Powder Coated Fire Rated doors, frames & shutters made of Skin pass galvanized Iron sheet conforming to Base Steel as per IS 513 "D" Quality, Galvanized as per IS 277 with Hot Zinc Coating of 120 grams / Sq.Mtr with powder coating of thickness 60-65 Microns, frame with 1.2mm thick Skin pass Galvanized Iron sheet formed to double rebate profile of size 143 mm X 58 mm with maximum bending radius of 1.4 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Skin pass Galvanized Iron Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper and coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 – 65 microns and are coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for 120 minutes Fire Rated door conforming to IS:3614 (Part2) 1992	1 Sqm	13,193.00
495	TBSC-L.III-23	Supply & Fixing of Powder Coated Fire Rated doors, frames & shutters made of Skin pass galvanized Iron sheet conforming to Base Steel as per IS 513 "D" Quality, Galvanized as per IS 277 with Hot Zinc Coating of 120 grams / Sq.Mtr with powder coating of thickness 60-65 Microns, frame with 1.2mm thick Skin pass Galvanized Iron sheet formed to double rebate profile of size 143 mm X 58 mm with maximum bending radius of 1.4 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Skin pass Galvanized Iron Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper and coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 – 65 microns and are coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush	1 Sqm	12,499.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for 60 minutes Fire Rated door conforming to IS:3614 (Part2) 1992		
496	TBSC-L.III-23	Supply & Fixing of Stainless steel Fire Rated doors, frames & shutters made of Stainless steel of 304 grade hairline finish, frame with 1.2mm thick Stainless steel of 304 grade hairline finish sheet formed to double rebate profile of size 143 mm X 58 mm with maximum bending radius of 1.4 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Stainless steel of 304 grade hairline finish Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper and coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 – 65 microns and are coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for 120 minutes Fire Rated door conforming to IS:3614 (Part2) 1992	1 Sqm	20,830.00
497	TBSC-L.III-24	Supply & Fixing of Stainless steel Fire Rated doors, frames & shutters made of Stainless steel of 304 grade hairline finish, frame with 1.2mm thick Stainless steel of 304 grade hairline finish sheet formed to double rebate profile of size 143 mm X 58 mm with maximum bending radius of 1.4 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Stainless steel of 304 grade hairline finish Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper and coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 – 65 microns and are coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles,	1 Sqm	18,161.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		Mortise Dead Bolt, etc for 60 minutes Fire Rated door conforming to IS:3614 (Part2) 1992		
498	TBSC-L.III-25	Supply & Fixing of Lead Lined Clean room doors frames and shutters made of Skin pass galvanized Iron sheet (Conform to Base Steel as per IS 513 "D" Quality, Galvanized as per IS 277 with Hot Zinc Coating of 120 grams / Sq.Mtr).with powder coating of thickness 60-65 Microns, frame of 1.60mm thick galvanized steel sheet (Conform to IS 277) formed to Single/double rebate profile of size 100mm X 58mm/ 143x58mm, door frames with a single / multi Layer of Lead sheet varying thickness from 3mm /1mm to 2mm depends on radiation level, the shutter with 1.2 mm thick Galvanized Steel Sheet (Conform to IS 277) formed to provide a 46mm thick fully flush, double skin door shell with Lock Seam joints at stile edges with a single / multi Layer of Lead sheet varying thickness from 3mm /1mm to 2mm depends on radiation level, the lead sheets extend the full width and height of the door, Lead thickness is equal to the shielding in the adjacent wall, the door frames and door shutters are coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 - 65 microns, coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, hardware with Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter etc complete for finished item	1 Sqm	14,956.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
499	TBSC-L.III-26	Supply & Fixing of Lead Lined Stainless steel Clean room door frames and shutters made of Stainless steel grade of 304 hairline finish, frame with 1.60mm (16SWG) thick hairline finish Stainless steel grade of 304 formed to Single/double rebate profile of size 100 mm x 58mm/ 143 x 58 mm, door frames with a single / multi Layer of Lead sheet varying thickness from 3mm /1mm to 2mm depends on radiation level, the shutter with 1.2 mm thick hairline finish Stainless steel grade of 304 formed to provide a 46mm thick fully flush, double skin door shell with Lock Seam joints at stile edges with a single / multi Layer of Lead sheet varying thickness from 3mm /1mm to 2mm depends on radiation level. The lead sheets extend the full width and height of the door. Lead thickness is to be equal to the shielding in the adjacent wall. Hardware can be provided with Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter etc complete for finished item of work	1 Sqm	23,608.00
500	TBSC-L.III-27	Providing of Factory made prelaminate FPVC (Foamed Polyvinyl Chloride) Door frame of the size 105x40mm with a wall thickness of 10mm made out of extruded rigid FPVC profile mitre joined with 6 Nos. of 50mm long screw. The door frame shall be fixed to the wall by using 80mm long screws through the frame with the help of PVC fasteners of 3 no's to be provided for each vertical member, GI stiffeners of ("U" channel of size 29x9x1mm, 150mm long) -3 no's at hinge point, Frame reinforcement of("U" GI channel of size 46x22x.06mm),Bottom tie rod of ("U" GI channel size of 15x15x1mm) etc. complete as per manufacturers specification for finished item of work. Maximum door frame size : 980 x 2070 including providing of 35mm thick Factory made Pre-laminated ABS (Acrolynitrile Butadyne Styrene) Door shutter moulded in different designs, consisting of all round Frame made out of water proof solid foam PVC bar of size 20x32mm, reinforced by 32x 32mm - 2 nos. for vertical made out of LVL (Laminated Veneer Lumber), core material of 32 mm thick high density craft paper honey comb board, sandwiched on both sides with pre-laminated ABS sheet thickness of 1.5mm . PVC edge banding of size 0.45mm on the vertical sides. Hardware made out of steel coated butterfly hinges - 3 Nos. for each shutter and ISI make S.S round lock completes for finished item of work. Maximum shutter size of : 910 x 2030 mm	1 Sqm	7605.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
501	TBSC-L.III-28	Supply and fixing of toilet door shutter with frame made of M.S. door frame of 5 mm x 48 mm x 48 mm (L angel) as all-round frame the frame is coated with one coat of red oxide and two coats of enamel of approved color. For shutter and the shutter is made with 16mm Bison lam shutter with all-round 'U' Lipping of PPS section of 12 mm x 18 mm x 12 mm x 0.60mm, along hardware of 200m long and 12mm dia aluminium Aldrops 2 Nos, 2Nos of 125m m handle, 3 Nos of RT patte hinges IS 304gr SS 2mmX12mmX180mm long with a pole receiver of 10mmDia x 40mm by welded on 3mm x 40mm SS 304, plate it works as receiver for RT Patte hinges it is welded to M.S. angle . M.S. angle will be fixed to wall of self expandable screws and caps	1 Sqm	3,410.00
502	TBSC-L.III-29	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) sliding doors three track - three glass shutters sliding duly manufactured using UPVC reinforced profiles of 108.0 mm x 49 mm x 2.25 mm for outer frames, 85 mm x 41 mm x 2.25 mm for sliding door shutter frames capable of mounting single glazing system, structurally reinforced with reinforced with 35mm x 10mm x 1.5mm thick with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the window sash shall be fitted with 5 mm thick clear float glass of reputed make and fixed with with uPVC glazing bead of 22.5mm x 18mm with "C" or "R" type inner and outer EPDM weathering seal resistant accessories like clipping locking system made of aluminium 1 No., per set of sashes and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work	1 Sqm	8306.00
IV	SUB-SECTION	CUP-BOARD DOORS		
503	TBSC-L.IV-01	Supply and fixing of cup board frames and shutters and using 16mm Cement Bonded Particle Board conforming to IS 14276 duly painted both sides with one coat of primer and two coats of synthetic / enamel paint of approved shade and brand including fixing of hardware like M.S. powder coated Piano hinges of size 18mm x 18mm, brass ball catches, Aluminium tower bolts and handles , Godrej locks, synthetic glue, screws and nails including cost and conveyance of all materials, labour charges, all incidental and operational charges etc., complete for finished item of work at site as	1 Sqm	2,131.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		per the directions of Engineer in Charge.		
504	TBSC-L.IV-02	Supply and fixing of box type cup board using Cement Bonded Particle Board conforming to IS 14276 for making frame of size 100mm x 35mm using two sandwiched 16MM boards, one Cement Bonded Particle Board conforming to IS 14276 and one Cement Bonded Prelaminated Particle Board with plain 35mm wood lipping. The Shutters are made of 16MM thick Cement Bonded Prelaminated Particle Board (Pre-Laminated Cement Bonded Particle Board) of approved shade inclusive of hardware like M.S. powder coated Piano hinges of size 3/4" x 3/4" , Aluminium powder coated handles of size 4" (101.6mm), Aluminium tower bolt 4" (101.6mm) Godrej locks, screws, wood lipping and synthetic glue etc., complete finish item of work.	1 Sqm	3,502.00
505	TBSC-L.IV-03	Supply and fixing of PVC cupboards for kitchen and bedrooms shall be made out of multi chambered PVC sections having overall dimensions of 20 X 762mm with a wall thickness of 1.2mm ± 0.3mm. The cabinets shall be made as per the requirements of the room with groove system. The PVC section surface shall be plain and laminated finish to have good look, completed, for finished item of work for SINTEX OR equivalent PVC CABINETS	1 Sqm	3,934.00
506	TBSC-L.IV-04	Supply and fixing of cupboard shutter using teakwood scantling of size 50 mm x 50 mm teakwood as outer frame and 50 mm x 30 mm of size teakwood for shutter frames, 8mm thick Bison Lam as panel to each shutter consist of 2 Nos 75mm long tower bolt - 2 nos 75 mm big handle the and other shutter will have 1 no of cupboard lack , 1 No of 75 mm long handle and 75 mm x 10mm x 1mm thick SS hinges- 2 Nos for each shutter. The above frame will be fixed to the wall with screws, the rate inclusive of screws, handle, etc., complete at site of work	1 Sqm	3,928.00
M	SECTION	WINDOWS		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	OPENABLE WINDOWS		
507	TBSC-M.I-01	Supply and fixing of pre-painted steel casement/ open able windows base steel as per IS 513 of - 0.58 mm thick 'D quality, galvanized as per IS 277, finish painted with a polyester paint, section for outer frame of 46 x 52 mm section for shutter of 46 x 46 mm section for mullion 46 x 70 mm, and section for beading 18 x 25 mm panelled	1 Sqm	6300.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		with 5 mm thick plain float glass fitted with EPDM gaskets, handle made of high grade aluminium powder coated frames fixed to the concrete /masonry wall by means of self expanding screws including 10 mm square guard bars @ 150 mm pitch for Windows: Double shutter for sizes 2'0 x 4'0 (609.6 x 1219.2 mm) 3'-0 x 4'-0 (914.4mm x 1219.2 mm) without mullion section		
508	TBSC-M.I-02	Supply and fixing of pre-painted steel casement/ open able windows base steel as per IS 513 of - 0.58 mm thick 'D quality, galvanized as per IS 277, finish painted with a polyester paint, section for outer frame of 46 x 52 mm section for shutter of 46 x 46 mm section for mullion 46 x 70 mm, and section for beading 18 x 25 mm panelled with 5 mm thick plain float glass fitted with EPDM gaskets, handle made of high grade aluminium powder coated frames fixed to the concrete /masonry wall by means of self expanding screws including 10 mm square guard bars @ 150 mm pitch for Windows: Double shutter with mullion section for sizes 3'-0 x 4'-0 (914.4mm x 1219.2 mm) and 4'-0 x 4 '-0 (1219.2x1219.2mm)	1 Sqm	6,664.00
509	TBSC-M.I-03	Supply and fixing of pre-painted steel casement/ open able windows base steel as per IS 513 of - 0.58 mm thick 'D quality, galvanized as per IS 277, finish painted with a polyester paint, section for outer frame of 46 x 52 mm section for shutter of 46 x 46 mm section for mullion 46 x 70 mm, and section for beading 18 x 25 mm panelled with 5 mm thick plain float glass fitted with EPDM gaskets, handle made of high grade aluminium powder coated frames fixed to the concrete /masonry wall by means of self expanding screws including 10 mm square guard bars @ 150 mm pitch for Windows: Double shutter 4'-0 x 4 '-0 (1219.2x12.19.2mm) without Mullion section	1 Sqm	6481.00
510	TBSC-M.I-04	Supply and fixing of pre-painted steel casement/ open able windows base steel as per IS 513 of - 0.58 mm thick 'D quality, galvanized as per IS 277, finish painted with a polyester paint, section for outer frame of 46 x 52 mm section for shutter of 46 x 46 mm section for mullion 46 x 70 mm, and section for beading 18 x 25 mm panelled with 5 mm thick plain float glass fitted with EPDM gaskets, handle made of high grade aluminium powder coated frames fixed to the concrete /masonry wall by means of self expanding screws including 10 mm square guard bars @ 150 mm pitch for Windows: Double shutter with Mullion section for sizes 4'-6 x 4 '-6 (1371.6x1371.6mm) 5'-0 x 4'-0 (1524x1219.2mm) and 6'-0 x 4'-0	1 Sqm	5,937.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		(1828.8x1219.2mm) and 6'-0 x 4'-6 (1828.8x1371.6mm)		
511	TBSC-M.I-05	Providing and fixing of Casement/ Open able Windows made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 48 x 50 mm, centre mullion of 48 x 50 mm, section for shutter of 48 x 25 mm and the fixed glass beading section should be 12 x 12 mm and the outer frame and mullions to have rebate for glazed shutter with a 20 mm provision for guard bars/grills, handle, stay, 2 nos. of stainless steel heavy duty pivot hinges provided per shutter and windows fitted with 5 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10mm Square guard bars with 6" (152.4mm) pitch etc., complete Single shutter Window without vertical mullion for size 2'0"x4'0" (609.6mm x 1219.2mm)	1 Sqm	5,755.00
512	TBSC-M.I-06	Providing and fixing of Casement/ Open able Windows made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 48 x 50 mm, centre mullion of 48 x 50 mm, section for shutter of 48 x 25 mm and the fixed glass beading section should be 12 x 12 mm and the outer frame and mullions to have rebate for glazed shutter with a 20 mm provision for guard bars/grills, handle, stay, 2 nos. of stainless steel heavy duty pivot hinges provided per shutter and windows fitted with 5 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10mm Square guard bars with 6" (152.4mm) pitch etc., complete Double shutter Window with vertical mullion for sizes 3'0" x 4'0" (914.4mm x 1219.2mm) and 4'0" x 4'0" (1219.2mm x 1219.2mm)	1 Sqm	6,118.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
513	TBSC-M.I-07	Providing and fixing of Casement/ Open able Windows made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 48 x 50 mm, centre mullion of 48 x 50 mm, section for shutter of 48 x 25 mm and the fixed glass beading section should be 12 x 12 mm and the outer frame and mullions to have rebate for glazed shutter with a 20 mm provision for guard bars/grills, handle, stay, 2 nos. of stainless steel heavy duty pivot hinges provided per shutter and windows fitted with 5 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10mm Square guard bars with 6" (152.4mm) pitch etc., complete Centre fixed both side open able shutter window for sizes 5'0"x4'0" (1524mm x1219.2mm) and 6'0"x4'0" (1828.8mm x1219.2mm)	1 Sqm	5,391.00
514	TBSC-M.I-08	Providing & Fixing of Open able Windows with Fly-mesh made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277 finish painted with a polyester paint and the section for outer frame of 72 x 55mm, centre mullion of 72 x 50mm, section for fixed glass beading section of 12 x 12 mm and section for shutters of 48 x 25 mm and outer frame & mullion sections with rebate for glazed shutters, fly mesh and a 20 mm provision for guard bars/grills and fly mesh shutter section of 20 x 40 mm, stay, handles, latch 2 Nos of heavy duty stainless steel pivot hinges per shutter and panelled with 5mm thick plain float glass and S.S. Mesh for fly mesh shutter (304 grade), fitted using rubber gaskets including fixing the windows in the concrete/masonry wall by means of self expanding screws, including 10mm Square guard bars with 6" (152.4mm) pitch , complete for Single shutter Window 2'0"x4'0" (609.6mm x 1219.2mm)	1 Sqm	7632.00
515	TBSC-M.I-09	Providing & Fixing of Open able Windows with Fly-mesh made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277 finish painted with a polyester paint and the section for outer frame of 72 x 55mm, centre mullion of 72 x 50mm, section for fixed glass beading section of 12 x 12 mm and section for shutters of 48 x 25 mm and outer frame & mullion sections with rebate for glazed shutters, fly mesh and a 20 mm provision for guard bars/grills and fly mesh shutter section of 20 x 40 mm, stay, handles, latch 2 Nos of heavy duty stainless steel pivot hinges per shutter and panelled with 5mm thick plain float glass and S.S. Mesh for fly mesh shutter (304 grade), fitted using rubber gaskets	1 Sqm	7,996.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		including fixing the windows in the concrete/masonry wall by means of self expanding screws, including 10mm Square guard bars with 6" (152.4mm) pitch , complete for Double shutter Window with vertical mullion of sizes 3'0" x 4'0" (914.4mm x 1219.2mm) and 4'0" x 4'0" (1219.2mm x 1219.2mm)		
516	TBSC-M.I-10	Providing & Fixing of Open able Windows with Fly-mesh made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277 finish painted with a polyester paint and the section for outer frame of 72 x 55mm, centre mullion of 72 x 50mm, section for fixed glass beading section of 12 x 12 mm and section for shutters of 48 x 25 mm and outer frame & mullion sections with rebate for glazed shutters, fly mesh and a 20 mm provision for guard bars/grills and fly mesh shutter section of 20 x 40 mm, stay, handles, latch 2 Nos of heavy duty stainless steel pivot hinges per shutter and panelled with 5mm thick plain float glass and S.S. Mesh for fly mesh shutter (304 grade), fitted using rubber gaskets including fixing the windows in the concrete/masonry wall by means of self expanding screws, including 10mm Square guard bars with 6" (152.4mm) pitch , complete for Centre fixed both side open able shutter window for a size 5'0"x4'0" (1524mm x1219.2mm).	1 Sqm	7,270.00
517	TBSC-M.I-11	Providing & Fixing of Open able Windows with Fly-mesh made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277 finish painted with a polyester paint and the section for outer frame of 72 x 55mm, centre mullion of 72 x 50mm, section for fixed glass beading section of 12 x 12 mm and section for shutters of 48 x 25 mm and outer frame & mullion sections with rebate for glazed shutters, fly mesh and a 20 mm provision for guard bars/grills and fly mesh shutter section of 20 x 40 mm, stay, handles, latch 2 Nos of heavy duty stainless steel pivot hinges per shutter and panelled with 5mm thick plain float glass and S.S. Mesh for fly mesh shutter (304 grade), fitted using rubber gaskets including fixing the windows in the concrete/masonry wall by means of self expanding screws, including 10mm Square guard bars with 6" (152.4mm) pitch , complete for a size 6'0"x4'0" (1828.8mm x1219.2mm)	1 Sqm	6,361.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
518	TBSC-M.I-12	Providing & Fixing of Mesh windows made of pre-painted steel (Base Steel as per IS 513 of 0.58mm thick galvanized as per IS 277 primer coated with epoxy primer finish painted with a polyester paint, section for outer frame of 47 x 36 mm, centre mullion of 60 x 36 mm, section mesh beading 18 x 6 mm and Fly mesh shutter section of 20 x 40 mm, the sections cut to length meter joined with corner bracket and centre mullions fixed with mullion cap, handles, latch, 2 Nos of heavy duty stainless steel pivot hinges per S.S. Mesh for fly mesh shutter (304 grade) including fixing the frames in the concrete/masonry wall by means of self expanding screws complete for finished item of work.	1 Sqm	4,753.00
519	TBSC-M.I-13	Providing and fixing of Open able / Casement Windows made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 finish painted with a polyester paint and section for outer frame of 80 x 45 mm, centre mullion of 80 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, outer frame and mullions to have rebate for glazed shutter with a provision for guard bars/grills, centre mullion fixed with mullion cap, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for Single open able shutter window size of 2' 0" x 4' 0" (609.6 x 1219.2mm)	1 Sqm	5075.00
520	TBSC-M.I-14	Providing and fixing of Open able / Casement Windows made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 finish painted with a polyester paint and section for outer frame of 80 x 45 mm, centre mullion of 80 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, outer frame and mullions to have rebate for glazed shutter with a provision for guard bars/grills, centre mullion fixed with mullion cap, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for Double open able shutter window Size of 3' 0" x 4' 0" (914.4mm x 1219.2mm) and 4'0" x 4'0"	1 Sqm	5,395.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		(1219.2mm x 1219.2mm)		
521	TBSC-M.I-15	Providing and fixing of Open able / Casement Windows made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 finish painted with a polyester paint and section for outer frame of 80 x 45 mm, centre mullion of 80 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, outer frame and mullions to have rebate for glazed shutter with a provision for guard bars/grills, centre mullion fixed with mullion cap, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for 5'0 x 4'0 (1524 x 1219.2mm) and 6'0 x4'0 (1829.6 x 1219.2mm)	1 Sqm	4,753.00
522	TBSC-M.I-16	Providing and fixing of Open able / Casement Windows with fly mesh made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 100 x 45 mm, centre mullion of 100 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, section for fly-shutter of 52 x 25 mm x 0.6 mm thick and fitted with stainless steel 32 gauge fly mesh of 304 grade and mullions to have double rebate for glazed shutter and fly-shutter with a provision for guard bars/grills and the sections, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for 2' 0" x 4' 0" (609.6 x 1219.2mm)	1 Sqm	6,731.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
523	TBSC-M.I-17	Providing and fixing of Open able / Casement Windows with fly mesh made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 100 x 45 mm, centre mullion of 100 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, section for fly-shutter of 52 x 25 mm x 0.6 mm thick and fitted with stainless steel 32 gauge fly mesh of 304 grade and mullions to have double rebate for glazed shutter and fly-shutter with a provision for guard bars/grills and the sections, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for 3' 0" x 4' 0" (914.4mm x 1219.2mm) and 4'0" x 4'0" (1219.2mm x 1219.2mm)	1 Sqm	7,051.00
524	TBSC-M.I-18	Providing and fixing of Open able / Casement Windows with fly mesh made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 100 x 45 mm, centre mullion of 100 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, section for fly-shutter of 52 x 25 mm x 0.6 mm thick and fitted with stainless steel 32 gauge fly mesh of 304 grade and mullions to have double rebate for glazed shutter and fly-shutter with a provision for guard bars/grills and the sections, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for 5'0 x 4'0 (1524 x 1219.2mm) and 6'0 x4'0 (1829.6 x 1219.2mm)	1 Sqm	6,411.00
525	TBSC-M.I-19	Galvanized powder coated Casement Windows with open able shutters duly manufactured using pressed steel sections in mild steel conforming to IS 513 of having 1.0 mm thick and galvanized as per IS 277 of 120 GSM surface treatment with pure polyester powder coating of 30-40 microns thick and section for outer frame of 60x50mm, centre for mullion of 62x50mm, section for shutter of 52 x 22 mm, outer frame and mullions to have one side rebate for glazed shutter of size 24 mm and 10x10 mm square guard bars	1 Sqm	5,670.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		provided at 125 mm c/c the sections assembled with bolt & nut assembly with zinc-electroplated M-5 bolts, GI Handle of size 80 mm x 15 mm -1 No per shutter, 2 nos of stainless steel heavy duty pivot hinges of size 3 of SS 304 Grade per shutter, window panes with 5 mm thick plain float glass and fixed with glass beading section of 10x12 mm size with 0.8 mm thick powder coated aluminium 'U' channel and window frames fixing to the concrete/masonry wall arrangement with self expanding screws, complete for finished item of work including of all taxes - 1220 x 1372 or below size		
526	TBSC-M.I-20	Galvanized powder coated Casement Windows with open able shutters duly manufactured using pressed steel sections in mild steel conforming to IS 513 of having 1.0 mm thick and galvanized as per IS 277 of 120 GSM surface treatment with pure polyester powder coating of 30-40 microns thick and section for outer frame of 60x50mm, centre for mullion of 62x50mm, section for shutter of 52 x 22 mm, outer frame and mullions to have one side rebate for glazed shutter of size 24 mm and 10x10 mm square guard bars provided at 125 mm c/c the sections assembled with bolt & nut assembly with zinc-electroplated M-5 bolts, GI Handle of size 80 mm x 15 mm -1 No per shutter, 2 nos of stainless steel heavy duty pivot hinges of size 3 of SS 304 Grade per shutter, window panes with 5 mm thick plain float glass and fixed with glass beading section of 10x12 mm size with 0.8 mm thick powder coated aluminium 'U' channel and window frames fixing to the concrete/masonry wall arrangement with self expanding screws, complete for finished item of work including of all taxes - 1530 x 1372 or above size	1 Sqm	5,080.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
527	TBSC-M.I-21	Galvanized powder coated Casement Windows with open able shutters duly manufactured using pressed steel sections in mild steel conforming to IS 513 of having 1.0 mm thick and galvanized as per IS 277 of 120 GSM surface treatment with pure polyester powder coating of 30-40 microns thick and section for outer frame of 88x50mm, centre for mullion of 62x88 mm, section for glass and fly-proof mesh shutter of 52 x 22 mm, outer frame and mullions to have two sides rebate for glazed shutter of size 24 mm and 10x10 mm square guard bars provided at 125 mm c/c the sections assembled with bolt & nut assembly with zinc-electroplated M-5 bolts, GI Handle of size 80 mm x 15 mm -1 No per shutter, 2 Nos of stainless steel heavy duty pivot hinges of size 3 of SS 304 Grade per shutter, window panes with 5 mm thick plain float glass and fixed with glass beading section of 10x12 mm size with 0.8 mm thick powder coated aluminium 'U' channel and fly-proof mesh of SS 304 grade fixed with 18 mm x 12 mm BT wood beading and window frames fixing arrangement to the concrete/masonry wall with self expanding screws, complete for finished item of work including of all taxes - 1220 x 1372 or below size	1 Sqm	7,124.00
528	TBSC-M.I-22	Galvanized powder coated Casement Windows with open able shutters duly manufactured using pressed steel sections in mild steel conforming to IS 513 of having 1.0 mm thick and galvanized as per IS 277 of 120 GSM surface treatment with pure polyester powder coating of 30-40 microns thick and section for outer frame of 88x50mm, centre for mullion of 62x88 mm, section for glass and fly-proof mesh shutter of 52 x 22 mm, outer frame and mullions to have two sides rebate for glazed shutter of size 24 mm and 10x10 mm square guard bars provided at 125 mm c/c the sections assembled with bolt & nut assembly with zinc-electroplated M-5 bolts, GI Handle of size 80 mm x 15 mm -1 No per shutter, 2 Nos of stainless steel heavy duty pivot hinges of size 3 of SS 304 Grade per shutter, window panes with 5 mm thick plain float glass and fixed with glass beading section of 10x12 mm size with 0.8 mm thick powder coated aluminium 'U' channel and fly-proof mesh of SS 304 grade fixed with 18 mm x 12 mm BT wood beading and window frames fixing arrangement to the concrete/masonry wall with self expanding screws, complete for finished item of work including of all taxes - 1530 x 1372 or above size	1 Sqm	6,549.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
529	TBSC-M.I-23	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) casement windows open able shutters duly manufactured using UPVC reinforced profiles of (48 mm x 60 mm)/ (58 mm x 60 mm) x 2.0 mm for outer frames, (64 mm x 60 mm)/(72 mm x 60mm) x 2.0 mm for mullion sections for two or more open able shutters and (78 mm x 60 mm)/(72 mm x 42 mm) x 2.0 mm for outward open able shutter frame or (70 mm x 60 mm)/ (72 mmx 42 mm) x 2.0 mm for inward open able shutter frame capable of mounting single glazing system structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with TPV Gaskets/ EPDM weathering seal resistant accessories for casement window - friction stay hinges of stainless steel grade 304- 2 Nos., per sash, handle with mazak alloy casting 1 No. per sash, locking system suitably concealed 1 No., per sash provided with raiser wedges for smooth operation and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work	1 Sqm	5,867.00
530	TBSC-M.I-24	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) casement windows openable shutters duly manufactured using UPVC reinforced profiles (Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin) of 60 mm x 55 mm x 2.40 mm for outer frames, 74 mm x 60 mm x 2.40 mm for mullion sections for two or more openable shutters 75 mm x 60 mm x 2.40 mm for openable shutter frame capable of mounting single glazing system structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC and accessories for casement window - friction hinges of stainless steel grade 304/430- 2 Nos., per sash, handle with mazak alloy casting 1 No. per sash, multipoint locking system suitably concealed 1 No., per sash provided with raiser wedges for smooth operation and the system is to be installed at the site using anchor fasteners,	1 Sqm	7,032.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.		
531	TBSC-M.I-25	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) casement windows openable shutters duly manufactured using UPVC reinforced profiles of 60 mm x 60 mm x 2.60 mm for outer frames, 82 mm x 60 mm x 2.60 mm for Fix mullion ("T" or "Z")made of 60mm x 82mm uPVC profile section with steel reinforcement of size 35mm x 28mm x 1.5mm shall be provided in windows having fixed panel as per the requirement. The shutter of outward open able window shall be made of size 60mm x 77mm or for inward open able window shall be made of size 60mm x 78mm; "T" shaped for outward open or "Z" shaped for Inward open extruded 3 box multi-chamber uPVC window profile section of white colour having outer wall thickness of 2.6mm (± 0.2mm) provided with reinforcement of minimum 1.5mm thick G/J/U/S/O type GI section prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC and accessories for casement window – friction hinges of stainless steel grade 304- 2 Nos., per sash, handle 1 No. per sash, multipoint locking system suitably concealed 1 No., per sash provided with raiser wedges for smooth operation and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials,	1 Sqm	7,236.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		accessories, labour charges for transportation, erection at site complete for finished item of work.		
		Supply and fixing of Pre Laminated Cement Bonded Particle Board (as per IS-14276) WINDOWS with Pre-Painted Steel Sections fabricated from pre-painted Cold rolled formed sections made of galvanized steel color coated sections {Base steel as per 15-512 quality, galvanized as per IS-277 with Zinc of 120 gram/sqm) with total coated thickness of 0.58mm primer coated with epoxy primer of 5-7 microns thick, finish painted with polyester paint of 12-16 microns and back coated with alkyd backer of 5-7 microns), the sections for outer frame and centre mullion (duly filled with PU form of 40 kg/Cum) should be of 60mm x 50mm, with provision for fixing glazed shutter. The section for glazed/paneled shutter should be of size 48mm x 25 mm and another section of size 60mm x 23mm should be provided for separating glazed and paneled portion 5 mm thick colour pin headed glass is to be provided for glazing and providing guard bars of 10mm square rods duly welded at 150mm pitch to MS flat section of size 18mm and 3mm thick. Windows are to be fixed to wall by means of self expansion nylon Cap (75) and electroplated wooden screws of size 100mm, including aluminum powder coated fittings, A) 75mm long grip handles 1 no per shutter, B) 75 mm long tower bolts 2 nos. per shutter, C) Heavy duty 55 Pivot hinges 2 nos per shutter, D) MS Powder coated telescopic stay 1no per shutter.		
532	TBSC-M.I-26	Pre Laminated Cement Bonded Particle Board (as per IS-14276) WINDOWS WITH PPS SECTIONS — Single shutter 2'0"x4'0" outer frame section size of 50mm x 60mm shutter frame section size of 48mm x 25mm	1 Sqm	7,236.00
533	TBSC-M.I-27	Pre Laminated Cement Bonded Particle Board (as per IS-14276) WINDOWS WITH PPS SECTIONS —Double shutter 3'0" x 4'0" outer frame section size of 50mm x 60mm shutter frame section size of 48mm x 25mm mullion section size of 50mm x 60mm for outer frame	1 Sqm	7,236.00
534	TBSC-M.I-28	Pre Laminated Cement Bonded Particle Board (as per IS-14276) WINDOWS WITH PPS SECTIONS — Double shutter 3'0" x 3'0" outer frame section size of 50mm x 60mm shutter frame section size of 48mm x 25mm Mullion section size of 50mm x 60mm for outer frame.	1 Sqm	7,236.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
535	TBSC-M.I-29	Pre Laminated Cement Bonded Particle Board (as per IS-14276) WINDOWS WITH PPS SECTIONS — Double shutter 4'0"x4'0" outer frame section size of 50mm x 60mm shutter frame section size of 48mm x 25mm Mullion section size of 50mm x 60mm for outer frame.	1 Sqm	7,236.00
II	SUB-SECTION	SLIDING WINDOWS		
536	TBSC-M.II-01	Providing and fixing 2 Track 2 glass shutter sliding Windows fabricated from roll formed sections made of Galvanized Steel Colour Coated/ Powder Coated (Base Steel as per IS 513 "D" quality, Galvanized as per IS 277 with Zinc of 120 GM/Sq.mtr) with total coated thickness of 0.58 mm. Primer coat with epoxy primer of 5-7 micron thick, finish painted with polyester paint of 12-16 microns thick and back coated with alkyd backer of 5-7 microns or Powder Coated with pure Polyester Powder up to 50-60 microns thick. Section for external frame should be of 44 x 59mm, Section for glass shutter should be of 35 x 49 mm Section for euro groove should be 25 x 24mm(Aluminium/Plastic)and Lap Strip should be of 30 x 41mm(Aluminium/Plastic).shutter should be provided with a glass of 5mm Plain Float Glass. Corner bracket for External frame made of Steel/Polypropylene, Corner Bracket for Internal frame made of Steel/Polypropylene, Touch Lock, Rollers, wool pile for lap strip & euro groove, Bump Stop Base & Rubber for shutter stopper. Ethyl Propylene Diamine Monomer (EPDM) Gasket should be used all around glass in shutter. The Frame Section should be cut to length and mitre joined with Corner brackets & Shutter Sections should be cut to length and mitre joined with Corner Bracket. Window Frame should be fixed to brick/ concrete masonry by using Nylon self-expanding caps and driving MS electroplated 80mm long screws into the caps through frames.10mm square guard bars with 6" pitch (152.4mm) max to be fixed wall to wall and all taxes complete for finished item of work	1 Sqm	6,765.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
537	TBSC-M.II-02	Providing and fixing of Two shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 with powder coated with Pure polyester powder up to 50-60 microns thick with total coated thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, the Outer Frame for Two Tracks without grill provision is of 75 mm x 50 mm and the Window Shutter section of 58 mm x 36 mm and the outer Frame with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for Window with Two Sliding Shutters and without Grill	1 Sqm	5,289.00
538	TBSC-M.II-03	Providing and fixing of Two shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 with powder coated with Pure polyester powder up to 50-60 microns thick with total coated thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, the Outer Frame for Two Tracks with Grill provision size of 90 mm x 50 mm and the Window Shutter section of 58 mm x 36 mm and the outer Frame with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for Window with Two Sliding Shutters and with Grill	1 Sqm	5,865.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
539	TBSC-M.II-04	Providing and fixing of Three shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 powder coated with Pure polyester powder and thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter and including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for i) Centre Shutter Fixed: centre shutter frame made of section with size 20mm x 47mm should be fitted with 5mm thick plain float glass of reputed make, EPDM gasket all around the glass and fixed to the Outer Frame with the supporting section of size 29mm x 20mm of 0.58mm thick fixed horizontally on top and bottom of the shutter frame.	1 Sqm	6,195.00
540	TBSC-M.II-05	Providing and fixing of Three shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 powder coated with Pure polyester powder and thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter and including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for ii) Centre Shutter Sliding: centre shutter frame made of section of size 20mm x 47mm should be fitted with 5 mm thick plain float glass of reputed make. The supporting guide section of size 15mm x 19mm of 0.58mm thick fixed horizontally at top and bottom of shutter frame and slides along the bottom and top guide tracks made of sections size 24mm x 20mm of 0.58mm thick and 29mm x 20mm of 0.58mm thick and iii) Centre Fly mesh	1 Sqm	6,784.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		Shutter Sliding: Section for Fly mesh Shutter frame should be of size 20mm x 40mm of 0.58mm thick and fitted with SS mesh (304 Grade). The supporting guide section of size 29mm x 20mm of 0.58mm thick at the bottom and 15mm x 19mm of 0.58mm thick at the top fixed horizontally to the Fly mesh frame and slides along the bottom and top guide tracks made of sections size 20mm x 20mm of 0.58mm and 29mm x 20mm of 0.58mm.		
541	TBSC-M.II-06	Providing and fixing of Three shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 powder coated with Pure polyester powder and thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter and including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for Window with 3 shutters (Centre fixed shutter / Centre sliding shutter / centre Fly mesh shutter) and without Grill Window made of Outer Frame of size 90mm x 50mm. i) Centre Shutter Fixed: centre shutter frame made of section with size 20mm x 47mm of 0.58mm thick should be fitted with 5mm thick plain float glass of reputed make, EPDM gasket all around the glass and fixed to the Outer Frame with the supporting section of size 29mm x 20mm of 0.58mm thick fixed horizontally on top and bottom of the shutter frame.	1 Sqm	5,556.00
542	TBSC-M.II-07	Providing and fixing of Three shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 powder coated with Pure polyester powder and thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter and including installation of window system at site using	1 Sqm	6,080.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for Window with 3 shutters (Centre fixed shutter / Centre sliding shutter / centre Fly mesh shutter) and without Grill Window made of Outer Frame of size 90mm x 50mm. ii) Centre Shutter Sliding: centre shutter frame made of section with size 20mm x 47mm of 0.58mm thick should be fitted with 5 mm thick plain float glass of reputed make. The supporting guide section of size 15mm x 19mm of 0.58mm thick fixed horizontally at top and bottom of shutter frame and slides along the bottom and top guide tracks made of sections size 24mm x 20mm of 0.58mm thick and 29mm x 20mm of 0.58mm thick.		
543	TBSC-M.II-08	Providing and fixing of Three shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 powder coated with Pure polyester powder and thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter and including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for Window with 3 shutters (Centre fixed shutter / Centre sliding shutter / centre Fly mesh shutter) and without Grill Window made of Outer Frame of size 90mm x 50mm. iii) Centre Fly mesh Shutter Sliding: Section for Fly mesh shutter frame should be of size 20mm x 40mm and fitted with SS mesh (304 Grade). The supporting guide section of size 29mm x 20mm of 0.58mm thick at the bottom and 15mm x 19mm of 0.58mm thick at the top fixed horizontally to the Fly mesh frame and slides along the bottom and top guide tracks made of sections size 20mm x 20mm of 0.58mm thick and 29mm x 20mm of 0.58mm thick.	1 Sqm	6,080.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
544	TBSC-M.II-09	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) 2 Track-2 Panel Sliding windows duly manufactured using UPVC reinforced profiles(Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin) of (62 mm x 60 mm)/(60 mm x 45 mm) x 2.20 mm for outer frames, (66 mm x 38 mm)/(58 mm x 39 mm) x 2.20 mm for sliding shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. System shall have single point locking with Touch Lock and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	6,375.00
545	TBSC-M.II-10	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) 3 track sliding windows with mesh shutter provision - (only 2-glass shutters) duly manufactured using UPVC reinforced profiles (Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin) of (80 mm x 52 mm)/ (94 mm x 45 mm) x 2.20 mm for outer frames, (54 mm x 38 mm)/(39 mm x 58 mm) x 2.20 mm for sliding shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. System shall have single point locking with Touch Lock and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work	1 Sqm	5,980.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
546	TBSC-M.II-11	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) 3 track sliding windows with mesh shutter - (2-glass shutters and 1-mesh shutter) duly manufactured using UPVC reinforced profiles (Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin)of (94 mm x 45 mm)/(80 mm x 52 mm) x 2.20 mm for outer frames, (58 mm x 39 mm)/(54 mm x 38 mm) x 2.20 mm for sliding shutter frames capable of mounting single glazing system structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make and mesh shutter frame shall be (42 mm x 25 mm)/(52 mm x 21.5 mm) x 2.0 mm fitted with Vinyl Coated Fibre mesh- on rollers/ pulley duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. System shall have single point locking with Touch Lock and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	6,657.00
547	TBSC-M.II-12	DELETED		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
548	TBSC-M.II-13	Providing and Fixing Pre painted Steel Sliding Windows / Doors - 3 track sliding window /doors shutter with mesh shutter – (2 - glass shutters and 1 - mesh shutter) fabricated from Roll formed sections made of galvanized Steel colour coated/powder coated (Base Steel as per IS 513 'D' quality, galvanized as per IS 277 with zinc of 120 GM/Sq.mtr) with total coated thickness of 0.58mm. Primer coat with epoxy primer of 5-7 microns thick, finish painted with a polyester paint of 12-16 microns thick and back coated with Alkyd backer of 5-7 microns or powder coated with pure polyester powder up to 50-60 microns thick. Section for external frame should be of 44 x 107mm .Section for glass shutter and mesh shutter in case of door should be of 35 x 67 mm Section for euro groove should be 25 x 31mm (Aluminium/ Plastic) (in case of window sections should be 35 x 49 mm and 25 x 24 mm and 30 x 41 mm) and Lap Strip should be of 39 x 41mm (30 x 41 mm & Touch lock for window) (Aluminium/ Plastic. The doors/ windows should be panelled with 5mm thick plain float glass. Corner bracket for internal and external frame made of glass filled nylon. Gaskets are to be made of Ethyl Propylene Diamine Monomer (EPDM).The sections are to be cut to length, joined and assembled by means of corner bracket. The above frames should be fixed to the concrete/masonry walls by means of self expanding brackets & screws including 10mm square guard bars with 6" pitch (152.4mm) (in case of windows only) and all Taxes complete for finished item of work.	1 Sqm	7,481.00
549	TBSC-M.II-14	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) 2 Track-2 Panel Sliding windows duly manufactured using UPVC reinforced profiles of 60 mm x 49 mm x 2.20 mm for outer frames, 62 mm x 41 mm x 2.20 mm for sliding shutter frames capable of mounting single glazing system, structurally reinforced with 30 mm 15 mm x 1.5 mm with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. System shall have single point locking with Touch Lock and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	6,557.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
550	TBSC-M.II-15	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) 2 Track-2 Panel Sliding windows with mesh duly manufactured using UPVC reinforced profiles of 91 mm x 49 mm x 2.20 mm for outer frames, 62 mm x 41 mm x 2.20 mm for sliding shutter frames capable of mounting single glazing system, structurally reinforced with 30 mm 15 mm x 1.5 mm with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm and the shutter of fly screen with fibre mesh shall be made of size 21mm x 58mm extruded uPVC window profile section of white colour having outer wall thickness of 2.2mm (± 0.3mm) provided with reinforcement of minimum 1.5mm thick G/J/U/S/O type GI section duly mitred cut and thermal welded at all corners and prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make & Glazing bead shall be co-extruded with Grey colour soft PVC. System shall have single point locking with Touch Lock and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	7,590.00
III	SUB-SECTION	VENTILLATORS		
551	TBSC-M.III-01	Supply and fixing of pre-painted steel top hung and fixed louvered ventilators made of pre - painted steel as per IS 513 of -0.58 mm thick 'D quality, galvanized as per IS 277, finish painted with a polyester paint & 4 mm pinhead glass for ventilators with EPDM Gasket with handle made of high grade aluminium powder coated and nylon receiver, corner brackets made of CRCA with Zinc Phosphate, Mullion caps made of glass filled nylon, frames fixed to the concrete /masonry wall by means of self expanding screws including 10 mm square guard bars with 6 pitch complete for finished item of work for (i) Ventilators: Top Hung 2 '0 x 2'-0 (609.6x609.6mm) outer frame section size of 46mm x 52 mm shutter frame section size of 46mm x 46 mm and (ii) Ventilators: Top Hung 4 '0 x 2'-0 (1219.2x609.6mm) outer frame section size of 46 x 52 m shutter frame section size of 46 x 46 mm Mullion section size of 46 x 70 mm and (iii) Ventilators: Top Hung 4 '0 x 3'-0 (1219.2x914.4mm) outer frame section size of 46 x 52m m shutter frame section size of 46 x 46 mm Mullion section size of 46 x 70 mm	1 Sqm	6,907.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
552	TBSC-M.III-02	Supply and fixing of pre-painted steel top hung and fixed louvered ventilators made of pre - painted steel as per IS 513 of -0.58 mm thick 'D quality, galvanized as per IS 277, finish painted with a polyester paint & 4 mm pinhead glass for ventilators with EPDM Gasket with handle made of high grade aluminium powder coated and nylon receiver, corner brackets made of CRCA with Zinc Phosphate, Mullion caps made of glass filled nylon, frames fixed to the concrete /masonry wall by means of self expanding screws including 10 mm square guard bars with 6 pitch complete for finished item of work for (i) Ventilators: Fixed louvers 2'-0 x 2'-0 (609.6x609.6mm)(Box section) outer frame section size of 33 x 56 mm and (ii) Ventilators: Fixed louvers 4'-0 x 2'-0 (1219.2 x 609.6 mm) (Box section) outer frame section size of 33 x 56 mm Mullion section size of 33 x 56 mm and (iii) Ventilators: Fixed louvers 4'-0 x 3'-0 (1219.2 x 914.4 mm) (Box section) outer frame section size of 33 x 56 mm Mullion section size of 33 x 56 mm	1 Sqm	4,725.00
553	TBSC-M.III-03	Providing and fixing of top hung Ventilators made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 with a polyester paint with 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for finished item of work for (i) Single open able ventilator shutter size of 2' 0" x 2' 0" (609.6 x 609.6mm) outer frame section size of 80 x 45mm, shutter frame section size of 52 x 25mm thick and (ii) Double open able ventilator shutter Size of 4' 0" x 2' 0" (1219.2mm x 609.6mm) outer frame section size of 80 x 45mm,shutter frame section size of 52 x 25mm, vertical mullion section size of 80 x 60 mm and (iii) Double open able fix shutter size of 4'0" x 3'0" (1219.2mm x 914.4mm) outer frame section size of 80 x 45mm , shutter frame section size of 52 x 25 mm ,Vertical mullion section size of 80 x 60 mm	1 Sqm	6,088.00
554	TBSC-M.III-04	Providing and fixing of louvered Ventilators made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 with a polyester paint with and fitted with 4 mm thick plain float glass including fixing the frames in concrete/masonry wall by means of self expanding screws, etc., complete for finished item of work for (i) Single fixed Louvers	1 Sqm	4,167.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		Ventilator size of 2' 0" x 2' 0" (609.6 x 609.6mm) outer frame box section size of 80 x 45mm and (ii) Double fixed Louvers ventilator Size of 4' 0" x 2' 0" (1219.2mm x 609.6mm) outer frame box section size of 80 x 45mm, vertical mullion section size of 80 x 60 mm and (iii) Double fixed Louvers Ventilator size of 4'0" x 3'0" (1219.2mm x 914.4mm) outer frame box section size of 80 x 45mm , Vertical mullion section size of 80 x 60 mm		
555	TBSC-M.III-05	Providing and fixing of top hung Ventilator with fly mesh made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 with Zinc, finish painted with a polyester paint, section for fly-shutter of 0.6 mm thick and fitted with stainless steel 32 gauge fly mesh of 304 grade and mullions to have double rebate for glazed shutter and fly-shutter with a provision for guard bars/grills and 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for finished item of work for (i) Single open able ventilator shutter window size of 2' 0" x 2' 0" (609.6 x 609.6mm) outer frame section size of 100 x 45mm, Glazed and fly mesh shutter frame section size of 52 x 25mm thick and (ii) Double open able ventilator shutter window Size of 4' 0" x 2' 0" (1219.2mm x 609.6mm) outer frame section size of 100 x 45mm, Glazed and fly mesh shutter frame section size of 52 x 25mm, vertical mullion section size of 100 x 60 mm and (iii) Double open able fix shutter window size of 4'0" x 3'0" (1219.2mm x 914.4mm) outer frame section size 100 x 45mm , Glazed and fly mesh shutter frame section size 52 x 25 mm ,Vertical mullion section size of 100 x 60 mm	1 Sqm	7,532.00
556	TBSC-M.III-06	Providing and fixing of top hung Ventilator with fly mesh made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 with Zinc, finish painted with a polyester paint, section for fly-shutter of 0.6 mm thick and fitted with stainless steel 32 gauge fly mesh of 304 grade and mullions to have double rebate for glazed shutter and fly-shutter with a provision for guard bars/grills and 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in	1 Sqm	5,075.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		concrete/masonry wall by means of self expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for finished item of work for (i) Single fixed Louvers Ventilator window size of 2' 0" x 2' 0" (609.6 x 609.6mm) outer frame box section size of 100 x 45mm, fly mesh shutter frame section size 52 x 25 mm and (ii) Double fixed Louvers ventilator window Size of 4' 0" x 2' 0" (1219.2mm x 609.6mm) outer frame box section size of 100 x 45mm, fly mesh shutter frame section size 52 x 25 mm, vertical mullion section size of 100 x 60 mm and (iii) Double fixed Louvers Ventilator window size of 4'0" x 3'0" (1219.2mm x 914.4mm) outer frame box section size 100 x 45mm , fly mesh shutter frame section size 52 x 25 mm Vertical mullion section size of 100 x 60 mm		
557	TBSC-M.III-07	Providing, supplying & fixing of Fixed Louvered Ventilator made out of multi chambered uPVC sections with Glazing bead shall be co-extruded with Grey colour soft PVC. having isolated drainage and reinforced with Galvanized Iron profiles throughout the window. The outer frame having an overall size of 60 mm x 55 mm x 2.40 with reinforcement of 1 mm thickness and Mullion with overall size of 74 mm x 60 mm x 2.40 mm with reinforcement of 1 mm thickness. (Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin).Ventilator shall be provided with 4.5 mm Pin Head glass, standard hardware. Wall thickness of frame & Mullion shall be 2.4 mm., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	5,990.00
558	TBSC-M.III-08	Providing, supplying & fixing of Top hung Ventilator With Exhaust Fan Provision made out of multi chambered uPVC sections with TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC and reinforced with Galvanized Iron profiles throughout the window. The outer frame having a overall size of 60mm x 55 mm x 2.40 mm with reinforcement of 1 mm thickness, Mullion with overall size of 74 mm x 60 mm x 2.40 mm with reinforcement of 1 mm thickness and Sash with overall size of 75 mm x 60 mm x 2.40 mm with reinforcement of 1.0/1.2 mm thickness. (Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin).Glazing bead for fixing of glass shall be of size 34 x 20 mm coextruded with soft PVC gasket. Ventilator	1 Sqm	8,428.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		shall be provided with 4.5 mm Pin Head glass, standard hardware, single point locking using cockspur handle and friction stays. Wall thickness of frame, mullion and sash shall be 2.4 mm., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.		
N	SECTION	STRUCTURAL GLAZING & CURTAIN WALLING		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	FIXED GLAZING		
559	TBSC-N.I-01	Supplying and fixing of curtain Glazing made of pre painted steel as per IS 513 of 0.58 mm thick D quality, galvanized as per IS 277 Primer coated with epoxy, finish painted with a polyester paint using the section for outer frame of 46 x 52 mm, section for mullion of 46 x 70 mm and section for beading of 18 x 25 mm and the glazing with 5 mm thick plain float glass fitted with EPDM gaskets including handle made of high grade Aluminium powder coated and nylon receiver, corner brackets made of CRCA with zinc phosphating, mullion caps made of Glass filled nylon including fixing the frames in the concrete / masonry wall with self expanding screws, etc., complete for finished item.- Fixed Glazing 2'-0 x 2'-0 (609.6x609.6mm) and Fixed Glazing 2'-0 x 3'-0 (609.6x914.4mm)	1 Sqm	5,997.00
560	TBSC-N.I-02	Supplying and fixing of curtain Glazing made of pre painted steel as per IS 513 of 0.58 mm thick D quality, galvanized as per IS 277 Primer coated with epoxy, finish painted with a polyester paint using the section for outer frame of 46 x 52 mm, section for mullion of 46 x 70 mm and section for beading of 18 x 25 mm and the glazing with 5 mm thick plain float glass fitted with EPDM gaskets including handle made of high grade Aluminium powder coated and nylon receiver, corner brackets made of CRCA with zinc phosphating, mullion caps made of Glass filled nylon including fixing the frames in the concrete / masonry wall with self expanding screws, etc., complete for finished item.- Fixed Glazing 3'-0 x 3'-0 (914.4x914.4mm) and Fixed Glazing 3'-0 x 4'-0 (914.4x1219.2mm)	1 Sqm	5,089.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
561	TBSC-N.I-03	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) Fixed Glazing - 48 series duly manufactured using UPVC reinforced profiles of 60 mm x 48 mm x 2.25 mm for outer frames and the mullion sections are of 60 mm x 76 mm x 2.25 mm frames are structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm the sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with EPDM weathering seal resistant including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work	1 Sqm	2938.00
562	TBSC-N.I-04	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) Fixed Glazing duly manufactured using UPVC reinforced profiles of 60 mm x 56 mm x 2.25 mm for outer frames and the mullion sections are of 60 mm x 70 mm x 2.25 mm frames are structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm the sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with EPDM weathering seal resistant including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work	1 Sqm	3,511.00
563	TBSC-N.I-05	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) Fixed Glazing/ Window duly manufactured using UPVC reinforced profiles of 60 mm x 60 mm x 2.60 mm for frames and the mullion sections are of 60 mm x 82 mm x 2.60 mm frames are structurally reinforced with hot dip galvanized up to 50 microns of size 35 mm x 28 mm of thickness 1.5 mm the sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with EPDM weathering seal resistant and glazing bead 34.5 mm x 18 mm including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work	1 Sqm	4,403.00
II	SUB-SECTION	STRUCTURAL GLAZING		
564	TBSC-N.II-01	Providing and fixing Structural Glazing fabricated from Roll formed sections made of Pre-painted Steel / Powder coated base steel as per IS 513 of 'D' quality, galvanized as per IS 277 and the glass holding section made of 304 grade stainless steel of 0.58 mm thick galvanized steel section as stiffeners inside the colour coated steel powder coated sections as per the design requirement & calculations to suit wind pressures as given in IS: 875, the primer coat with epoxy primer, finish painted with a	1 Sqm	7,270.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		polyester paint or powder coated with pure polyester powder and the vertical section of 50 mm x 99 mm x 0.72 mm, 33 mm x 56 mm x 0.72 mm for frame horizontal section, stiffener section of 47 mm x 97 mm x 1 mm, cover profiles sections of 20 mm x 58 mm x 0.58 mm, glass holding section of 37 mm x 37 mm & 37 mm x 18 mm including fixing 5mm thick Ocean Blue reflective glass, brackets made of CRCA powder coated/Electroplated to connect vertical to horizontal, vertical to slab, to fix verticals at top & bottom as per site requirement and EPDM gasket, U.V. resistant silicon sealant including fixing in concrete/masonry wall with self-expanding cap & screws inclusive of cost and conveyance of all materials to site, all labour charges, incidental charges, cost of all consumables etc. and fixing charges excluding scaffolding complete for finished item of work.		
565	TBSC-N.II-02	Providing and fixing Top Hung shutters in Structural Glazing fabricated from Roll formed sections made of Pre-painted Steel / Powder coated base steel as per IS 513 of 'D' quality, galvanized as per IS 277 and the glass holding section made of 304 grade stainless steel of 0.58 mm thick, duly providing stiffeners inside the colour coated steel/powder coated sections as per the design requirement, calculations to suit wind pressures as given in IS 875 and primer coat with epoxy primer and powder coated with pure polyester powder up to 50-60 microns thick and the outer frame of 20 mm x 58 mm x 0.58 mm, shutter sections of 57 mm x 33 mm x 0.72 mm, stiffener sections of 55 mm x 31 mm x 1mm, hinges - 2 Nos for each shutter and aluminium Stays - 2 Nos. for each shutter, aluminium Handle - 1 no. for each shutter including cost and conveyance of all materials to site, all labour charges, incidental charges, cost of all consumables etc. and fixing charges etc excluding scaffolding complete for finished item of work	1 Sqm	5,875.00
III	SUB-SECTION	CURTAIN WALLING		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
566	TBSC-N.III-01	Supplying and fixing of Unplasticised Poly Vinyl Chloride (UPVC) Curtain Walling systems duly manufactured using UPVC reinforced profiles of 60 mm x 56 mm x 2.5 mm for outer frames, 60 mm x 70 mm x 2.5 mm for casement shutter frames and the mullion sections are of 60 mm x 70 mm x 2.5 mm or 60 mm x 62 mm x 2.5 mm for sliding shutter outer frames and 77 mm x 38 mm x 2.5 mm for sliding shutter frames structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1 mm the sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with EPDM weathering seal resistant and accessories for casement window - friction stay hinges of stainless steel grade 304- 2 Nos., per sash, handle with mazak alloy casting 1 No. per sash, multipoint locking system suitably concealed 1 No., per sash provided with raiser wedges for smooth operation for sliding window - clipping locking system 1 No. made of aluminium including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing excluding scaffolding complete for finished item of work	1 Sqm	6,259.00
P	SECTION	FIXTURES FOR DOORS & WINDOWS		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	TOWER BOLTS		
567	TBSC-P.I-01	Brass Tower Bolt-10 mm Bolt (IS:204) 100 mm Long	Each	161.00
568	TBSC-P.I-02	Brass Tower Bolt-10 mm Bolt (IS:204) 150 mm Long	Each	236.00
569	TBSC-P.I-03	Brass Tower Bolt-10 mm Bolt (IS:204) 200 mm Long	Each	315.00
570	TBSC-P.I-04	Brass Tower Bolt-10 mm Bolt (IS:204) 250 mm Long	Each	391.00
571	TBSC-P.I-05	Brass Tower Bolt-10 mm Bolt (IS:204) 300 mm Long	Each	481.00
572	TBSC-P.I-06	Aluminium Tower Bolt-10 mm Bolt (IS:204) 75 mm Long	Each	44.00
573	TBSC-P.I-07	Aluminium Tower Bolt-10 mm Bolt (IS:204) 100 mm Long	Each	52.00
574	TBSC-P.I-08	Aluminium Tower Bolt-10 mm Bolt (IS:204) 150 mm Long	Each	66.00
575	TBSC-P.I-09	Aluminium Tower Bolt-10 mm Bolt (IS:204) 200 mm Long	Each	79.00
576	TBSC-P.I-10	Aluminium Tower Bolt-10 mm Bolt (IS:204) 250 mm Long	Each	96.00
577	TBSC-P.I-11	Aluminium Tower Bolt-10 mm Bolt (IS:204) 300 mm Long	Each	109.00
578	TBSC-P.I-12	Aluminium Tower Bolt-10 mm Bolt (IS:204) 350 mm Long	Each	288.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
579	TBSC-P.I-13	Aluminium Tower Bolt-10 mm Bolt (IS:204) 450 mm Long	Each	376.00
580	TBSC-P.I-14	MS-Powder Coated Tower Bolt-10 mm Bolt (IS:204) 100 mm Long	Each	24.00
581	TBSC-P.I-15	MS-Powder Coated Tower Bolt-10 mm Bolt (IS:204) 150 mm Long	Each	35.00
582	TBSC-P.I-16	MS-Powder Coated Tower Bolt-10 mm Bolt (IS:204) 200 mm Long	Each	52.00
583	TBSC-P.I-17	MS-Powder Coated Tower Bolt-10 mm Bolt (IS:204) 250 mm Long	Each	68.00
584	TBSC-P.I-18	MS-Powder Coated Tower Bolt-10 mm Bolt (IS:204) 300 mm Long	Each	85.00
585	TBSC-P.I-19	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 75 mm Long	Each	84.00
586	TBSC-P.I-20	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 100 mm Long	Each	98.00
587	TBSC-P.I-21	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 150 mm Long	Each	147.00
588	TBSC-P.I-22	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 200 mm Long	Each	196.00
589	TBSC-P.I-23	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 250 mm Long	Each	245.00
590	TBSC-P.I-24	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 300 mm Long	Each	293.00
II	SUB-SECTION	HINGES		
591	TBSC-P.II-01	Brass Butt hinges (IS:205)- 75 mm Long	Each	66.00
592	TBSC-P.II-02	Brass Butt hinges (IS:205)- 100 mm Long	Each	218.00
593	TBSC-P.II-03	Brass Butt hinges (IS:205)- 125 mm Long	Each	264.00
594	TBSC-P.II-04	Brass Butt hinges (IS:205)- 150 mm Long	Each	348.00
595	TBSC-P.II-05	Aluminium Butt hinges (IS:205)- 75 mm Long	Each	49.00
596	TBSC-P.II-06	Aluminium Butt hinges (IS:205)- 100 mm Long	Each	64.00
597	TBSC-P.II-07	Aluminium Butt hinges (IS:205)- 125 mm Long	Each	77.00
598	TBSC-P.II-08	Aluminium Butt hinges (IS:205)- 150 mm Long	Each	93.00
599	TBSC-P.II-09	MS-Powder Coated Butt hinges (IS:205)- 75 mm Long	Each	11.00
600	TBSC-P.II-10	MS-Powder Coated Butt hinges (IS:205)- 100 mm Long	Each	21.00
601	TBSC-P.II-11	MS-Powder Coated Butt hinges (IS:205)- 125 mm Long	Each	31.00
602	TBSC-P.II-12	MS-Powder Coated Butt hinges (IS:205)- 150 mm Long	Each	40.00
603	TBSC-P.II-13	Deluxe window stay Aluminium	Each	131.00
604	TBSC-P.II-14	Brass Windows Stay	Each	203.00
605	TBSC-P.II-15	GI Powder Coated Friction stay hinges of 10" Long for windows	Each	213.00
606	TBSC-P.II-16	Continuous Piano Hinges Powder coated Mild steel as per IS-3818 : 1992 of nominal size 25 mm (B) of thickness 0.8 to 1.0 mm	1 RM	32.00
607	TBSC-P.II-17	Box hinges for cup boards	1 Each	41.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
608	TBSC-P.II-18	GI Powder Coated Friction stay hinges of 14" Long for windows	1 Each	300.00
609	TBSC-P.II-19	Stainless Steel Butt hinges (IS:12817)- 75 mm Long	Each	63.00
610	TBSC-P.II-20	Stainless Steel Butt hinges (IS:12817)- 100 mm Long	Each	93.00
611	TBSC-P.II-21	Stainless Steel Butt hinges (IS:12817)- 125 mm Long	Each	119.00
612	TBSC-P.II-22	Stainless Steel Butt hinges (IS:12817)- 150 mm Long	Each	148.00
III	SUB-SECTION	DOOR HANDLES		
613	TBSC-P.III-01	Aluminium Door Handles (IS:208) 75 mm Long	Each	44.00
614	TBSC-P.III-02	Aluminium Door Handles (IS:208) 100 mm Long	Each	52.00
615	TBSC-P.III-03	Aluminium Door Handles (IS:208) 125 mm Long	Each	74.00
616	TBSC-P.III-04	Aluminium Door Handles (IS:208) 150 mm Long	Each	87.00
617	TBSC-P.III-05	MS-Powder Coated Door Handles (IS:208) 125 mm Long	Each	31.00
618	TBSC-P.III-06	MS-Powder Coated Door Handles (IS:208) 150 mm Long	Each	45.00
619	TBSC-P.III-07	Brass fancy handles 150 mm	Each	304.00
620	TBSC-P.III-08	Brass fancy handles 200 mm	Each	412.00
621	TBSC-P.III-09	Brass fancy handles 250 mm	Each	743.00
622	TBSC-P.III-10	Brass fancy handles 300 mm	Each	948.00
623	TBSC-P.III-11	Brass fancy handles 450 mm	Each	1,483.00
624	TBSC-P.III-12	Keyless lockset for toilet doors with CP or PC knob handles (complete set)	Each	316.00
625	TBSC-P.III-13	Keyless lock set for toilet doors with brass knob handles	Each	836.00
626	TBSC-P.III-14	Hard Nylon Window Handle	Each	64.00
627	TBSC-P.III-15	Stainless Steel Door Handles 100 mm Long	Each	96.00
628	TBSC-P.III-16	Stainless Steel Door Handles 125 mm Long	Each	114.00
629	TBSC-P.III-17	Stainless Steel Door Handles 150 mm Long	Each	140.00
630	TBSC-P.III-18	Stainless Steel Door Handles 200 mm Long	Each	157.00
IV	SUB-SECTION	ALDROPS		
631	TBSC-P.IV-01	Brass Aldrops (IS:2681) 300 mm long	Each	1,164.00
632	TBSC-P.IV-02	Brass Aldrops (IS:2681) 350 mm long	Each	2,243.00
633	TBSC-P.IV-03	Brass Aldrops (IS:2681) 450 mm long	Each	3,194.00
634	TBSC-P.IV-04	Aluminium Aldrops (IS:2681) 200 mm long	Each	166.00
635	TBSC-P.IV-05	Aluminium Aldrops (IS:2681) 250 mm long	Each	192.00
636	TBSC-P.IV-06	Aluminium Aldrops (IS:2681) 300 mm long	Each	210.00
637	TBSC-P.IV-07	MS-Powder Coated Aldrops (IS:2681) 200 mm long	Each	105.00
638	TBSC-P.IV-08	MS-Powder Coated Aldrops (IS:2681) 250 mm long	Each	137.00
639	TBSC-P.IV-09	MS-Powder Coated Aldrops (IS:2681) 300 mm long	Each	164.00
640	TBSC-P.IV-10	Stainless Steel Aldrops (IS:15834) 200 mm long	Each	236.00
641	TBSC-P.IV-11	Stainless Steel Aldrops (IS:15834) 250 mm long	Each	279.00
642	TBSC-P.IV-12	Stainless Steel Aldrops (IS:15834) 300 mm long	Each	306.00
V	SUB-SECTION	LATCHES		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
643	TBSC-P.V-01	Brass latch heavy 300 mm	Each	584.00
644	TBSC-P.V-02	Brass latch heavy 350 mm	Each	672.00
645	TBSC-P.V-03	Brass latch heavy 450 mm	Each	886.00
646	TBSC-P.V-04	Aluminium Flat Latches: 200 mm long	Each	96.00
647	TBSC-P.V-05	Aluminium Flat Latches: 250 mm long	Each	105.00
648	TBSC-P.V-06	Aluminium Flat Latches: 300 mm long	Each	114.00
649	TBSC-P.V-07	MS-Powder Coated Flat Latches: 250 mm long	Each	53.00
650	TBSC-P.V-08	MS-Powder Coated Flat Latches: 300 mm long	Each	66.00
VI	SUB-SECTION	DOOR CLOSURES		
651	TBSC-P.VI-01	Providing and fixing Cast Iron Body Bottle Type Hydraulic Door Closer (IS: 3564) with double speed adjustment, with necessary accessories and screws etc. complete	Each	939.00
652	TBSC-P.VI-02	Providing and fixing Aluminium Extruded Section Body Tubular Type Hydraulic Door Closer (IS: 3564) with double speed adjustment with necessary accessories and screws etc. complete (Type-1: for width of doors up to 700 mm)	Each	1,086.00
653	TBSC-P.VI-03	Providing and fixing Aluminium Extruded Section Body Tubular Type Hydraulic Door Closer (IS: 3564) with double speed adjustment with necessary accessories and screws etc. complete (Type-2: for width of doors 701 to 850 mm)	Each	1,162.00
654	TBSC-P.VI-04	Providing and fixing Aluminium Extruded Section Body Tubular Type Hydraulic Door Closer (IS: 3564) with double speed adjustment with necessary accessories and screws etc. complete (Type-3: for width of doors 851 to 1000 mm)	Each	1,220.00
VII	SUB-SECTION	FLOOR SPRINGS		
655	TBSC-P.VII-01	Double action Stainless steel cover plate and cast body iron floor spring (IS 6315- Table-1)	Each	1,734.00
656	TBSC-P.VII-02	Double action Brass cover plate and cast brass body floor spring (IS 6315- Table-1)	Each	4,114.00
657	TBSC-P.VII-03	Providing and fixing double action brass cast hydraulic floor spring (IS:6315-Table 1) for doors including cost of cutting floors as required, embedding in floors and S.S./ Brass cover plates with brass pivot and single piece M.S. Sheet outer box with slide plate etc. complete (door weight capacity up to 130 Kgs)	Each	3,435.00
658	TBSC-P.VII-04	Providing and fixing double action brass cast hydraulic floor spring (IS:6315-Table 1) for doors including cost of cutting floors as required, embedding in floors and S.S. cover plates with brass pivot and single piece M.S. Sheet outer box with slide plate etc. complete (door weight capacity up to 80 Kgs)	Each	2,554.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
659	TBSC-P.VII-05	Providing of brass cast body Floor Spring IS: 6315 sleek in size with the S.S. / Brass Cover plates of Length 320 mm x Breadth 130 mm size along with the Top Patch, Bottom Patch, Door Lock and Pivot with Double Cylinder etc. complete for Heavy duty Glass doors.	Each	11,346.00
VIII	SUB-SECTION	MORTICE LOCKS		
660	TBSC-P.VIII-01	Heavy duty mortise lock 6/7 levers (IS:2209) with PC or CP handles complete set	Each	848.00
661	TBSC-P.VIII-02	Heavy duty mortise lock 6/7 levers (IS:2209) with brass heavy handles	Each	2,181.00
IX	SUB-SECTION	OTHER ACCESSORIES		
662	TBSC-P.IX-01	Brass Door Stoppers	Each	180.00
663	TBSC-P.IX-02	MS-Powder Coated - Door Stoppers	Each	45.00
664	TBSC-P.IX-03	Heavy duty Aluminium Door stopper	Each	58.00
665	TBSC-P.IX-04	Rubber/ Nylon door stop bushes	1 Each	10.00
666	TBSC-P.IX-05	Supply & fixing drapery rods (25.4 mm) 1" x 21 G Powder coated with PVC rings	RM	116.00
667	TBSC-P.IX-06	Supply & fixing drapery bracket - brass powder coated	pair	410.00
668	TBSC-P.IX-07	Nylon rollers for sliding glasses/ aluminium windows	1 Each	14.00
669	TBSC-P.IX-08	MS Z Hold fasts - 300 mm long of 40 x 40 x 5 mm ISA	1 Each	32.00
670	TBSC-P.IX-09	Magnetic Catchers	1 Each	14.00
Q	SECTION	CONSTRUCTION CHEMICALS & ADMIXTURES		
		Approved brands, area of application, dosage etc have been appended to this SoR for the guidance for preparation of estimates only. However, Literature for usage/ application of construction/ water proofing materials, epoxies etc, may be obtained from the manufacturers, while in execution.		
I	SUB-SECTION	PLASTICIZERS		
671	TBSC-Q.I-01	Concrete Plasticizers and Water reducing admixture Conforming to IS:9103-1999	1 Ltr	182.00
672	TBSC-Q.I-02	Early High Strength, High water retention, polycarboxylic plasticizers Conforming to IS:9103-1999	1 Kg	128.00
673	TBSC-Q.I-03	High performance super plasticizer and water reducing admixture Conforming to IS: 9103-1999	1 Kg	86.00
674	TBSC-Q.I-04	Super plasticizer for high range water reducing admixture Conforming to IS: 9103-1999	1 Kg	96.00
675	TBSC-Q.I-05	Super plasticizer, high range water reducing and retarding admixture complying with IS: 9103-1999	1 Kg	105.00
676	TBSC-Q.I-06	Plasticizer for accelerator for sprayed concrete Conforming to IS: 9103-1999.	1Kg	78.00
677	TBSC-Q.I-07	High Early Strength Concrete Admixture for Road Repairs	1 Ltr	26.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
II	SUB-SECTION	WATER PROOFING COMPOUNDS		
678	TBSC-Q.II-01	Integral Cement Waterproofing Liquid Conforming to IS: 2645-2003	1 Ltr	191.00
679	TBSC-Q.II-02	High durable cementitious acrylic based waterproofing systems	1 Kg	122.00
680	TBSC-Q.II-03	Acrylic Polymer Elastomeric Cementitious Waterproof Coatings	1 Ltr	318.00
681	TBSC-Q.II-04	Single component, elastomeric waterproof membrane coating	1 Ltr	386.00
682	TBSC-Q.II-05	Quick setting, rapid hardening and water proofing compound Conforming to IS: I.S. 2645-2003	1 Ltr	73.00
683	TBSC-Q.II-06	Highly Flexible Waterproof Acrylic Elastomeric bituminous Blended Coatings	1 Ltr	272.00
684	TBSC-Q.II-07	Two part system of fibre reinforced Acrylic Cementitious Waterproofing coating.	Kg	131.00
685	TBSC-Q.II-08	High strength cellulose fibre reinforced acrylic elastomeric liquid membrane waterproof coating	Ltr	279.00
686	TBSC-Q.II-09	High Strength Acrylic Penetrative U,V. Resistant concrete road top coatings.	Ltr	306.00
687	TBSC-Q.II-10	High performance polyurethane blended with bituminous Membrane coating (Complies with ASTM C - 836)	Ltr	568.00
688	TBSC-Q.II-11	Nano Technology water based transparent silicon water repellent	Ltr	655.00
		Providing and applying Brushbond (two component acrylic polymer modified elastomeric waterproofing membrane which consists of Brushbond powder and Brushbond liquid acrylic emulsion) for a minimum 2mm thickness coating. (Work shall be executed as per manufacturer's specification and instructions.	1 sqm	220.00
III	SUB-SECTION	BONDING AGENTS/ ADHESIVES		
689	TBSC-Q.III-01	Acrylic based Bonding adhesive	1 Ltr	136.00
690	TBSC-Q.III-02	Styrene butadiene rubber based bonding agent	1 Kg	409.00
691	TBSC-Q.III-03	Two Parts system of Epoxy Bonding adhesive Conforming to ASTM-C 881	1 Kg	790.00
692	TBSC-Q.III-04	Liquid Polymer additive for cement & concrete mixes	1 Ltr	218.00
693	TBSC-Q.III-05	Polymer cementitious additive for fixing tiles/ stones etc	1 Kg	197.00
694	TBSC-Q.III-06	Highly multi purpose Roads Grade concrete bonding agent	Ltr	197.00
IV	SUB-SECTION	ANTI-CORROSIVE AGENTS		
695	TBSC-Q.IV-01	Acrylic based Anti corrosive coating	1 Ltr	318.00
696	TBSC-Q.IV-02	Rust converter –rust encapsulating coating for steel	1 Ltr	436.00
697	TBSC-Q.IV-03	High range of reinforcement / steel protector against corrosion zinc rich epoxy resin primer	1 Kg	680.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
698	TBSC-Q.IV-04	Anti corrosion CRPPC (Corrosion Resistant) inhibitive admixture	1 Lit	314.00
V	SUB-SECTION	GROUTS		
699	TBSC-Q.V-01	High Power Polyester Resin Anchor Grout Conforming to ASTM-827	1 Kg	272.00
700	TBSC-Q.V-02	Non-shrink Free flow high strength precision grout Conforming to BS 1881 Part 1161983.	1 Kg	31.00
701	TBSC-Q.V-03	Low viscosity Epoxy resin injection grout	1 Kg	726.00
702	TBSC-Q.V-04	Three component epoxy grout Conforming to IS: ASTM 827 (Three components)	1 Kg	146.00
703	TBSC-Q.V-05	Expansive acqua -reactive water barrier and grouting system.	1 Kg	941.00
VI	SUB-SECTION	MISCELLANEOUS CHEMICALS		
704	TBSC-Q.VI-01	Mould / Shutter releasing oil	1 Ltr	132.00
705	TBSC-Q.VI-02	Non oxidizing, heavy duty metallic Floor Hardeners	1 Kg	34.00
706	TBSC-Q.VI-03	Non-metallic Floor Hardeners	1 Kg	28.00
707	TBSC-Q.VI-04	High Strength, Non shrink Micro Concrete for structural repair product.	1 Kg	33.00
708	TBSC-Q.VI-05	Structural graded polymer modified reinstatement concrete / mortar(Two Part System)	1 Kg	78.00
709	TBSC-Q.VI-06	Three Component high performance elastomeric mortar.	1 Kg	862.00
710	TBSC-Q.VI-07	Surface treatment crystalline product.	1 Kg	327.00
711	TBSC-Q.VI-08	Polyurethane Sealant. 600 ml tube	1 No	662.00
712	TBSC-Q.VI-09	Polysulphide Sealant.	1 Kg	409.00
713	TBSC-Q.VI-10	Acrylic Latex caulking compound.	1 Kg	304.00
714	TBSC-Q.VI-11	Fast setting cement based plugging compound	1 Kg	78.00
715	TBSC-Q.VI-12	Highly Flexible High Range Polyurethane surface coatings	1 Ltr	590.00
716	TBSC-Q.VI-13	Coal Tar Epoxy	1 Kg	318.00
717	TBSC-Q.VI-14	Water Based Acrylic Blended High power curing compound	1 Kg	91.00
718	TBSC-Q.VI-15	Bituminous hot sealing compound	1 Kg	109.00
719	TBSC-Q.VI-16	Bitumen solution primer coating.	1 Kg	78.00
720	TBSC-Q.VI-17	Air Entraining Agent Conforming to IS: 9103-99	1 Ltr	109.00
721	TBSC-Q.VI-18	Chlorpyrifos/ Lindane emulsifiable concentrate of 20%	1 Lit	207.00
722	TBSC-Q.VI-19	Multifilament Polypropylene fibers of 6/12/18 mm length for Plastering, Screeds, all Precasting items	1 Kg	262.00
723	TBSC-Q.VI-20	Macro Synthetic fibers of 45mm length for CC Roads, Ground Supported Slabs, Pavements, Sprayed Concrete,Tunnel linings, Mining	1 Kg	393.00
724	TBSC-Q.VI-21	Steel Fibers of 35 mm length for CC Roads, Ground Supported Slabs, Pavements, Sprayed Concrete,Tunnel linings, Mining	1 Kg	87.00
725	TBSC-Q.VI-22	High strength, Acrylic blended dry colour mortar /concrete	1 Kg	42.00
VII	SUB-SECTION	REPAIRING & TREATMENT WORKS		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
726	TBSC-Q.VII-01	Providing Tar Felting roof repair with approved brand Tar Felt duly applying one coat of appropriate grade of bitumen in hot condition @ 0.2 Kg/1 Sqm of roof area, fixing tar felt (Conforming to IS 1322-1972 specification), applying second coat of appropriate grade of hot bitumen at 1.20 Kg / 1 Sqm of roof area and spreading course aggregate (sand) at 0.063 Cum per 1 Sqm of roof area finished item.	1 Sqm	270.00
727	TBSC-Q.VII-02	Providing waterproofing treatment by supplying and fixing synthetic membrane felt of 1.50 mm thickness, 2.25 Kg per Sq. Mtr. duly applying one coat of Bituminous Emulsion, first coat of bituminous grade 85/25, fix waterproofing membrane, applying second coat of bitumen grade 90/15 after sealing all the joints and abutments with a Gas torch and applying one coat of bituminous aluminium paint for heat resistance for finished item.	1 Sqm	374.00
728	TBSC-Q.VII-03	Providing and laying of 3mm thick app modified bitumen membrane treatment to the terrace duly [1]removing of existing tar felt. [2]cleaning of the surface from dirt, dust and other contaminations. [3]application of one coat of Bitumen primer [4]providing and laying of 3mm thick APP Modified Bitumen Membrane with 100 mm overlap fixing with butane torch.	1 Sqm	509.00
729	TBSC-Q.VII-04	Providing specialized high performance acrylic polymer modified elastomeric cementitious waterproof coating to the terrace / walls / internal portion of the bathroom & toilets / internal portion of the water tanks duly cleaning of the surface from dirt, dust and other contaminations, providing and application of Two coats of High performance Acrylic polymer modified Elastomeric cementitious waterproof coating (1.8 Sq. Mtr. / Kg /Each Coat)	1 Sqm	405.00
730	TBSC-Q.VII-05	Providing specialized high build, elastomeric acrylic bituminous blended coating to the terrace / internal portion of the bathroom / toilets / basements / roofing duly a). Cleaning of the surface. b). Applying primer coat of High Build, Elastomeric Acrylic Bituminous Blended Coating c). Application of Two coats of High Build, Elastomeric Acrylic Bituminous Blended Coating	1 Sqm	374.00
731	TBSC-Q.VII-06	Providing specialized high solid, cold applied, acrylic elastomeric liquid membrane coating treatment to the terrace / roofing with fibre mesh / geo fabric duly a. Cleaning of the surface from dirt, dust and other contaminations. b. Applying one coat of High solid, Cold applied, Acrylic Elastomeric Liquid Membrane coating c. immediately, Application of one coat of High solid, Cold applied, Acrylic Elastomeric Liquid	1 Sqm	592.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		Membrane coating e. Laying of fibre mesh 40 GSM / Geo fabric 40 GSM on the surface. f. Over the Fibre mesh, Application of two coats of High solid, cold applied, Acrylic Elastomeric Liquid Membrane Coating		
732	TBSC-Q.VII-07	Providing specialized polysulphide sealant treatment to the expansion joints (Size : 25 mm x 25 mm) duly a]. Chipping and removing of existing covering on expansion joints b]. Cleaning of the surface from dirt, dust and other contaminations c].Application of one coat of - High performance specially designed SBR latex polymer based bonding agent d]. Providing and application of Acrylic Polymer modified reinstatement concrete /mortar to the damaged edges of joint and making the groove. e]. Providing and fixing of masking tape on top of the joint both sides f]. Providing and fixing of Back up support material of PVC Solid Backer rod to leave the depth of 25 mm on the joint g]. Providing and application of one coat of polysulphide primer on inner edges of Joint. h]. Providing and application of Two part Polysulphide sealant to a width of 25 mm and depth of 25 mm with putty knife and neat finish i]. Removing of masking tape and providing and application of two coats of Acrylic elastomeric cementitious coating	1 RM	675.00
733	TBSC-Q.VII-08	Pressure grouting the drilled holes with neat cement slurry or with approved grout admixture using pump - excluding cost of drilling holes	1 Each	52.00
734	TBSC-Q.VII-09	Providing multi-coloured silicon fluorocarbon spray coating of thickness 1mm for exterior & interior wall finishes to give Natural Granite appearance comprising of 4 coats including application of primer, waterproof coat, Multi colour texture & finally UV resistant with repellent clear coat of low VOC, non-toxic, Green Building compliant material	1 Sqm	1,440.00
735	TBSC-Q.VII-10	Providing and applying epoxy based anti skid coat over existing RCC/Concrete flooring surfaces of 2mm thickness for wear & tear protection in three part applications containing low solvent-coloured, epoxy resin based coating with thyrotrophic properties specially formulated for application in Car Parks having Mechanical / Physical Properties such as 1. Abrasion Resistance ~ 0.8mm thickness loss (According to IS 1237 - 1980 and IS 9162 - 1979) 2. Chemical Resistance to many chemicals 3.Thermal Resistance Exposure with Dry heat Permanent +50°C	1 Sqm	680.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
736	TBSC-Q.VII-11	Providing and applying epoxy resin based self levelling Conductive Floor System of 2mm thick Antistatic (ESD) Flooring System comprising of 1 coat of Primer followed by Application of copper tape and 1 layer of SL Conductive Undercoat and 1 layer of SL Conductive Top coat with Compressive strength after 7 days at +30° C: 50 N/mm2 and Flexural strength after 7 days at +30° C: approx. 25N/mm2 and Tensile strength after 7 days at +30° C: 16 N/mm2 with aSurface resistance When measured for surface resistance in accordance with BS 2050: 1978 (A-1984) and DIN EN 1081, the static Conductive topping including under coat shall be less than 25k Ω.	1 Sqm	1,400.00
737	TBSC-Q.VII-12	Providing and applying food grade epoxy based water proof coat over existing RCC/Concrete flooring surfaces in three part applications containing low solvent-coloured, epoxy resin based coating with low VOC properties specially formulated for food grade application for potable water storage tanks in ambient temperatures	1 Kg	280.00
VIII	SUB-SECTION	EXPANSION JOINTS		
738	TBSC-Q.VIII-01	Supply of high performance expansion joint filler board conforming to IS: 1838 - 18 mm THICK	1 Sqm	729.00
739	TBSC-Q.VIII-02	Supply of high performance expansion joint filler board conforming to IS: 1838 - 20 mm THICK	1 Sqm	818.00
740	TBSC-Q.VIII-03	Supply of high performance expansion joint filler board conforming to IS: 1838 - 25 mm THICK	1 Sqm	1,022.00
741	TBSC-Q.VIII-04	Supply of expansion joint filler board conforming to IS: 1838 for buildings, columns, beams and slabs 20 mm THICK	1 Sqm	293.00
742	TBSC-Q.VIII-05	Supply of expansion joint filler board conforming to IS: 1838 for buildings, columns, beams and slabs 25 mm THICK	1 Sqm	366.00
743	TBSC-Q.VIII-06	Supply of expansion joint filler board conforming to IS: 1838 for buildings, columns, beams and slabs 50 mm THICK	1 Sqm	729.00
744	TBSC-Q.VIII-07	Supply of back up to cold applied gun-grade polysulphide sealant conforming to IS:11433 (Part-1) in construction and longitudinal joint - 10 mm OD	1 RM	12.00
745	TBSC-Q.VIII-08	Supply of back up to cold applied gun-grade polysulphide sealant conforming to IS:11433 (Part-1) in construction and longitudinal joint - 12 mm OD	1 RM	14.00
746	TBSC-Q.VIII-09	Supply of back up to cold applied gun-grade polysulphide sealant conforming to IS:11433 (Part-1) in construction and longitudinal joint - 15 mm OD	1 RM	17.00
747	TBSC-Q.VIII-10	Supply of back up to cold applied gun-grade polysulphide sealant conforming to IS:11433 (Part-1) in construction and longitudinal joint - 20 mm OD	1 RM	24.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
748	TBSC-Q.VIII-11	Supply of back up to cold applied gun-grade polysulphide sealant conforming to IS:11433 (Part-1) in construction and longitudinal joint - 25 mm OD	1 RM	30.00
R	SECTION	MISCELLANEOUS ITEMS		
749	TBSC-R.I-01	Supply of White Cement conforming to IS:8042-1989	1 Kg	29.00
750	TBSC-R.I-02	Supply of well burnt cinder aggregates as per IS: 2686-1977	1 Cum	608.00
751	TBSC-R.I-03	Supply of Aluminium anodized Sections for Doors, partitions, windows, Ventilators (including anodization cost) conforming to IS: 11857 - 1986	1 Kg	292.00
752	TBSC-R.I-04	Providing Powder coating as per IS:13871-1993 or colour anodization as per IS:7088-1973 - on any aluminium or mild steel section	1 Kg	30.00
753	TBSC-R.I-05	Providing hot dip galvanizing to any steel section as per IS:2629-1985	1 Kg	18.00
754	TBSC-R.I-06	Supply of Clear Silicone Sealant (Glass Glue Sealant) of Gun Applicator grade	1 Kg	211.00
755	TBSC-R.I-07	Supply of Sun Control film to the glazed windows partition including labour charges.	1 Sqm	299.00
756	TBSC-R.I-08	Supply of Aluminium Venetian Blinds horizontal 25.4 mm wide with all accessories.	1 Sqm	760.00
757	TBSC-R.I-09	Supply of Aluminium Venetian Blinds horizontal 20.0 mm wide with all accessories.	1 Sqm	724.00
758	TBSC-R.I-10	Supply of Venetian blinds Vertical blinds 100 mm wide with all accessories.	1 Sqm	1,229.00
759	TBSC-R.I-11	Supply of Rubber Beading for glass fixing	1 RM	3.00
760	TBSC-R.I-12	Supply of Soft Brush for painting, varnishing etc	Each	134.00
761	TBSC-R.I-13	Supply of Wire Brush for scraping	Each	31.00
762	TBSC-R.I-14	Providing and fixing PVC door cladding to the flush doors shutters, for the new doors it shall be pasted with synthetic glue or nailed to the old doors. complete as per direction of Engineer-in-charge, manufacturers specification and drawing - 1 mm thick	1 Sqm	352.00
763	TBSC-R.I-15	Providing and fixing PVC door cladding to the flush doors shutters, for the new doors it shall be pasted with Synthetic glue SSR 998 or nailed to the old doors. complete as per direction of Engineer-in-charge, manufacturers specification and drawing - 1.5 mm thick	1 Sqm	402.00
764	TBSC-R.I-16	Providing and fixing PVC door cladding to the flush doors shutters, for the new doors it shall be pasted with Synthetic glue SSR 998 or nailed to the old doors. complete as per direction of Engineer-in-charge, manufacturers specification and drawing - 2.0 mm thick	1 Sqm	454.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
765	TBSC-R.I-17	Supplying and fixing aluminium composite cladding with skin material 0.25 mm thick aluminium sheet cover material natural polyethylene aluminium cladding panel fixed with extruded aluminium basis frame (50x25x1.5mm) angle cleats, weather sealants, rivets, GI brackets all as approved, using suitable bolts on structural steel work including necessary accessories complete in all respects including labour charges etc., complete for finished item of work but excluding cost of structural steel fabrication, scaffolding charges, if any, ACP Cladding - 3 mm thick	1 Sqm	2,345.00
766	TBSC-R.I-18	Supplying and fixing aluminium composite cladding with skin material 0.25 mm thick aluminium sheet cover material natural polyethylene aluminium cladding panel fixed with extruded aluminium basis frame (50x25x1.5mm) angle cleats, weather sealants, rivets, GI brackets all as approved, using suitable bolts on structural steel work including necessary accessories complete in all respects including all labour charges etc., complete for finished item of work but excluding cost of structural steel fabrication, scaffolding charges, if any, ACP Cladding - 4 mm thick	1 Sqm	2,557.00
767	TBSC-R.I-19	Supplying and fixing aluminium composite cladding with skin material 0.5 mm thick aluminium sheet cover material natural polyethylene aluminium cladding panel fixed with extruded aluminium basis frame (50x25x1.5mm) angle cleats, weather sealants, rivets, GI brackets all as approved, using suitable bolts on structural steel work including necessary accessories complete in all respects including all labour charges etc., complete for finished item of work but excluding cost of structural steel fabrication, scaffolding charges, if any, ACP Cladding - 4 mm thick	1 Sqm	2,868.00
768	TBSC-R.I-20	S&F of pre-cast RCC Grills of any design of 25 mm thick manufactured with M-30 grade of concrete using vibro-compaction process using joint less FRP moulds to achieve shuttering finish and adequately reinforced for long use and to prevent damage during handling, transportation & erection etc.,	1 Sqm	343.00
769	TBSC-R.I-21	S&F of pre-cast RCC Grills of any design of 40 mm thick manufactured with M-30 grade of concrete using vibro-compaction process using joint less FRP moulds to achieve shuttering finish and adequately reinforced for long use and to prevent damage during handling, transportation & erection etc.,	1 Sqm	479.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
770	TBSC-R.I-22	S&F of pre-cast RCC Grills of any design of 50 mm thick manufactured with M-30 grade of concrete using vibro-compaction process using joint less FRP moulds to achieve shuttering finish and adequately reinforced for long use and to prevent damage during handling, transportation & erection etc.,	1 Sqm	562.00
771	TBSC-R.I-23	Supply of Aluminium sheet 24 Gauge	1 Sqm	274.00
772	TBSC-R.I-24	Supply of 7.5mm thick Aluminium Grill (as approved by the department) 3.58 Kg/1 Sqm	1 Sqm	1,009.00
		Design, fabrication & supply of light weight pre engineered buildings for a maximum span of 9 meters with 50 x 50 x 2.8 mm M.S hollow square tubes for columns, trusses & purlins walls with sandwich panels made up of 2 Nos 10mm thick cement bonded particle/ fibre boards with 25mm thick 12 kg/cum density expanded polystyrene in between encased in 1.25 mm thick 24x7x26 mm 'W' tracks in bottom & top and 'H' section for sides with doors, windows & ventilators, roofing with 26 gauge pre painted profiled sheets fixed with self tapping/ drilling screws, painting with enamel paint for steel items, OBD for interiors and ace for exteriors & providing base plates, templates & anchor bolts along with civil foundation designs & drawings for the finished item of work		
773	TBSC-R.I-25	Steel Structure: - Structure is made up of 50x50x2.8 m/33x66x2.8mm thick hollow M.S. sections for -Columns and purlins	1 RM	395.00
774	TBSC-R.I-26	Steel Structure: - Structure is made up of 50x50x2.8 m/33x66x2.8mm thick hollow M.S. sections for Trusses	1 RM	1,987.00
775	TBSC-R.I-27	10 mm thick 200 X 200 mm M.S Plates for base plates, 250mm long 12mm anchor bolts with plate washer and nuts complete with one coat of Asian or equivalent red oxide paint	Each	67100
776	TBSC-R.I-28	Sandwich panels: Sandwich panels of 50 mm thick with 25 mm Thermocol of 12 kg / cum, fixed in between 2 Nos 10 mm cement bonded wood particle / fibre boards properly fixed together with 30 mmx30mmx30mm wood pieces along width & length wherever necessary	1 Sqm	1,430.00
777	TBSC-R.I-29	U' Tracks & 'H' Section:- Bottom & Top 'U' Tracks are made of 1.25 mm thick 120 GSM G.I. Sheet of size 24x51x26 mm size.	1 RM	155.00
778	TBSC-R.I-30	G I 'H' Section is made up of forming width of 275 mm single sheet roll formed in the shape of "H" section without any welding joint. 40mm width for flanges and 51 mm for web to hold 50 mm Sandwich panel	1RM	254.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
779	TBSC-R.I-31	Sandwich Panel joinery is made up of couplers or equivalent made from 0.6 mm G.I. roll formed section to hold 2 Nos of 10 mm board on both sides with 25 mm Thermocol in between.	1 RM	301.00
780	TBSC-R.I-32	150 mm X 150 mm X 2.0 mm size M. S. Corner Cover Plate	1 RM	362.00
781	TBSC-R.I-31	Window:- windows are made up of 51 x51 mm step 'U' section made from 1.25 thick MS Cold rolled Steel Sheet and Windows Shutters & Grill are made of 48x25mm mm size pre painted section with 4 mm glass complete with necessary hardware. Grills are made from 8 mm square rod at 100 mm spacing.	1 Sqm	4,163.00
782	TBSC-R.I-32	Door Frames :-51 X 51 Stepped 'U' section made from 1.25 mm thick C.R. section with a 32 mm rebate for 30 mm flush door and Door Shutters with 30 mm thick block board / flush doors with boiling water proof plywood complete with necessary Hard ware.	1 Sqm	3,984.00
783	TBSC-R.I-33	Ventilators:- Ventilators are made of 51x51 mm step 'U' section made From 1.25 mm thick C.R. sheet with fixed louvers and glass.	1 Sqm	4,459.00
784	TBSC-R.I-34	Painting:-1) Steel structure is to be painted with 2 coats of Grade I enamel paint.	1 Sqm	113.00
785	TBSC-R.I-35	2) Exterior walls are painted with one coast of primer and 2 coats of exterior emulsion paint .	1 Sqm	101.00
786	TBSC-R.I-36	3) Interiors are painted with 1+2 coat of O.B.D.	1 Sqm	88.00
787	TBSC-R.I-37	Toilets: - Toilets are provided as per plan with a provision for fixing the wash basin, W.C. etc only is made with M.S. steel section secured to the walls with toilet bracket provision excluding cost of WC/ Wash basin etc	Each	953.00
788	TBSC-R.I-38	Sun shades: - Sun shades will be provided wherever necessary with 300 mm more than the width of window. 25x25 mm angle frame to cover 450 mm in the front and the sides. 10mm cement bonded particle board will be fixed on the frame work and sealed with green paste or equivalent.	Each	3,211.00
789	TBSC-R.I-39	Roofing: - Roofing will be provided with 0.5mm thick galvanized / pre painted G.I. profiled sheets fixed to the purlins with 14 size self drilling screws with neoprene washer. Side laps are stitched with self tapping / drilling screws. End laps are to be sealed with 25x3 mm Butyl tape. The sheets are provided with anti capillary groove.	1 Sqm	725.00
790	TBSC-R.I-40	Preparing gabions with jungle wood	Each	3.00
791	TBSC-R.I-41	Planting plants	Each	3.00
792	TBSC-R.I-42	Pruning plants	Each	3.00
793	TBSC-R.I-43	Maintaining avenues including fencing, weeding, mulching, watering etc per plant.	Each	7.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
794	TBSC-R.I-44	Maintaining avenues including fencing, weeding, mulching, watering etc per plant When scattered in hot weather with extra conveyance from March to June	Each	8.00
795	TBSC-R.I-45	Hoisting or lowering of slab	1 cum	110.00
796	TBSC-R.I-46	Drilling holes in hard rock surfaces up to 18mm Diameter	1 RM	274.00
797	TBSC-R.I-47	Drilling holes in hard rock above 18mm Diameter	1 RM	381.00
798	TBSC-R.I-48	Making holes up to 18mm Diameter in RCC/ any stones up to 50 mm thick	1 Each	46.00
799	TBSC-R.I-49	Making holes above 18mm Diameter in RCC/ any stones above 50 mm thick	1 Each	64.00
800	TBSC-R.I-50	Supplying EPDM Gasket for windows panes to the PPS shutter	1 RM	32.00
801	TBSC-R.I-51	Supplying SS 304 Grade Heavy Duty Pivot Hinges for windows	1 Each	78.00
S	SECTION	MACHINERY & OTHER HIRE CHARGES		
802	TBSC-S.I-01	Machine charges of rubbing/ polishing floor	1 Hr	279.00
803	TBSC-S.I-02	Power Saw Cutter - Hand Operated - Hire charges	1 Hr	130.00
804	TBSC-S.I-03	Power Drill - Hand Operated - Hire Charges	1 Hr	121.00
805	TBSC-S.I-04	Grinding Mortar (Special Grinding)	1 Hr	140.00
806	TBSC-S.I-05	Casuarinas Balli Props - 3" to 4" Diameter - 12'-0" Height	Each	76.00
807	TBSC-S.I-06	Casuarinas Balli Props - 4" to 8" Diameter - 20'-0" Height	Each	126.00
808	TBSC-S.I-07	Wall Plate Brackets / beam bottom supports	Each	221.00
809	TBSC-S.I-08	Wedge Plate fixture	Each	11.00
810	TBSC-S.I-09	Runner beams of approximately 4" x 4" size	RM	442.00
811	TBSC-S.I-10	Steel Plates for form works	1 Sqm	1,671.00
812	TBSC-S.I-11	Scaffolding Pipes & Centering accessories	1 Kg	126.00
813	TBSC-S.I-12	Scaffold Boards - Bamboo scaffolds - Bamboos - 8'0" long	Each	135.00
814	TBSC-S.I-13	Hire charges for stationary Concrete pump conforming to IS 21573 Part-1: 2006 to deliver the fresh green concrete	1 Hr	356.00
815	TBSC-S.I-14	Concrete delivery pipes conforming to IS 15947 Part I: 2012 to be connected to the pump to delivery point (150 mm Diameter) hire charges per 10 RM	1 Hr	5.00
T	SECTION	LABOUR CHARGES		
816	TBSC-T.I-01	Bailing out water for earth work excavation /concrete for foundation below water level. (For building items only) - Other than sandy soil - 0.0 M to 1.0 M	1 cum	269.00
817	TBSC-T.I-02	Bailing out water for earth work excavation /concrete for foundation below water level. (For building items only) - Other than sandy soil - 1.0 M to 2.0 M	1 cum	318.00
818	TBSC-T.I-03	Bailing out water for earth work excavation /concrete for foundation below water level. (For	1 cum	371.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		building items only) - Other than sandy soil - 2.0 M to 3.0 M		
819	TBSC-T.I-04	Bailing out water for earth work excavation / for concrete foundation below water level. (For building items only) Sandy soil - 0.0 M to 1.0 M	1 cum	427.00
820	TBSC-T.I-05	Bailing out water for earth work excavation /for concrete foundation below water level. (For building items only) Sandy soil - 1.0 M to 2.0 M	1 cum	664.00
821	TBSC-T.I-06	Bailing out water for earth work excavation /concrete for foundation below water level. (For building items only) Sandy soil - 2.0 M to 3.0 M	1 cum	802.00
822	TBSC-T.I-07	Labour charges for making, fabricating office racks, cup-board shutters etc with ply-wood/ MDF sheets, decolam/ veneer laminations including fixing cutting, making, assembling, fixing hinges, fixing fixtures, fixing locks, pasting sheets/ laminations fixing in position with necessary screws excluding cost of materials, accessories, fittings	1 Sqm	1134.00
823	TBSC-T.I-08	Labour charges for making, fabricating kitchen furniture, cup-boards with shutters, box cup-boards, box racks, work-station furniture etc with ply-wood/ MDF sheets, decolam/ veneer laminations including fixing cutting, making, assembling, fixing hinges, fixing fixtures, fixing locks, pasting sheets/ laminations fixing in position with necessary screws excluding cost of materials, accessories, fittings	1 Sqm	1696.00
824	TBSC-T.I-09	Labour charges for making, fabricating any aluminium door/ window/ glazing including fixing cutting, making, assembling, fixing hinges, fixing fixtures, fixing locks, fixing in position with necessary screws excluding cost of materials, accessories, fittings excluding cost of annodization	1 Sqm	524.00
825	TBSC-T.I-10	Rounding the edges of Kadapa / Shahabad stone slabs of any thickness including polishing the same	1 Rm	117.00
826	TBSC-T.I-11	Half Rounding the edges of Marble/ Granite stone slabs of all thicknesses including polishing the same.	1 Rm	353.00
827	TBSC-T.I-12	Full Rounding the edges of Marble/ Granite stone slabs of all thicknesses including polishing the same.	1 Rm	458.00
828	TBSC-T.I-13	Machine Cutting charges - for Marble/ Granite slabs up to 50 mm thick by mechanical device.	1 RM	18.00
829	TBSC-T.I-14	Flat nosing to Kadapa/ Shahabad stone slabs of any thick	1 Rm	55.00
830	TBSC-T.I-15	Grooves 2-3 mm	1 Rm	62.00
831	TBSC-T.I-16	Labour charges for fabricating steel works like Window Grills, Compound Wall Grills, Iron Doors, Windows including cost of welding rods, power charges, excluding cost of fixing in position	1 Kg	29.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
832	TBSC-T.I-17	Labour charges for fixing Iron Doors, Iron Windows and Window Grills in position	1 Kg	4.00
833	TBSC-T.I-18	Labour charges for fabricating all structural steel works like heavy steel works like Trusses, Stanchions, Heavy Beams and Girders including cost of welding rods, power charges, etc excluding cost of fixing in position	1 Kg	26.00
834	TBSC-T.I-19	Labour charges for erecting & fixing all structural steel works like heavy iron grills, Trusses, Stanchions, Heavy Beams and Girders erecting in position and fixing by using chain pulley blocks, Derek pole arrangements and cranes etc., complete in position	1 Kg	23.00
835	TBSC-T.I-20	Labour charges for Fabrication of stainless steel railing works using stainless steel welding rods including buffing, polishing, lacquer finishing, to present seamless finish	1 Kg	146.00
836	TBSC-T.I-21	Labour charges for Fabrication of stainless steel sheet cladding works using stainless steel welding rods including buffing, polishing, lacquer finishing, to present seamless finish	1 Sqm	1,953.00
837	TBSC-T.I-22	Labour charges for Glass designing works on any thickness of Glass including fixing at site - Etching works	1 Sqm	1,063.00
838	TBSC-T.I-23	Labour charges for Glass designing works on any thickness of Glass including fixing at site - Reverse Etching work	1 Sqm	1,315.00
839	TBSC-T.I-24	Labour charges for Glass designing works on any thickness of Glass including fixing at site - Acid wash works	1 Sqm	1,643.00
840	TBSC-T.I-25	Labour charges for fixing Flush door shutters of any thickness to the existing door frame including fixing the fixtures to the door shutter excluding cost of shutter	1 Sqm	426.00
841	TBSC-T.I-26	Labour charges for fixing glass panes of any thickness to the existing door / window panes including fixing the beading excluding cost of beading	1 Sqm	318.00
842	TBSC-T.I-27	Labour charges for wrought and put up including fixing in position for Teak wood Fully panelled doors external or internal including frame	1 Sqm	2,003.00
843	TBSC-T.I-28	Labour charges for wrought and put up including fixing in position for Teak wood Glazed and panelled doors including fixing glass including frame	1 Sqm	1,858.00
844	TBSC-T.I-29	Labour charges for wrought and put up including fixing in position for Teak wood Framed and planked doors including frame	1 Sqm	1,661.00
845	TBSC-T.I-30	Labour charges for wrought and put up including fixing in position for Teak wood Lugged, braced and planked doors including frame	1 Sqm	1,299.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
846	TBSC-T.I-31	Labour charges for wrought and put up including fixing in position for Teak wood Flush type door shutter including frame	1 Sqm	938.00
847	TBSC-T.I-32	Labour charges for wrought and put up including fixing in position for Teak wood Windows glazed including outer frame and shutter frame	1 Sqm	1,254.00
848	TBSC-T.I-33	Labour charges for wrought and put up including fixing in position for Teak wood Windows panelled including outer frame and shutter frame	1 Sqm	1,932.00
849	TBSC-T.I-34	Labour charges for wrought and put up including fixing in position for Teak wood Windows ledged, braced and planked including outer frame	1 Sqm	1,320.00
850	TBSC-T.I-35	Labour charges for wrought and put up including fixing in position for Teak wood Windows framed and planked including outer frame and shutter frame	1 Sqm	1,577.00
851	TBSC-T.I-36	Labour charges for wrought and put up including fixing in position for Teak wood Ventilators glazed, fixed with double frame with wire netting including frame	1 Sqm	974.00
852	TBSC-T.I-37	Labour charges for wrought and put up including fixing in position for Teak wood Swing ventilators glazed including outer frame and shutter frame	1 Sqm	1,255.00
853	TBSC-T.I-38	Labour charges for wrought and put up including fixing in position for Teak wood Weld mesh doors and windows including outer frame and shutter frame	1 Sqm	670.00
854	TBSC-T.I-39	Labour charges for wrought and put up including fixing in position for Teak wood G.I or .AC sheet door & windows including outer frame and shutter frame	1 Sqm	750.00
855	TBSC-T.I-40	Labour charges for wrought and put up including fixing in position for Other than teakwood Fully panelled doors external or internal including frame	1 Sqm	1,676.00
856	TBSC-T.I-41	Labour charges for wrought and put up including fixing in position for Other than teakwood Glazed and panelled doors including fixing glass including frame	1 Sqm	1,592.00
857	TBSC-T.I-42	Labour charges for wrought and put up including fixing in position for Other than teakwood Framed and planked doors including frame	1 Sqm	1,389.00
858	TBSC-T.I-43	Labour charges for wrought and put up including fixing in position for Other than teakwood Ledged, braced and planked doors including frame	1 Sqm	1,087.00
859	TBSC-T.I-44	Labour charges for wrought and put up including fixing in position for Other than teakwood Flush type door shutter including frame	1 Sqm	854.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
860	TBSC-T.I-45	Labour charges for wrought and put up including fixing in position for Other than teakwood Windows glazed including outer frame and shutter frame	1 Sqm	1,078.00
861	TBSC-T.I-46	Labour charges for wrought and put up including fixing in position for Other than teakwood Windows panelled including outer frame and shutter frame	1 Sqm	1,616.00
862	TBSC-T.I-47	Labour charges for wrought and put up including fixing in position for Other than teakwood Windows ledged, braced and planked including outer frame	1 Sqm	1,105.00
863	TBSC-T.I-48	Labour charges for wrought and put up including fixing in position for Other than teakwood Windows framed and planked including outer frame and shutter frame	1 Sqm	1,319.00
864	TBSC-T.I-49	Labour charges for wrought and put up including fixing in position for Other than teakwood Ventilators glazed, fixed with double frame with wire netting including frame	1 Sqm	911.00
865	TBSC-T.I-50	Labour charges for wrought and put up including fixing in position for Other than teakwood Swing ventilators glazed including outer frame and shutter frame	1 Sqm	1,147.00
866	TBSC-T.I-51	Labour charges for wrought and put up including fixing in position for Other than teakwood Weld mesh doors and windows including outer frame and shutter frame	1 Sqm	587.00
867	TBSC-T.I-52	Labour charges for wrought and put up including fixing in position for Other than teakwood G.I or .AC sheet door & windows including outer frame and shutter frame	1 Sqm	666.00
868	TBSC-T.I-53	Dressing faces of granite stone (double line dressing)	1 Sqm	195.00
869	TBSC-T.I-54	Dressing faces of other than granite stone(double line dressing)	1 Sqm	121.00
870	TBSC-T.I-55	Labour charges for removing and refixing with complete servicing of the MS Windows	1 Sqm	415.00
U	SECTION	DISMANTLING		
871	TBSC-U.I-01	Stone masonry in cement mortar	1 Cum	442.00
872	TBSC-U.I-02	Terracing work in roofs or floors	1 Sqm	18.00
873	TBSC-U.I-03	Flat stones in roof or floors including lifting	1Sqm	16.00
874	TBSC-U.I-04	Pan tiled or Mangalore tiled roof without roof timbers.	1Sqm	14.00
875	TBSC-U.I-05	Flat and pan tiles or Mangalore tiles over flat tiles without roof timbers	1Sqm	16.00
876	TBSC-U.I-06	Wrought and framed timber in roofs or floors	1 Cum	230.00
877	TBSC-U.I-07	Old lime mortar plaster	1Sqm	4.00
878	TBSC-U.I-08	Old cement mortar plaster	1Sqm	5.00
879	TBSC-U.I-09	Dry rough stone revetment for aprons and stacking within 40 M lead	1 Cum	72.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
880	TBSC-U.I-10	Revetment for aprons and stacking grouted within 40 lead	1 Cum	54.00
881	TBSC-U.I-11	Kadapa slabs or Shahabad stone slabs flooring on sand bed	1Sqm	7.00
882	TBSC-U.I-12	Through scraping of old plastered surface	1Sqm	4.00
883	TBSC-U.I-13	Washing of plastered surface with soap, soda and water (or with soda lime and water)	1Sqm	1.00
884	TBSC-U.I-14	Clean removal of lime plaster from walls and raking out joints 20 mm deep or from terraced roof and raking out joints up to 50 mm deep	1Sqm	4.00
885	TBSC-U.I-15	Clean removal of cement plaster from walls and raking out joints 20 mm deep or from terraced roof and raking out joints from 50 mm to 100 mm deep	1Sqm	5.00
1	All the items to be used on the works are of first quality & ISI and as approved by the Engineer-In-charge of the work.			
2	Supply Rates for all the materials are based on market rates excluding Sales Tax/ Material GST.			
3	18% towards " Works Contract GST " on Estimated Contract Value may be allowed in the Part-B of the estimates for public buildings taken up by the R&B Department. Respective departments to allow this provision as applicable.			
4	SSR Rates for Building items are purely for the guidance of the officers in preparation of estimates vide para.113 of APPWD code. Authority who prepares the estimate is however responsible for proper rates as envisaged in para.45 of APPWD code.			
	LEGEND	"TBSC" -A.I-01		
		"TBSC" -R.I-22		
		"TBSC" -S.III-14		
		TBS - Denotes Telangana Buildings SoR		
		A.I/ R.IV - Denotes the Section & Sub-section		
		01/22 - Denotes the serial number of the item		

SI	NAME OF THE STRUCTURAL MEMBER	Material Hire charges	Labour charges	Centring Charges for 2018-19	Unit of Measurement
1	2	3	4	5	6

HIRE CHARGES FOR CENTERING & SCAFFOLDING

A	FOOTINGS	Rs.	288.00	Rs.	631.00	Rs.	919.00	per 1 cum
B	BED BLOCKS, BANDS	Rs.	64.00	Rs.	325.00	Rs.	389.00	per 1 cum
C	PEDESTALS	Rs.	328.00	Rs.	1,004.00	Rs.	1332.00	per 1 cum
D	PLINTH BEAMS	Rs.	1390.00	Rs.	1,521.00	Rs.	2911.00	per 1 cum
HIRE CHARGES FOR CENTERING & SCAFFOLDING - Unsupported Height up to 3.66 M Steel scaffolding pipes, jack Props, wallers, Foot plates, brackets, steel Centering Plates,etc.,								
E	LINTELS	Rs.	1180.00	Rs.	1,615.00	Rs.	2795.00	per 1 cum
F	CHAJJAS - SUNSHADES	Rs.	233.00	Rs.	248.00	Rs.	2795.00	per 1 sqm
G	COLUMNS	Rs.	355.00	Rs.	2,268.00	Rs.	2623.00	per 1 cum
H	BEAMS	Rs.	2085.00	Rs.	1,903.00	Rs.	2623.00	per 1 cum
I	SLABS - Up to 150 mm thick	Rs.	236.00	Rs.	215.00	Rs.	451.00	per 1 sqm
J	SLABS - above 150 mm - Up to 300 mm thick	Rs.	243.00	Rs.	222.00	Rs.	465.00	per 1 sqm
K	SLABS - above 300 mm thick	Rs.	254.00	Rs.	232.00	Rs.	486.00	per 1 sqm
L	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	Rs.	858.00	Rs.	783.00	Rs.	1641.00	per 1 sqm
M	PERGOLA SLABS (Only Rib Beams)	Rs.	602.00	Rs.	549.00	Rs.	1151.00	per 1 sqm
N	ARCH BEAMS - up to 1.5 M Span	Rs.	2370.00	Rs.	2,163.00	Rs.	4533.00	per 1 cum
O	ARCH BEAMS - above 1.5 M Span	Rs.	2404.00	Rs.	2,193.00	Rs.	4597.00	per 1 cum
P	DOME SLABS	Rs.	3833.00	Rs.	3,496.00	Rs.	7329.00	per 1 cum
Q	HELICAL STAIRCASES	Rs.	292.00	Rs.	267.00	Rs.	559.00	per 1 sqm
R	SHEAR WALLS, RCC WALLS, WATER TANK WALLS	Rs.	1206.00	Rs.	1,653.00	Rs.	2859.00	per 1 sqm

HIRE CHARGES FOR CENTERING & SCAFFOLDING - Unsupported Height up to 3.66 M
Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates etc.,

E	LINTELS	Rs.	790.00	Rs.	1251.00	Rs.	2041.00	per 1 cum
F	CHAJJAS - SUNSHADES	Rs.	156.00	Rs.	192.00	Rs.	348.00	per 1 sqm
G	COLUMNS	Rs.	238.00	Rs.	1757.00	Rs.	1995.00	per 1 cum
H	BEAMS	Rs.	1395.00	Rs.	1473.00	Rs.	2868.00	per 1 cum
I	SLABS - Up to 150 mm thick	Rs.	158.00	Rs.	167.00	Rs.	325.00	per 1 sqm
J	SLABS - above 150 mm - Up to 300 mm thick	Rs.	163.00	Rs.	172.00	Rs.	335.00	per 1 sqm
K	SLABS - above 300 mm thick	Rs.	170.00	Rs.	180.00	Rs.	350.00	per 1 sqm
L	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	Rs.	575.00	Rs.	607.00	Rs.	1182.00	per 1 sqm
M	PERGOLA SLABS (Only Rib Beams)	Rs.	403.00	Rs.	425.00	Rs.	828.00	per 1 sqm
N	ARCH BEAMS - up to 1.5 M Span	Rs.	1586.00	Rs.	1675.00	Rs.	3261.00	per 1 cum
O	ARCH BEAMS - above 1.5 M Span	Rs.	1609.00	Rs.	1698.00	Rs.	3307.00	per 1 cum
P	DOME SLABS	Rs.	2566.00	Rs.	2708.00	Rs.	5274.00	per 1 cum
Q	HELICAL STAIRCASES	Rs.	196.00	Rs.	207.00	Rs.	403.00	per 1 sqm
R	SHEAR WALLS, RCC WALLS, WATER TANK WALLS	DELETED						

Note: - Centering & scaffolding charges for steel scaffolding with pipes, jack props, steel centring plates for unsupported heights of every 610 mm height above 3.66 M may be allowed at 16.666% more than the basic material hire charges and relevant labour charges of the applicable floor and item

SI	NAME OF THE STRUCTURAL MEMBER	Material Hire charges		Labour charges		Centring Charges for 2018-19		Unit of Measurement
1	2	3		4		5		6
HIRE CHARGES FOR ACCESS SCAFFOLDING - up to 3.66 M using Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates etc., for BRICK MASONRY/ STONE MASONRY - 1 sqm (Wall Area)								
A	1st - Floor	Rs.	10.32	Rs.	79.46	Rs.	89.78	per 1 sqm
B	2nd - Floor	Rs.	10.32	Rs.	113.78	Rs.	124.1	per 1 sqm
C	3rd - Floor	Rs.	10.32	Rs.	148.09	Rs.	158.41	per 1 sqm
D	4th - Floor	Rs.	10.32	Rs.	182.41	Rs.	192.73	per 1 sqm
E	5th - Floor	Rs.	10.32	Rs.	216.72	Rs.	227.04	per 1 sqm
F	6th - Floor	Rs.	10.32	Rs.	251.03	Rs.	261.35	per 1 sqm
G	7th - Floor	Rs.	10.32	Rs.	285.33	Rs.	295.65	per 1 sqm
H	8th - Floor	Rs.	10.32	Rs.	319.65	Rs.	329.97	per 1 sqm
I	9th - Floor	Rs.	10.32	Rs.	353.97	Rs.	364.29	per 1 sqm
J	10th - Floor	Rs.	10.32	Rs.	388.27	Rs.	398.59	per 1 sqm
K	11th - Floor	Rs.	10.32	Rs.	422.59	Rs.	432.91	per 1 sqm
L	12th - Floor	Rs.	10.32	Rs.	456.91	Rs.	467.23	per 1 sqm
M	13th - Floor	Rs.	10.32	Rs.	491.22	Rs.	501.54	per 1 sqm
N	14th - Floor	Rs.	10.32	Rs.	525.52	Rs.	535.84	per 1 sqm
O	15th - Floor	Rs.	10.32	Rs.	559.84	Rs.	570.16	per 1 sqm

HIRE CHARGES FOR ACCESS SCAFFOLDING - up to 3.66 M using Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates etc., for PLASTERING to WALLS - 1 sqm								
A	1st - Floor	Rs.	1.03	Rs.	7.95	Rs.	8.98	per 1 sqm
B	2nd - Floor	Rs.	1.03	Rs.	11.38	Rs.	12.41	per 1 sqm
C	3rd - Floor	Rs.	1.03	Rs.	14.80	Rs.	15.83	per 1 sqm
D	4th - Floor	Rs.	1.03	Rs.	18.24	Rs.	19.27	per 1 sqm
E	5th - Floor	Rs.	1.03	Rs.	21.67	Rs.	22.70	per 1 sqm
F	6th - Floor	Rs.	1.03	Rs.	25.11	Rs.	26.14	per 1 sqm
G	7th - Floor	Rs.	1.03	Rs.	28.54	Rs.	29.57	per 1 sqm
H	8th - Floor	Rs.	1.03	Rs.	31.96	Rs.	32.99	per 1 sqm
I	9th - Floor	Rs.	1.03	Rs.	35.40	Rs.	36.43	per 1 sqm
J	10th - Floor	Rs.	1.03	Rs.	38.83	Rs.	39.86	per 1 sqm
K	11th - Floor	Rs.	1.03	Rs.	42.26	Rs.	43.29	per 1 sqm
L	12th - Floor	Rs.	1.03	Rs.	45.69	Rs.	46.72	per 1 sqm
M	13th - Floor	Rs.	1.03	Rs.	49.12	Rs.	50.15	per 1 sqm
N	14th - Floor	Rs.	1.03	Rs.	52.55	Rs.	53.58	per 1 sqm
O	15th - Floor	Rs.	1.03	Rs.	56.00	Rs.	57.03	per 1 sqm

HIRE CHARGES FOR STAGE SCAFFOLDING - up to 3.66 M using Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates etc., for CEILING PLASTERING - 1 sqm								
A	1st - Floor	Rs.	2.46	Rs.	15.91	Rs.	18.37	per 1 sqm
B	2nd - Floor	Rs.	2.46	Rs.	22.57	Rs.	25.03	per 1 sqm
C	3rd - Floor	Rs.	2.46	Rs.	29.23	Rs.	31.69	per 1 sqm
D	4th - Floor	Rs.	2.46	Rs.	35.90	Rs.	38.36	per 1 sqm
E	5th - Floor	Rs.	2.46	Rs.	42.56	Rs.	45.02	per 1 sqm
F	6th - Floor	Rs.	2.46	Rs.	49.22	Rs.	51.68	per 1 sqm
G	7th - Floor	Rs.	2.46	Rs.	55.89	Rs.	58.35	per 1 sqm
H	8th - Floor	Rs.	2.46	Rs.	62.55	Rs.	65.01	per 1 sqm
I	9th - Floor	Rs.	2.46	Rs.	69.22	Rs.	71.68	per 1 sqm
J	10th - Floor	Rs.	2.46	Rs.	75.88	Rs.	78.34	per 1 sqm
K	11th - Floor	Rs.	2.46	Rs.	82.54	Rs.	85	per 1 sqm
L	12th - Floor	Rs.	2.46	Rs.	89.21	Rs.	91.67	per 1 sqm
M	13th - Floor	Rs.	2.46	Rs.	95.80	Rs.	98.26	per 1 sqm
N	14th - Floor	Rs.	2.46	Rs.	102.53	Rs.	104.99	per 1 sqm
O	15th - Floor	Rs.	2.46	Rs.	109.20	Rs.	111.66	per 1 sqm

CENTERING & SCAFFOLDING CHARGES- FLOOR WISE RATES for Steel scaffolding pipes, jack Props, Steel Centering Plates,etc., for unsupported height 3.66 M

FLOOR		LINTELS	CHAJJAS - SUNSHADES	COLUMNS	BEAMS	SLABS - Up to 150 mm thick	SLABS - above 150 mm - Up to 300 mm thick	SLABS - above 300 mm thick	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	PERGOLA SLABS (Only Rib Beams)	ARCH BEAMS - up to 1.5 M Span	ARCH BEAMS - above 1.5 M Span	DOME SLABS	HELICAL STAIRCASES	SHEAR WALLS, RCC WALLS, WATER TANK WALLS
Material Hire for any Floor	H	1180.00	233.00	355.00	2085.00	236.00	243.00	254.00	858.00	602.00	2370.00	2404.00	3833.00	292.00	472.00
Labour Charges for 1st Floor	L	1615.00	248.00	2268.00	1903.00	215.00	222.00	232.00	783.00	549.00	2163.00	2193.00	3498.00	267.00	1653.00
Total Hire Charges (H+L)	T	2795.00	481.00	2623.00	3988.00	451.00	465.00	486.00	1641.00	1151.00	4533.00	4597.00	7331.00	559.00	2125.00

1st - Floor	L	1615.00	248.00	2268.00	1903.00	215.00	222.00	232.00	783.00	549.00	2163.00	2193.00	3498.00	267.00	1653.00
2nd - Floor	L	1777.00	273.00	2495.00	2093.00	237.00	244.00	255.00	862.00	604.00	2379.00	2413.00	3847.00	293.00	1818.00
3rd - Floor	L	1938.00	297.00	2722.00	2283.00	258.00	266.00	278.00	940.00	659.00	2596.00	2632.00	4197.00	320.00	1983.00
4th - Floor	L	2099.00	322.00	2948.00	2474.00	280.00	288.00	301.00	1019.00	714.00	2812.00	2852.00	4547.00	347.00	2148.00
5th - Floor	L	2261.00	347.00	3175.00	2664.00	301.00	310.00	324.00	1096.00	769.00	3028.00	3071.00	4896.00	374.00	2314.00
6th - Floor	L	2422.00	372.00	3402.00	2854.00	323.00	333.00	349.00	1175.00	824.00	3245.00	3291.00	5247.00	400.00	2479.00
7th - Floor	L	2584.00	397.00	3629.00	3044.00	344.00	355.00	372.00	1254.00	879.00	3461.00	3509.00	5597.00	426.00	2644.00
8th - Floor	L	2746.00	421.00	3856.00	3234.00	366.00	377.00	395.00	1331.00	933.00	3677.00	3729.00	5946.00	454.00	2810.00
9th - Floor	L	2906.00	446.00	4082.00	3425.00	387.00	399.00	418.00	1410.00	988.00	3893.00	3948.00	6296.00	480.00	2975.00
10th - Floor	L	3068.00	470.00	4309.00	3615.00	410.00	421.00	441.00	1488.00	1044.00	4110.00	4167.00	6645.00	507.00	3141.00
11th - Floor	L	3230.00	496.00	4536.00	3805.00	431.00	443.00	464.00	1567.00	1098.00	4326.00	4387.00	6995.00	533.00	3305.00
12th - Floor	L	3392.00	521.00	4763.00	3995.00	453.00	465.00	487.00	1645.00	1153.00	4542.00	4606.00	7345.00	560.00	3470.00
13th - Floor	L	3553.00	545.00	4990.00	4185.00	474.00	487.00	510.00	1723.00	1209.00	4759.00	4826.00	7694.00	587.00	3636.00
14th - Floor	L	3714.00	570.00	5216.00	4376.00	496.00	509.00	533.00	1802.00	1263.00	4975.00	5045.00	8044.00	613.00	3801.00
15th - Floor	L	3876.00	594.00	5443.00	4566.00	517.00	531.00	557.00	1880.00	1318.00	5191.00	5265.00	8394.00	641.00	3967.00

Note: - Centering & scaffolding charges for steel scaffolding with pipes, jack props, steel centring plates for unsupported heights of every 610 mm height or part thereof over and above 3.66 M may be allowed at 16.666% more than the basic material hire charges and relevant labour charges of the applicable floor and item

CENTERING & SCAFFOLDING CHARGES- FLOOR WISE RATES for Casurina Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates, Steel Centring Plates etc., for unsupported height 3.66 M														
FLOOR		LINTELS	CHAJJAS - SUNSHADES	COLUMNS	BEAMS	SLABS - Up to 150 mm thick	SLABS - above 150 mm - Up to 300 mm thick	SLABS - above 300 mm thick	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	PERGOLA SLABS (Only Rib Beams)	ARCH BEAMS - up to 1.5 M Span	ARCH BEAMS - above 1.5 M Span	DOME SLABS	HELICAL STAIRCASES
Material Hire for any Floor	H	790.00	156.00	238.00	1395.00	158.00	163.00	170.00	575.00	403.00	1586.00	1609.00	2566.00	196.00
Labour Charges for 1st Floor	L	1251.00	192.00	1757.00	1473.00	167.00	172.00	180.00	607.00	425.00	1675.00	1698.00	2708.00	207.00
Total Hire Charges (H+L)	T	2041.00	348.00	1995.00	2868.00	325.00	335.00	350.00	1182.00	828.00	3261.00	3307.00	5274.00	403.00
1st - Floor	L	1251.00	192.00	1757.00	1473.00	167.00	172.00	180.00	607.00	425.00	1675.00	1698.00	2708.00	207.00
2nd - Floor	L	1376.00	211.00	1932.00	1620.00	184.00	189.00	197.00	668.00	468.00	1843.00	1868.00	2979.00	228.00
3rd - Floor	L	1500.00	231.00	2108.00	1768.00	201.00	207.00	215.00	729.00	510.00	2010.00	2037.00	3250.00	248.00
4th - Floor	L	1625.00	250.00	2284.00	1915.00	217.00	224.00	233.00	789.00	553.00	2178.00	2207.00	3521.00	269.00
5th - Floor	L	1750.00	269.00	2459.00	2062.00	234.00	242.00	251.00	849.00	595.00	2345.00	2377.00	3792.00	290.00
6th - Floor	L	1876.00	289.00	2636.00	2210.00	251.00	258.00	270.00	910.00	638.00	2513.00	2547.00	4062.00	311.00
7th - Floor	L	2001.00	308.00	2811.00	2357.00	267.00	275.00	288.00	971.00	680.00	2680.00	2716.00	4332.00	331.00
8th - Floor	L	2126.00	327.00	2986.00	2504.00	284.00	293.00	306.00	1032.00	723.00	2848.00	2886.00	4603.00	352.00
9th - Floor	L	2251.00	345.00	3162.00	2651.00	300.00	310.00	323.00	1092.00	765.00	3015.00	3057.00	4874.00	373.00
10th - Floor	L	2376.00	365.00	3338.00	2799.00	317.00	328.00	341.00	1153.00	809.00	3183.00	3226.00	5145.00	393.00
11th - Floor	L	2501.00	384.00	3513.00	2946.00	334.00	344.00	359.00	1214.00	851.00	3350.00	3396.00	5416.00	414.00
12th - Floor	L	2626.00	403.00	3689.00	3093.00	351.00	361.00	377.00	1275.00	894.00	3518.00	3566.00	5687.00	435.00
13th - Floor	L	2751.00	423.00	3865.00	3241.00	368.00	379.00	395.00	1336.00	936.00	3684.00	3735.00	5958.00	455.00
14th - Floor	L	2876.00	442.00	4040.00	3388.00	384.00	396.00	413.00	1395.00	979.00	3852.00	3905.00	6229.00	476.00
15th - Floor	L	3001.00	461.00	4216.00	3535.00	401.00	414.00	431.00	1456.00	1021.00	4019.00	4075.00	6500.00	497.00

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
A	SECTION	BRICKS & BUILDING BLOCKS
III	SUB-SECTION	Birla Aerocon , Siporex, Nucon, NCL Aerated Blocks
C	SECTION	WALL & FLOOR TILES
		(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)
I	SUB-SECTION	NON-PORCELAIN CERAMIC FLOOR TILES - Somany, H & R Johnson, Naveen Ceramics, Kajaria, Nitco, Sphinx, Orient Bell, AGL, Hindware, Cera, Varmora
II	SUB-SECTION	PORCELAIN VITRIFIED FLOOR TILES - H & R Johnson, H & R Johnson Marbonite, H & R Johnson Endura, H & R Johnson GPS, Naveen Ceramics, Kajaria, Nitco, Orient Bell, Hindware, AGL, Ricasil Cermaics Exxaro, Cera, Varmora, VITERO
III	SUB-SECTION	CERAMIC WALL TILES - Somany, H & R Johnson, Kajaria, Sphinx, Orient Bell, AGL, Hindware, Ricasil Cermaics Exxaro, Cera, Varmora
IV	SUB-SECTION	PORCELAIN WALL TILES - Somany, H & R Johnson, Kajaria, Sphinx, Orient Bell, Hindware, Ricasil Cermaics Exxaro, Cera, Varmora, VITERO
V	SUB-SECTION	GLASS MOSAIC TILES - Bisazza
VI	SUB-SECTION	WALL CLADDING TILES - Somany, H & R Johnson, Kajaria, Sphinx, Orient Bell, Hindware, Cera
VII	SUB-SECTION	TERRAZZO FLOOR TILES (PLAIN & CHEQUERED) - Super Decorative, Aditya Designer, Maha Bhima, Tricon, Pheonix, Eurocon, Ultra, Sphinx, Cemtech
VIII	SUB-SECTION	CEMENT CONCRETE FLOOR TILES (PLAIN & CHEQUERED) - Super Decorative, Aditya Designer, Maha Bhima, Tricon, Pheonix, Eurocon, Ultra, Sphinx
IX	SUB-SECTION	PRE-CAST CONCRETE BLOCKS FOR PAVING - Super Decorative, Aditya Designer, Maha Bhima, Tricon, Pheonix, Eurocon, Ultra, Sphinx, Cemtech
X	SUB-SECTION	VINYL FLOORING - Marblex, Amstrong
		TILE ADHESIVE - MYK LATICRETE, JK Super Grip
F	SECTION	GLASS MATERIALS - Modifloat, Asahi, Saintgobain, Binani, HNG,
G	SECTION	PAINTS & POLISHES - Asian, Berger, Nerolac, British Paints, JK Cements, Nexon paints, Indocem, ESSAR, Sheenlac, Suryacem, Neon, Wallz, Walrus - SYNTHETIC PLASTER - NCL-Cement Primer, NCL-Alltek, NCL-Skimcoat, Allteck Spray Plaster, NCL Gaiety, NCL-Delight, NCL-Harmony, Allteck Deco Orient, MYK LATICRETE, Multichem, Essar, J.K. White Cement, J.K.Wall Putty (White cement based), JK Primaxx(White Cement Based Primer), Smoothtek, Shalimar, Snowcem
H	SECTION	PARTICLE BOARDS - NCL Bison, Ramco-Hilux, Ramco-Hicem, Everest-board, Visaka-board, Rajshri, Innsula, Birla Aerocon, Aerolite, Novopan, Bhutan-board
J	SECTION	PLYWOODS, LAMINATES & VENEERS - Kitply, Century Ply, National Ply, Bhutan Ply, Samrat, Gurjan ply, Aamoda, Mayur, Amul Boards
K	SECTION	CEILINGS, WALL PARTITIONS & WALL LININGS - Ramco-Hilux, Everest-board, Visakha-board, Rajshri, Innsula, Gypsum India, Saintgobain, Armstrong, Daikin, NCL-Seccolor, NCL Bison, Rock Srength, Aerolite, USG Boral, Birla Aerocon
L	SECTION	DOORS, SHUTTERS & FRAMES - NCL-Seccolor, Anand, Raavila, Kutty, Standard, Shubhdwar, ITP, Rajshri, NCL-Bison, Elixir, Sintex, Elgi, Oasis, Polywood, Sintex, NCL-Wintech, Fenesta, LG, Masonite, Everest, Vishaka, Ambience, Aamoda, Rehau, Arpitha, Nandi, Aparna Venster
M	SECTION	WINDOWS - NCL-Seccolor, NCL-Bison, Elixir, Sintex, Elgi, Oasis, Polywood, NCL-Wintech, Fenesta, LG, Ahlada, Rehau, Arpitha, Win-Eshtas-Viswajeet Industries, Aparna Venster, ecoVUE
N	SECTION	STRUCTURAL GLAZING & CURTAIN WALLING - NCL-Seccolor, NCL-Bison, Elixir, Sintex, Elgi, Oasis, Polywood, Sintex, NCL-Wintech, Fenesta, LG, Rehau, Arpitha
P	SECTION	FIXTURES FOR DOORS & WINDOWS - Jyoti, Classic, Hardwyn, AKS for SS
Q	SECTION	CONSTRUCTION CHEMICALS & ADMIXTURES
		MAKE, APPLICATION METHOD, AREA AND DOSAGE

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
I	SUB-SECTION	PLASTICIZERS
	TBSC-Q.I-01	* Consplast of Armstrong Chemicals Pvt Ltd, Bengaluru * Conplast of Fosroc Chemicals India Pvt Ltd, Bengaluru (200ml /50Kgs Cement)* Zoriplax of Protect More Construction chemicals, Hyderabad. (Dosage 20ml per 50 Kgs cement). for M 20 + grade concrete works in slabs /canal lining works/ roads works**MYK SAVEMIX SERIES M/S by MYK Schomburg,Hyderabad.* "MYK SAVEMIX" dosage from 0.5% - 1.5% by weight of cement
	TBSC-Q.I-02	* Roofplast HS 100 of Armstrong Chemicals Pvt Ltd, Bengaluru * Structuro100 of Fosroc Chemicals India Pvt Ltd, Bengaluru * Zoriplast HS of Protect More Construction Chemicals, ** MYK Remecrete PC30 M/S by MYK Schomburg,Hyderabad.* Dosage 0.5 to 1 Ltr per 100kgs of Cement .
	TBSC-Q.I-03	*Roofplast SP 35of Armstrong Chemicals Pvt Ltd. Bengaluru *Conplast SP 337 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriplast SP 350 of Protect More Construction chemicals. * Rheomac 707 of BASF *Conflow (Dosage: 200ml to 500ml per bag of 50 Kgs Cement) . for M30+ grade concrete works like road projects / Canal linings / Dams / Reservoirs / Building's concrete works * Power35 of EBT (Dosage : 300 ml to 500 ml Per Bag of 50 Kgs Cement) * MYK Savemix RP 333 M/S by MYK Schomburg,Hyderabad.* Dosage at a rate between 0.15 and 0.40 kgs /50 kg cement
	TBSC-Q.I-04	*Roofplast SP 45 of Armstrong Chemicals Pvt Ltd, Bengaluru*Consplast SP 430 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriplast SP 450 of Protect More Construction Chemicals (Dosage: 200ml to 500ml per bag of 50 Kgs Cement) for high early strength and high range water reducing admixture for M40+ grade concrete works like road projects / Canal linings / Dams / Reservoirs / Building's concrete works *Power45 of EBT (Dosage : 300 ml to 500 ml Per Bag of 50 Kgs Cement) * MYK Remecrete PC10 M/S by MYK Schomburg,Hyderabad.* Dosage range between 0.3 to 2.5 ltrs/100 kg of cementitious material
	TBSC-Q.I-05	*Roofplast SR 45 of Armstrong Chemicals Pvt Ltd, Bengaluru*Conplast RP264 of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zoriplast SRT 5 of Protect More Construction Chemicals (Dosage : 300ml to 400ml per bag of 50 Kgs Cement).For delaying of initial setting time and M 40+ Grade concrete works * Power SR 45 of EBT (Dosage: 200 ml to 500 ml per bag of 50 Kgs Cement) * MYK Savemix RP 333 M/S by MYK Schomburg,Hyderabad.* Dosage at a rate between 0.15 and 0.40 kgs /50 kg cement
	TBSC-Q.I-06	*Roofplast SCA of Armstrong Chemicals Pvt Ltd, Bengaluru*Conplast NC of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zoriset of Protect More Construction Chemicals (Dosage:1 Kg to 3 Kgs per bag of 50 Kgs Cement depending on the setting time required).For shotcrete / Guniting / Emergency concrete works * Power-200 of EBT or Equivalent (Dosage:1 Kg to 3 Kgs per bag of 50 Kgs Cement depending on the setting time required)
	TBSC-Q.I-07	ALSTRONG CA 353 of M/s. Armstrong Chemicals Pvt Ltd , Bengaluru / ZORIBOND CRA 35 of M/s. Protect More Construction Chemicals (PMCC). POWER n STRENGTH of M/s. EBT Construction Chemicals / FOSROC (500ml Per Bag of 50 Kgs Cement)
II	SUB-SECTION	WATER PROOFING COMPOUNDS
	TBSC-Q.II-01	*Rainproof No.1 of Armstrong Chemicals Pvt Ltd Bengaluru *Conplast 421 of Fosroc Chemicals India Pvt Ltd Bengaluru (125ml Per 50 Kgs Cement) *Zoriproof No.1 of Protect More construction Chemicals. : (Dosage : 100ml Per Bag of 50 Kgs Cement) *MYK PROOF WP10 M/S by MYK SCHOMBURG,Hyderabad. Dosage - 150-200Gms per bag of cement * E160 of Ardex Endura : (200 ml per 50 Kgs Bag)

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
	TBSC-Q.II-02	*Roofbond RFX of Armstrong Chemicals Pvt Ltd, Bengaluru. *Brushbond RFX of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoricoat RX of Protect More Construction Chemicals.*Masre Seal 550 Grey of Base. (12-14 m2 in two coats to achieve 1mm thickness). Terrace, Water Tanks, Walls Waterproof Coatings : of Two Part System: *EBT - Power RFX *MYK BETOCRETE C-35 M/S by MYK Schomburg,Hyderabad Dosage - 0.8 - 1.5% by weight of cement * WPM 004 of Ardex Endura : (12-14 m2 in two coats to achieve 1mm thickness)
	TBSC-Q.II-03	* Roofcoat of Armstrong Chemicals Pvt Ltd, Bengaluru * Brushbond of Fosroc Chemicals India Pvt Ltd, Bengaluru * Zoricoat of Protect More Construction Chemicals Terrace, Water Tanks, Walls, Reservoirs Waterproofing Coatings : Surface treatments* Asian Paints *MYK AQUAFIN ADMIX M/S by MYK Schomburg,Hyderabad-Dosage Rate: w/c ratio < 0.45: 2 % of cement content w/c ratio > 0.45: 3 % of cement content * WPM 004 OF Ardex Endura
	TBSC-Q.II-04	*Rainseal of Armstrong Chemicals Pvt Ltd, Bengaluru *Proofex SM of Fosroc Chemicals India Pvt Ltd, Bengaluru, *Zoricoat XL of Protect More Construction Chemicals. wherever highly flexible, crack bridging ,waterproofing required (Coverage : 50 to 60 SFT Per/Ltr/Coat) (for brush / spray application add 20% water per Ltr) Terrace, Walls Highly Flexible Waterproof Liquid Membrane pure Acrylic Coatings : **MYK Coat WPU-1K(E) M/S by MYK Schomburg,Hyderabad - Coverage at minimum of 1.8kg per m2 for thickness of 1.1 mm * WPM 004 OF Ardex Endura
	TBSC-Q.II-05	*Rapidstrong QS of Armstrong Chemicals Pvt Ltd Bengaluru *Patchro C of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zorirapidr of Protect More Construction Chemicals * Conflow (Dosage : 1 to 3 Ltrs per bag of 50 Kgs Cement depending on the setting time required). * Concure Plus (200 -250 ml per Bag of cement)For emergency works/Anti wash and under water concreting: *MYK AQUAFIN TG M/S by MYK Schomburg,Hyderabad Dosage Rate: at 1.5-2.5 kg/m ² . * A4/5 WPM 401 of Ardex Endura
	TBSC-Q.II-06	*Rainseal Flexi Coat B30 of Armstrong Chemicals Pvt Ltd, Bengaluru *Fosroc Chemicals India Pvt Ltd, Bengaluru. *Zoricoat BL of Protect More Construction Chemicals. : wherever highly flexible, crack bridging, Sewage treatment plants, pipe lines, Reservoirs and waterproofing required. *MYK Schomburg * WPM 004 of Ardex Endura
	TBSC-Q.II-07	ROOFBOND FRC of M/s. Armstrong Chemicals Pvt Ltd, Bengaluru / ZORICOAT FRC of M/s. Protect More Construction Chemicals (PMCC). POWER n BOND FRX 2 of M/s. EBT Construction Chemicals / FOSROC (Coverage : 30 to 40 SFT / Ltr / Two coats)
	TBSC-Q.II-08	RAINSEAL CFR of M/s. Armstrong Chemicals Pvt Ltd, Bengaluru / ZORICOAT EFC of M/s. Protect More Construction Chemicals (PMCC). POWER n COAT EFC of M/s. EBT Construction Chemicals / FOSROC
	TBSC-Q.II-09	ALSTRONG CC 153 of M/s. Armstrong Chemicals Pvt Ltd, Bengaluru / ZORIBOND CTC 15 of M/s. Protect More Construction Chemicals (PMCC) (Coverage : 1 Ltr 20 SFT / 2 Coats). POWER n STRENGTH PEN of M/s. EBT Construction Chemicals / FOSROC
	TBSC-Q.II-10	ROOFCARE PU of M/s. Armstrong Chemicals Pvt Ltd, Bengaluru / ZORICOAT PU of M/s. Protect More Construction Chemicals (PMCC) , POWER n COAT BPU of M/s. EBT Construction Chemicals / FOSROC.
	TBSC-Q.II-11	ROOFCARE WR of M/s. Armstrong Chemicals Pvt Ltd, Bengaluru / ZORICOAT WR of M/s. Protect More Construction Chemicals (PMCC), POWER n REPEL WR of M/s. EBT Construction Chemicals / FOSROC
III	SUB-SECTION	BONDING AGENTS/ ADHESIVES

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
	TBSC-Q.III-01	*Roofbond PB of Armstrong Chemicals Pvt Ltd Bengaluru *Nitobond AR of Fosroc Chemical India Pvt Ltd Bengaluru *Zoribond PB of Protect More Construction Chemicals. (Mix: 1:1 ratio of cement)50 SFT / Ltr /coat depending on the substrate) On terrace old concrete to new mortar / screed : *MYK bond AR 43 M/S by MYKSchomburg,Hyderabad* Coverage: as a bonding agent: approximate 4 - 5 m2 / kg depending on substrate porosity* E135 of Ardex Endura (2.5 Lit for 50 Kgs of cement)
	TBSC-Q.III-02	*Roofbond SBR of Armstrong Chemicals Pvt Ltd Bengaluru *Nitobond SBR of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoribond SBR of Protect More Construction Chemicals. (50 SFT / Ltr /coat depending on the substrate) For ceiling / concrete repairs and bonding : mortar/concrete *MYK bond SBR 45 M/S by MYKSchomburg,Hyderabad* Dosage :For patching and repair mortars and plaster for masonry 10 Ltr of MYK Bond SBR per 50 Kgs- cement* E135 of Ardex Endura (2.5 Lit for 50 Kgs of cement)
	TBSC-Q.III-03	*Roofbond EP of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitobond EP of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zoribond EP of Protect More Construction Chemicals. (Coverage : 20 - 25 SFT / Kg /Coat) For Structural concrete repairs / bonding : Old concrete to new concrete epoxy bonding : *MYK Bond EB A M/S by MYKSchomburg,Hyderabad* Coverage Approx. 2.6 Sq Mtrs per 1 kgs * EP 300 of Ardex Endura (10 sqm per 5 Lit per coat of 50 microns)
	TBSC-Q.III-04	Admix AD1 of Ardex Endura
		Silver/Diamond & Platinum stars of Ardex Endura
		ALSTRONG CA 353 of M/s. Armstrong Chemicals Pvt Ltd , Bengaluru / ZORIBOND CRA 35 of M/s. Protect More Construction Chemicals (PMCC). POWER n STRENGTH of M/s. EBT Construction Chemicals / FOSROC (500ml Per Bag of 50 Kgs Cement)
		ALSTRONG CB 253 of M/s. Armstrong Chemicals Pvt Ltd , Bengaluru / ZORIBOND CB 25 of M/s. Protect More Construction Chemicals (PMCC). POWER n BOND RGB of M/s. EBT Construction Chemicals / FOSROC (Coverage : 1 Ltr / 40 SFT / Coat)
IV	SUB-SECTION	ANTI-CORROSIVE AGENTS
	TBSC-Q.IV-01	*Roofguard AC of Armstrong Chemicals Pvt Ltd Bengaluru *Fosroc Chemicals India Pvt Ltd Bengaluru*Zoriguard AC of Protect More Construction Chemicals.(40 SFT Per Ltr / Coat) * Concare-XL (200 ml to 250 ml per Bag of Cement To protect the exposed reinforcement / steel structures against corrosion : *MYK RUST Remover M/S by MYK Schomburg,Hyderabad*
	TBSC-Q.IV-02	*Roofguard RC of Armstrong Chemicals Pvt Ltd Bengaluru *Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriguard RC of Protect More Construction Chemicals Hyderabad. (50 SFT Per Ltr / Coat) During repairs to protect, to convert the rust of reinforcement / steel : *MYK RUST CONVERTOR M/S by MYKSchomburg,Hyderabad*
	TBSC-Q.IV-03	*Roofguard ZP of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitoprime Zinc Rich of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriguard ZP of Protect More Construction Chemicals, Hyderabad. (Coverage : 4 Sq.Mtr. /Ltr / Coat) *MYK Savemix CN 100 M/S by MYK Schomburg,Hyderabad - Recommended 0.90 chloride to nitrite ratio 30% CaNO2 Sol * EP 410 of Ardex Endura (Coverage : 10 Sq.Mtr. /5 Ltr / Coat of 250 Microns)
	TBSC-Q.IV-04	Supply of anti-corrosion admixture inhibitor liquid as per Central Electro Chemical Research Institute developed specification and licensee of Concare or Concare Plus or Equivalent (300 ml to 500 ml per Bag of 50 Kgs Cement)
V	SUB-SECTION	GROUTS

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
	TBSC-Q.V-01	*Rapidstrong Grout AG of Armstrong Chemicals Pvt Ltd, Bengaluru*Lockfix of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zorifix of Protect More Construction Chemicals (Yield 0.5 Ltrs / 1 Kg Pack) Anchoring / fix the steel bars into the rocks, concrete for foundations, extension of concrete :*EBT Power Anchor grout . (Yield 0.5 Ltrs / 1 Kg Pack) *MYK GROUT M 65 Yield: 13.0 Lts at flow able consistency for 25 Kgs of HDPE bags
	TBSC-Q.V-02	*Rapidstrong Grout GP2 of Armstrong Chemicals Pvt Ltd, Bengaluru*Conbextra GP2 of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zorigrout GP 2 of Protect More Construction Chemicals For machinery / thin sections of concrete joints Filling : *EBT Power GP2 Grout (Yield 13.5 Ltrs Per 25 Kgs Bag). *MYK Schomburg MYK Grout Inject E-200 Approx 1.06 kg for filling up of 1000 cc
	TBSC-Q.V-03	*Rapidstrong Grout EP of Armstrong Chemicals Pvt Ltd , Bengaluru*Conbextra EP10 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zorigrout EP of Protect More Construction Chemicals. (Two parts system).(Density 1.07 Kg Per Ltr)For Structural strengthening, filling of honey comb / voids in the concrete : *EBT Power EPL Grout *MYK Schomburg MYK Grout EP750 (Yield: Approx. 9.5 Litre volume per 19 kg pack)
	TBSC-Q.V-04	*Rapidstrong Grout EP3 of Armstrong Chemicals Pvt Ltd, Bengaluru *Conbextra EP300 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zorigrout EP3 of Protect More Construction Chemicals. Concrete strengthening and filling concrete repairs *EBT Power EP Grout *MYK Schomburg MYK INDUGROUT-EP10 approx. 1.60 kg/liters or 16.0 k g/10 mm thick gap/m2.
	TBSC-Q.V-05	RAPIDSTRONG GROUT PU of M/s. Armstrong Chemicals Pvt Ltd , Bengaluru / ZORIGROUT PU of M/s. Protect More Construction Chemicals (PMCC). M/s. POWER n GROUT RPU of M/s. EBT Construction Chemicals / FOSROC
VI	SUB-SECTION	MISCELLANEOUS CHEMICALS
	TBSC-Q.VI-01	*Roofcare MRA of Armstrong Chemicals Pvt Ltd, Bengaluru *Reebol of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zorislip of Protect More Construction Chemicals (Coverage: 1 Ltr will cover approx 20 to 30m2 on method and material of the form) *MYK Schomburg
	TBSC-Q.VI-02	*Rapidstrong FM of Armstrong Chemicals Pvt Ltd, Bengaluru *Fosroc Chemicals India Pvt Ltd. Bengaluru. *Zorifloor NH of Protect More Construction Chemicals. :(Coverage : May be applied at rate 3.5 Kgs /m2 over green concrete for normal traffic & 6-12 Kg / M2 for heavy traffic. Higher application rates yield better abrasion resistance)* EBT PowerHard M-100 *MYK Schomburg
	TBSC-Q.VI-03	* Rapidstrong NH of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitoflor Hardtop/Hard Standard of Fosroc Chemicals India Pvt Ltd, Bengaluru. * Zorifloor DH of Protect More Construction Chemicals* Mastertof 100 Grey of BASF :(Coverage : May be applied at rate 3.5 Kgs /m2 over green concrete for normal traffic & 6-12 Kg / M2 for heavy traffic. Higher application rates yield better abrasion resistance) *EBT PowerHard NM-100. (Coverage: May be applied at rate 3.5 Kgs /m2 over green concrete for normal traffic & 6-12 Kg / M2 for heavy traffic) *MYK Schomburg MYK TOP 150 Application rate Kg/M2 Intended traffic use AvgWear (IS1237-1980) 7 kgs Heavy <2mm 5 Kgs Medium >2<3.5mm 3 kgs Light >3.5<4mm
	TBSC-Q.VI-04	*Roofcrete MC of Armstrong Chemicals Pvt Ltd, Bengaluru / *Rendroc RG of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoricrete MC of Protect More Construction Chemicals. *MYK Schomburg MYK Top 200 Coverage : Light traffic 2.5 to 3.5 edium traffic 4 to 5 kg/m ² Heavy traffic 6 to 7 kg/m ²

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
	TBSC-Q.VI-05	*Roofcrete AR of Armstrong Chemicals Pvt Ltd, Bengaluru *Cemtop 400 SD of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoricrete CMG of Protect More Construction Chemicals. To achieve High Strength Concreting / Structural rehabilitation / concrete repairs : *MYK Schomburg MYK SOLOPLAN -30 For layers of less than 20 mm recommend 5.0 - 5.4 L of water to 25 kg of SOLOPLAN-30. For layers of 20 mm and higher, we recommend 4.7 - 5.1 L of water to 25 kg of SOLOPLAN-30.
	TBSC-Q.VI-06	*Roofcrete EM of Armstrong Chemicals Pvt Ltd, Bengaluru *Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoricrete ERM of Protect More Construction Chemicals. For wherever repeated failures takes place, resistance to chemicals. Repairing of Detoriated concrete with High Strength Flexural / Compressive Strength with High Standard Bonding: *MYK Schomburg MYK Crete CMS 4500 M/S by MYKSchomburg,Hyderabad* applied up to 50mm thickness at 2kg per m2 at 1mm thickness.
	TBSC-Q.VI-07	*Roofex of Armstrong Chemicals Pvt Ltd, Bengaluru *Brushbond Tap of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoripex of Protect More Construction Chemicals. For Negative Water Pressure Treatments like Cellar / Ceiling areas etc., : *MYK Schomburg
	TBSC-Q.VI-08	*Roofseal PU of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitoseal PU 280 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriseal PU of Protect More Construction Chemicals. For Expansion Joints / Terrace Cracks / Wall & Beam junction cracks ; Runway Joints etc., : *MYK Schomburg
	TBSC-Q.VI-09	* Roofseal PS of Armstrong Chemicals Pvt Ltd, Bengaluru * Thioflex 600 of Fosroc Chemicals India Pvt Ltd, Bengaluru * Zoriseal PS of Protect More Construction Chemicals. For Expansion Joints / Terrace Cracks : *MYK Schomburg
	TBSC-Q.VI-10	*Wonderseal XL of Armstrong Chemicals Pvt Ltd, Bengaluru *Decofil of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriseal XL of Protect More Construction Chemicals. External / Internal Wall Cracks Sealing *MYK Schomburg
	TBSC-Q.VI-11	*Wonderseal Plug of Armstrong Chemicals Pvt Ltd, Bengaluru *Renderroc Plug of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriseal Plug of Protect More Construction Chemicals.
	TBSC-Q.VI-12	*Roofcoat PU400 of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitocote UR 512 of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zoricoat PU of Protect More Construction Chemicals. for floorings / Walls.
	TBSC-Q.VI-13	*Roofguard CTE of Armstrong Chemicals Pvt Ltd, Bengaluru*Nitocote ET 550 of Fosroc Chemicals India Pvt Ltd, Bengaluru/ *Zoriguard CTE of Protect More Construction Chemical. : tar based epoxy coating for sewage treatment plants, pipe lines protective coating for steel reinforcement.
	TBSC-Q.VI-14	*Roofexure WB of Armstrong Chemicals Pvt Ltd, Bengaluru *Concure WB of Fosroc Chemicals Pvt Ltd, Bengaluru *Zoricure WB of Protect More Construction Chemicals. (Coverage : 4 Sq. Mtrs / Ltr / Coat)
	TBSC-Q.VI-15	*Rainseal BS of Armstrong Chemicals Pvt Ltd, Bengaluru *Fosroc Chemicals India Pvt Ltd, Bengaluru. *Zoriseal BS Grade 'A' of Protect More Construction Chemicals. for construction joints of roads / bridges.
	TBSC-Q.VI-16	*Rainseal BT Primer of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitoproof 100 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriprime BT of Protect More Construction Chemicals.
	TBSC-Q.VI-17	*Roofplast AEA of Armstrong Chemicals Pvt Ltd Bengaluru*Conplast AEA of Fosroc Chemicals India Pvt Ltd, Bengaluru (Dosage : 200ml Per 50 Kgs Cement)*Zoriplast AEA of Protect More Construction Chemicals. (Dosage : 15ml to 20ml per bag of 50 Kgs Cement) For entrainment of air, recommended for canal lining works, mass concreting etc : *EBT Power AEA Plasticizer (Dosage : 15ml per Bag of 50 Kgs Cement)

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
		Multifilament Polypropylene fibers of Belmix belgian fibers ISO 9001 Certified 6/12/18 mm length for Plastering, Screeds, All Precasting items 90 gms per each cement bag. * Multifilament Polypropylene fibers of Belmix belgian fibers ISO 9001 Certified 6/12/18 mm length for CC Roads, Car Parkings, Pavements each 900 gms per each Cubic Meter Concrete.
		Macro Synthetic Fibers of Propex ASTM C1116/ 1116M -45mm length for CC Roads, Ground Supported Slabs, Pavements, Sprayed Concrete,Tunnel linings, Mining etc., 4 to7 kg per 1 CuM
		Steel Fibers of Propex Novocon HE05535 EN 14889-1:2006 -35mm length for CC Roads, Ground Supported Slabs, Pavements, Sprayed Concrete,Tunnel linings, Mining etc., 15 to 22 kg per 1 CuM
		ALSTRONG CM 666 of M/s. Armstrong Chemicals Pvt Ltd , Bengaluru / ZORICOAT CM of M/s. Protect More Construction Chemicals (PMCC). M/s. POWER n GUARD ADM of EBT Construction Chemicals / FOSROC (Coverage : 1 Ltr / 40 SFT / Coat)
VII	SUB-SECTION	REPAIRING & TREATMENT WORKS
	TBSC-Q.VII-1	RAINSEAL FELT of Armstrong / Fosroc / ZORIFELT BT of PMCC
	TBSC-Q.VII-2	RAINSEAL HDP 1500 of Armstrong / Fosroc / ZORISHIELD 1500 of PMCC / Roof shield
	TBSC-Q.VII-3	RAINSEAL BT PRIMER of Armstorng / Fosroc / /STP/PMCC/ Asian
	TBSC-Q.VII-4	ROOFBOND RFX of Armstrong /BRUSHBOND RFX of Fosroc / ZORIBOND RFX of PMCC. * MYK Schomburg MYK AQUAFIN TG M/S by MYK Schomburg,Hyderabad.* MYK AQUAFIN TG is a two component cementations, polymer dispersion based flexible protective coating and waterproof barrier. This product is two-component and resistant to water, moisture and abrasion. Dosage Rate: MYK AQUAFIN TG to be applied typically at 1.5-2.5 kg/m ² .
	TBSC-Q.VII-5	RAINSEAL FLEXICOAT B 300 of Armstrong / NITOPROOF 120 of Fosroc /ZORICOAT BL of PMCC (Coverage : 1Ltr /100 SFT/ Each Coat) diluting with water at 1:1 ratio as a primer coat. RAINSEAL FLEXICOAT B 300 of Armstrong / NITOPROOF 120 of Fosroc /ZORICOAT BL of PMCC top coat diluting with 20% of water (Coverage : 1Ltr /5 Sqm /Each Coat)
	TBSC-Q.VII-6	RAINSEAL of Armstrong /PROOFEX SM of Fosroc / ZORICOAT XL of SMCC(1 Ltr/10 Sq.Mtr./Each Coat) diluting with water at 1:1 ratio as a primer coat , Next coat with with –RAINSEAL of Armstrong / PROOFEX SM of Fosroc / ZORICOAT XL of PMCC mixing with 20 % of Water. (1 Ltr/5 Sq.Mtr/Each Coat) final coat with--RAINSEAL of Armstrong /PROOFEX SM of Fosroc / ZORICOAT XL of PMCC (1 Ltr/2 Sq.Mtr/Each Coat)diluting with 20% of water. * MYK Schomburg MYK Coat WPU-1K(e) M/S by MYK Schomburg,Hyderabad.* Recommended coverage at minimum of 1.8kg per m ² for thickness of 1.1 mm
	TBSC-Q.VII-7	Polymer bonding agent: – ROOFBOND SBR of Armstrong / NITOBOND SBR of Fosroc / ZORIBOND SBR of PMCC (Coverage : 1 Ltr /5 Sqm / Each Coat), next with - Acrylic Polymer modified reinstatement concrete /mortar ROOFCRETE AR of Armstrong / CEMTOP 400 SD of Fosroc/ZORICRETE CMG of PMCC to finish and polysulphide sealant with ROOFSEAL PS of Armstrong / THIOFLEX 600 of Fosroc / ZORISEAL PS of PMCC (Coveragae : 1 Kg Per 1.8 RMT) finally with – ROOFCOAT of Armstrong / BRUSHBOND of Fosroc /ZORICOAT of PMCC mixing with Cement at 1: 2 ratio. (Coverage : 1 Ltr / 2.5 Sqm /Coat)* MYK Schomburg Seal PS
	TBSC-Q.VII-09	Ador Granite Series of MYK Schomburg Coverage: Primer Approx. 0.350 kg/m ² - final Texture Coat Approx. 0.70 to 0.80 kg/m ²
	TBSC-Q.VII-10	MYK Schomburg Parking System - Coverage: Primer Approx. 0.350 kg/m ² - final Coat Approx. 0.70 to 0.80 kg/m ²

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
	TBSC-Q.VII-11	MYK Schomburg Conductive Flooring System - Coverage: Primer Approx. 0.350 kg/m ² - final Coat Approx. 0.70 to 0.80 kg/m ²
	TBSC-Q.VII-12	MYK Schomburg - Coverage: Approximately 0.450 kg/m ² in two coat for a DFT of Approx 200 micron. Primer (10 % dilution with water) is approx 0.150 to 0.200 kg/m ² Note: Higher consumption is expected on rough surfaces.
VIII	TBSC-Q.VIII-01-11	Silseal, Silflex, Armour, Shalitex
R	SECTION	MISCELLANEOUS ITEMS
		(a) Sintex for PVC tanks (b) Centurywells & Sudarshana for Galvalume sheets (c) Elixir for PEB structures (d) Aluminium Sections - Hindalco, Nalco, Jindal, Geetha series (e) ACP Sheets - Alucopanel, alucobonel, Reynobond, Lennox Durabuid, Alstrong legame, Alpolic, Alcomat, Alshine, Viva, Aludecor f) Gypsum plaster- NKV Home Depot

PLUMBING ITEMS

INDEX FOR PLUMBING ITEMS OF TELANGANA BUILDINGS SoR: 2017-18

Sl. No	SECTION	ITEM CODE	DESCRIPTION OF THE ITEM	FROM	TO
A	SECTION		S.W.G. PIPES & FITTINGS		
			(Landing cost - including loading, cost of conveyance, unloading & stacking but excluding material GST,)		
I	SUB-SECTION	TBSP-A.I-01-09	SUPPLY & LAYING OF SWG PIPES		
II	SUB-SECTION	TBSP-A.II-01-59	S.W.G. FITTINGS		
III	SUB-SECTION	TBSP-A.III-01-05	LABOUR CHARGES FOR SWG WORKS		
B	SECTION		MANHOLES & INSPECTION CHAMBERS		
I	SUB-SECTION	TBSP-B.I-01-04	MANHOLES		
II	SUB-SECTION	TBSP-B.II-01-13	INSPECTION CHAMBERS		
III	SUB-SECTION	TBSP-B.III-01-01	LABOUR CHARGES FOR IC WORKS		
C	SECTION		CENTRIFUGAL CI PIPES & FITTINGS - IS : 1729		
I	SUB-SECTION	TBSP-C.I-01-06	SUPPLY & LAYING OF CAST IRON PIPES		
II	SUB-SECTION	TBSP-C.II-01-33	SUPPLYING & LAYING OF C.I. FITTINGS		
III	SUB-SECTION	TBSP-C.III-01-08	LABOUR CHARGES FOR CI PIPE WORKS		
D	SECTION		CENTRIFUGAL CI PIPES & FITTINGS - IS : 3989		
I	SUB-SECTION	TBSP-D.I-01-13	SUPPLY OF CENTRIFUGAL CI PIPES		
II	SUB-SECTION	TBSP-D.II-01-95	SUPPLY OF C.I. SPUN FITTINGS		
E	SECTION		VITREOUS CHINAWARE - SANITARY APPLIANCES		
I	SUB-SECTION	TBSP-E.I-01-07	INDIAN WATER CLOSETS		
II	SUB-SECTION	TBSP-E.II-01-06	FLOOR MOUNTED EWC		
III	SUB-SECTION	TBSP-E.III-01-03	WALL MOUNTED EWC		
IV	SUB-SECTION	TBSP-E.IV-01-03	CISTERNS FOR WATER CLOSETS		
V	SUB-SECTION	TBSP-E.V-01-02	PLASTIC SEATS FOR WATER CLOSETS		
VI	SUB-SECTION	TBSP-E.VI-01-16	WASH HAND BASINS		
VII	SUB-SECTION	TBSP-E.VII-01-04	URINALS		
VIII	SUB-SECTION	TBSP-E.VIII-01-12	LABOUR CHARGES FOR SANITARY WARE		
F	SECTION		CP FITTINGS - TAPS, FAUCETS & ACCESSORIES		
I	SUB-SECTION	TBSP-F.I-01-08	TAPS & FAUCETS - BIB TAPS		
II	SUB-SECTION	TBSP-F.II-01-09	TAPS & FAUCETS - PILLAR TAPS		
III	SUB-SECTION	TBSP-F.III-01-07	TAPS & FAUCETS - OTHER TAPS & SPOUTS		
IV	SUB-SECTION	TBSP-F.IV-01-07	STOP & ANGLE VALVES		
V	SUB-SECTION	TBSP-F.V-01-09	COMBINATION FAUCETS		
VI	SUB-SECTION	TBSP-F.VI-01-08	SHOWER ROSES & FITTINGS		
VII	SUB-SECTION	TBSP-F.VII-01-41	MISCELLANEOUS CP FITTINGS		
VIII	SUB-SECTION	TBSP-F.VIII-01-05	LABOUR CHARGES		
G	SECTION		G.I. PIPES & FITTINGS		
I	SUB-SECTION	TBSP-G.I-01-13	G.I. PIPES		
II	SUB-SECTION	TBSP-G.II-01-24	G.I. FITTINGS		

Sl. No	SECTION	ITEM CODE	DESCRIPTION OF THE ITEM	FROM	TO
III	SUB-SECTION	TBSP-G.III-01-27	BRONZE (COPPER ALLOY) VALVES		
IV	SUB-SECTION	TBSP-G.IV-01-03	LABOUR CHARGES FOR G.I PLUMBING		
H	SECTION		PVC PIPES & FITTINGS		
I	SUB-SECTION	TBSP-H.I-01-44	PVC PIPES		
II	SUB-SECTION	TBSP-H.II-01-96	PVC FITTINGS		
III	SUB-SECTION	TBSP-H.III-01-10	PVC PLUMBING ACCESSORIES		
IV	SUB-SECTION	TBSP-H.IV-01-03	LABOUR CHARGES FOR PVC PLUMBING		
J	SECTION		MISCELLANEOUS ITEMS		
I	SUB-SECTION	TBSP-J.I-01-40	MISCELLANEOUS PLUMBING WORK ITEMS		
II	SUB-SECTION	TBSP-J.II-01-17	POLYETHYLENE-ALUMINIUM-POLYETHYLENE COMPOSITE PIPES		
III	SUB-SECTION	TBSP-J.III-01-195	OTHER VARIETIES OF PIPES		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
1	2	3	4	
		Note: All the prices of the materials are excluding taxes but including cost of loading, cost of conveyance, unloading & stacking		
A	SECTION	S.W.G. PIPES & FITTINGS		
I	SUB-SECTION	SUPPLY & LAYING OF S.W.G. PIPES		
1	TBSP-A.I-01	Supplying, laying, jointing and testing 101.6 mm SWG SP-1 pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in CM 1.5:1 prop. Including excavation of trenches and socket pits in any soil (except rock requiring blasting) up to 1524 mm(5'0") depth and refilling with watering and tamping.	1 RM	491.00
2	TBSP-A.I-02	Supplying, laying, jointing and testing 101.6 mm SWG SP-1 pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in CM 1:5:1 prop. including excavation of trenches and socket pits in any soil (except rock requiring blasting) up to 914.4 mm (3'0") depth and refilling with watering and tamping.	1 RM	423.00
3	TBSP-A.I-03	Supplying, laying, jointing and testing 152.4 mm SWG SP-1 pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in CM 1.5:1 prop. including excavation of trenches and socket pits in any soil (except rock requiring blasting) up to 1524 mm(5'0") depth and refilling with watering and tamping.	1 RM	708.00
4	TBSP-A.I-04	Supplying, laying, jointing and testing 152.4 mm SWG SP-1 pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in CM 1.5:1 prop. including excavation of trenches and socket pits in any soil (except rock requiring blasting) up to 914.4 mm (3'0")) depth and refilling with watering and tamping.	1 RM	630.00
5	TBSP-A.I-05	Providing 152.4 mm CC bed 1:2:4 Prop: using 19.05 mm gauge graded granite metal chips and cradling 101.6 mm SWG pipe line all round to have 75 mm nominal size thick cover over the sockets.	1 RM	138.00
6	TBSP-A.I-06	Providing 152.4 mm CC bed 1:2:4 Prop: using 19.05 mm gauge graded granite metal chips and cradling 152.4 mm SWG pipe line all round to have 75 mm nominal size thick cover over the sockets.	1 RM	237.00
7	TBSP-A.I-07	Supplying & Laying 101.6 mm SWG channels with cement mortar joints with suitable brick masonry for fixing the channels in position	1 RM	95.00
8	TBSP-A.I-08	Supplying & Laying 152.4 mm SWG channels with cement mortar joints with suitable brick masonry for fixing the channels in position	1 RM	178.00
9	TBSP-A.I-09	Supplying & fixing 150 mm x 100 mm SWG gully traps conforming to ISI 651 & 4127 with C.I Grating & Cost. Brick masonry in CM 1:6 prop. Intermediate chamber and fitted with 304.8 mm x 288.6mm (12"x9") C.I Frame and hinged cover	Each	619.00
II	SUB-SECTION	S.W.G. PIPES (1m or above lengths)& FITTINGS		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
10	TBSP-A.II-01	Supply of SWG SP-1 pipe conforming to ISI 651 - 4" dia (101.6mm)	1 RM	188.00
11	TBSP-A.II-02	Supply of SWG SP-1 pipe conforming to ISI 651 - 6" dia (152.4mm)	1 RM	326.00
12	TBSP-A.II-03	Supply of SWG SP-1 pipe conforming to ISI 651 - 8" dia (203.2mm)	1 RM	504.00
13	TBSP-A.II-04	Supply of SWG SP-1 pipe conforming to ISI 651 - 10" dia (254 mm)	1 RM	922.00
14	TBSP-A.II-05	Supply of SWG SP-1 pipe conforming to ISI 651 - 12" dia (300 mm)	1 RM	1330.00
15	TBSP-A.II-06	Supply of SWG SP-1 pipe conforming to ISI 651 - 14" dia (350 mm)	1 RM	1810.00
16	TBSP-A.II-07	Supply of SWG SP-2 pipe conforming to ISI 651 - 4" dia (101.6mm)	1 RM	233.00
17	TBSP-A.II-08	Supply of SWG SP-2 pipe conforming to ISI 651 - 6" dia (152.4mm)	1 RM	346.00
18	TBSP-A.II-09	Supply of SWG SP-2 pipe conforming to ISI 651 - 8" dia (203.2mm)	1 RM	622.00
19	TBSP-A.II-10	Supply of SWG SP-2 pipe conforming to ISI 651 - 10" dia (254 mm)	1 RM	977.00
20	TBSP-A.II-11	Supply of SWG SP-2 pipe conforming to ISI 651 - 12" dia (300 mm)	1 RM	1502.00
21	TBSP-A.II-12	Supply of SWG SP-2 pipe conforming to ISI 651 - 14" dia (350 mm)	1 RM	1947.00
22	TBSP-A.II-13	Supply of SWG SP-2 pipe conforming to ISI 651 - 16" dia (400 mm)	1 RM	2242.00
23	TBSP-A.II-14	Supply of SWG SP-2 pipe conforming to ISI 651 - 18" dia (450 mm)	1 RM	2863.00
24	TBSP-A.II-15	Supply of SWG SP-3 pipe conforming to ISI 651 - 4" dia (101.6mm)	1 RM	297.00
25	TBSP-A.II-16	Supply of SWG SP-3 pipe conforming to ISI 651 - 6" dia (152.4mm)	1 RM	431.00
26	TBSP-A.II-17	Supply of SWG SP-3 pipe conforming to ISI 651 - 8" dia (203.2mm)	1 RM	763.00
27	TBSP-A.II-18	Supply of SWG SP-3 pipe conforming to ISI 651 - 10" dia (254 mm)	1 RM	1159.00
28	TBSP-A.II-19	Supply of SWG SP-3 pipe conforming to ISI 651 - 12" dia (300 mm)	1 RM	1619.00
29	TBSP-A.II-20	Supply of SWG SP-3 pipe conforming to ISI 651 - 14" dia (350 mm)	1 RM	2055.00
30	TBSP-A.II-21	Supply of SWG SP-2 pipe conforming to ISI 651 - 16" dia (400 mm)	1 RM	2365.00
31	TBSP-A.II-22	Supply of SWG SP-3 pipe conforming to ISI 651 - 18" dia (450 mm)	1 RM	3219.00
32	TBSP-A.II-23	Supply of SWG Bends conforming to IS standards -100 mm dia	Each	95.00
33	TBSP-A.II-24	Supply of SWG Bends conforming to IS standards -150 mm dia	Each	176.00
34	TBSP-A.II-25	Supply of SWG Bends conforming to IS standards -200 mm dia	Each	330.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
35	TBSP-A.II-26	Supply of SWG Bends conforming to IS standards -250 mm dia	Each	668.00
36	TBSP-A.II-27	Supply of SWG Bends conforming to IS standards -300 mm dia	Each	849.00
37	TBSP-A.II-28	Supply of SWG Bends conforming to IS standards -350 mm dia	Each	1060.00
38	TBSP-A.II-29	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 100 x 100	Each	182.00
39	TBSP-A.II-30	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 150 x 100	Each	268.00
40	TBSP-A.II-31	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 150 x 150	Each	292.00
41	TBSP-A.II-32	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 200 x 100	Each	416.00
42	TBSP-A.II-33	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 200 x 150	Each	487.00
43	TBSP-A.II-34	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 200 x 200	Each	558.00
44	TBSP-A.II-35	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 250 x 100	Each	657.00
45	TBSP-A.II-36	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 250 x 150	Each	866.00
46	TBSP-A.II-37	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 250 x 200	Each	1071.00
47	TBSP-A.II-38	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 250 x 250	Each	1283.00
48	TBSP-A.II-39	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 300 x 100	Each	935.00
49	TBSP-A.II-40	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 300 x 150	Each	1197.00
50	TBSP-A.II-41	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 300 x 200	Each	1468.00
51	TBSP-A.II-42	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 300 x 250	Each	1724.00
52	TBSP-A.II-43	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 300 x 300	Each	1985.00
53	TBSP-A.II-44	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 100	Each	1166.00
54	TBSP-A.II-45	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 150	Each	1496.00
55	TBSP-A.II-46	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 200	Each	1823.00
56	TBSP-A.II-47	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 250	Each	2150.00
57	TBSP-A.II-48	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 300	Each	2480.00
58	TBSP-A.II-49	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 350	Each	2805.00
59	TBSP-A.II-50	Supply of SWG Plugs conforming to IS standards for 100 mm dia	Each	35.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
60	TBSP-A.II-51	Supply of SWG Plugs conforming to IS standards for 150 mm dia	Each	67.00
61	TBSP-A.II-52	Supply of SWG Plugs conforming to IS standards for 200 mm dia	Each	125.00
62	TBSP-A.II-53	Supply of SWG Plugs conforming to IS standards for 250 mm dia	Each	217.00
63	TBSP-A.II-54	Supply of SWG Plugs conforming to IS standards for 300 mm dia	Each	343.00
64	TBSP-A.II-55	Supply of SWG Plugs conforming to IS standards for 350 mm dia	Each	430.00
65	TBSP-A.II-56	Supply of SWG Gully Traps (Round & Square) conforming to IS standards 150 x 100 mm	Each	264.00
66	TBSP-A.II-57	Supply of SWG Saddles conforming to IS standards 150 x 100 mm	Each	193.00
67	TBSP-A.II-58	Supply of SWG Saddles conforming to IS standards 200 x 100 mm	Each	330.00
68	TBSP-A.II-59	Supply of SWG Saddles conforming to IS standards 250 x 100 mm	Each	534.00
68(a)	TBSP-A.II-60	Supply of SWG Rubber Rings, glue & Fixing Charges conforming to IS standards 150mm	Each	40.00
68(b)	TBSP-A.II-61	Supply of SWG Rubber Rings, glue & Fixing Charges conforming to IS standards 200mm	Each	58.00
68(c)	TBSP-A.II-62	Supply of SWG Rubber Rings, glue & Fixing Charges conforming to IS standards 250mm	Each	78.00
68(d)	TBSP-A.II-63	Supply of SWG Rubber Rings, glue & Fixing Charges conforming to IS standards 300mm	Each	130.00
III	SUB-SECTION	LABOUR CHARGES FOR SWG WORKS		
69	TBSP-A.III-01	Labour charges only for laying, jointing and testing SWG pipes of any dia with airtight cement joints including excavation of trenches and socket pits in any soil up to 914.4 mm (3'0") depth (except rock requiring blasting) and refilling with watering and tamping.	1 RM	252.00
70	TBSP-A.III-02	Labour charges only for laying, jointing and testing SWG pipes of any dia with airtight cement joints including excavation of trenches and socket pits in any soil up to 1524 mm (5'-0") depth (except rock requiring blasting) and refilling with watering and tamping.	1 RM	313.00
71	TBSP-A.III-03	Labour charges only for laying 101.6 mm SWG channels with cement mortar joints with suitable brick masonry for fixing the channels in position	1 RM	40.00
72	TBSP-A.III-04	Labour charges only for laying 152.4 mm SWG channels with cement mortar joints with suitable brick masonry for fixing the channels in position	1 RM	54.00
73	TBSP-A.III-05	Labour charges only for fixing and laying the SWG Junctions/ Plugs/ Bends of any dia with airtight cement joints as per standard practice	Each	33.00
B	SECTION	MANHOLES & INSPECTION CHAMBERS - AS PER - IS 4111 : Part 1 : 1986		
I	SUB-SECTION	MANHOLES		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
74	TBSP-B.I-01	Constructing 904.0 mm (3'0") dia solid block masonry inspection chamber as per IS - 4111: Part-1:1986 with cement mortar (1:6) prop using fly-ash blocks of 225 mm thick from approved source having a minimum crushing strength of 10 N/sq.mm including plastering with cement mortar 1:3 prop; ½" thick both inside and outside fitted with 20" dia RCC manhole covers and frames including excavating pits up to a depth of 904 mm (3'-0") in all sorts of soils (excluding rock) and laying cement concrete (1:4:8) 150 mm thick using 40 mm HBG Metal and P.C.C. 1:2:4 benching and channel 100 mm thick as per Standard specification and including cost and conveyance of all materials like cement, sand, bricks, water etc., to site, cost of seigniorage charges on all materials and all incidental and operational, labour charges like mixing cement mortar, constructing masonry, lift charges, curing etc., complete for finished item of work as per Standard specification.	Each	7,338.00
75	TBSP-B.I-02	Constructing 904.0 mm (3'0") dia solid block masonry inspection chamber as per IS - 4111: Part-1:1986 with cement mortar (1:6) prop using fly-ash blocks of 225 mm thick from approved source having a minimum crushing strength of 10 N/sq.mm including plastering with cement mortar 1:3 prop; ½" thick both inside and outside fitted with 20" dia RCC manhole covers and frames including excavating pits up to a depth of 1524 mm (5'-0") in all sorts of soils (excluding rock) and laying cement concrete (1:4:8) 150 mm thick using 40 mm HBG Metal and P.C.C. 1:2:4 benching and channel 100 mm thick as per Standard specification and including cost and conveyance of all materials like cement, sand, bricks, water etc., to site, cost of seigniorage charges on all materials and all incidental and operational, labour charges like mixing cement mortar, constructing masonry, lift charges, curing etc., complete for finished item of work as per Standard specification.	Each	11,694.00
76	TBSP-B.I-03	Constructing 904.0 mm (3'0") dia brick masonry inspection chamber as per IS - 4111: Part-1:1986 with cement mortar (1:6) prop using 2nd Class Clay Bricks of 225 mm thick from approved source having a minimum crushing strength of 5 N/sq.mm including plastering with cement mortar 1:3 prop; ½" thick both inside and outside fitted with 20" dia RCC manhole covers and frames including excavating pits up to a depth of 904 mm (3'-0") in all sorts of soils (excluding rock) and laying cement concrete (1:4:8) 150 mm thick using 40 mm HBG Metal and P.C.C. 1:2:4 benching and channel 100 mm thick as per Standard specification and including cost and conveyance of all materials like cement, sand, bricks, water etc., to site, cost of seigniorage charges on all materials and all incidental and operational, labour charges like mixing cement mortar, constructing masonry, lift charges, curing etc., complete for finished item of work as per	Each	7,321.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		Standard specification.		
77	TBSP-B.I-04	Constructing 904.0 mm (3'0") dia brick masonry inspection chamber as per IS - 4111: Part-1:1986 with cement mortar (1:6) prop using 2nd Class Clay Bricks of 225 mm thick from approved source having a minimum crushing strength of 5 N/sq.mm including plastering with cement mortar 1:3 prop; ½" thick both inside and outside fitted with 20" dia RCC manhole covers and frames including excavating pits up to a depth of 1524 mm (5'-0") in all sorts of soils (excluding rock) and laying cement concrete (1:4:8) 150 mm thick using 40 mm HBG Metal and P.C.C. 1:2:4 benching and channel 100 mm thick as per Standard specification and including cost and conveyance of all materials like cement, sand, bricks, water etc., to site, cost of seigniorage charges on all materials and all incidental and operational, labour charges like mixing cement mortar, constructing masonry, lift charges, curing etc., complete for finished item of work as per Standard specification.	Each	11,649.00
II	SUB-SECTION	INSPECTION CHAMBERS & COVERS		
78	TBSP-B.II-01	Constructing 914.4 mm x 457.2 mm (3'0"x1'6") brick in CM 1:6 prop. Masonry Inspection chamber up to 914.4 mm (3'0") and fitted with light weight 914.4 mm x 457.2 mm (3'0"x1'6") C.I frame and cover of 40 Kg.	Each	6,324.00
79	TBSP-B.II-02	Constructing 457.2 mm x 457.2 mm (1'6"x1'6") brick in CM 1:6 prop. Masonry. Inspection chamber up to 914.4 mm (3'0") and fitted with light weight 457.2 mm x 457.2 mm (1'6"x1'6") C.I frame and cover of 20 Kg.	Each	3,813.00
80	TBSP-B.II-03	Constructing Brick masonry chamber over the gully trap or peet valve and fitted with 304.8 x 228.6 m size CI frame and hinged cover.	Each	473.00
81	TBSP-B.II-04	Constructing Brick masonry support for G.I pipe with C.M 304.8 x 228.6 x228.6 mm size including plastering and finishing etc. complete.	Each	76.00
82	TBSP-B.II-05	Supply & fixing RCC cover 22" dia with nominal reinforcement 3 " thick and hooks for lifting	Each	732.00
83	TBSP-B.II-06	Supplying & fixing 304.8 x 228.6 mm CI frame & cover over gully taps	Each	124.00
84	TBSP-B.II-07	Supplying & fixing CI Nahany trap grating	Each	20.00
85	TBSP-B.II-08	Supplying & fixing CI gully trap grating	Each	50.00
86	TBSP-B.II-09	Supplying & fixing 914.4 x 457.2 mm CI man hole frame and cover (light weight) 30 Kgs	Each	2,013.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
87	TBSP-B.II-10	Supplying & fixing 602 x 602 mm CI man hole frame and cover (light weight) 30 Kgs	Each	2,998.00
88	TBSP-B.II-11	Supplying & fixing CI steps for septic tank.	Each	65.00
89	TBSP-B.II-12	Supplying & fixing 50.8 cm dia C.I. Man hole frame & cover for 914.4 mm dia chamber (20 Kgs - Light weight)	Each	1,295.00
90	TBSP-B.II-13	Supplying & fixing 50.8 cm dia C.I. Man hole frame & cover for 914.4 mm dia chamber (Medium weight) as per IS:1726 - 40 Kgs	Each	2,674.00
III	SUB-SECTION	LABOUR CHARGES FOR IC WORKS		
91	TBSP-B.III-01	Making drainage connection from a drainage line in to an existing inspection chamber/ manhole including making a hole in to the chambers, placing necessary pipes in the connection and making good the junction in and out of the chambers including cost of necessary cement, sand and aggregate etc.,	Each	130.00
C	SECTION	C.I. PIPES & FITTINGS - AS PER - IS 1729:1979 (Materials shall be procured from the list of approved Brands/ Manufacturers/ Suppliers)		
I	SUB-SECTION	SUPPLYING & LAYING OF C.I. PIPES		
92	TBSP-C.I-01	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nails etc., complete for 3" dia (75 mm nominal size) Single Socket	1 RM	751.00
93	TBSP-C.I-02	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nails etc., complete for 4" dia (101.6mm) Single Socket	1 RM	988.00
94	TBSP-C.I-03	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nails etc., complete for 6" dia (152.4mm) Single Socket	1 RM	1,580.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
95	TBSP-C.I-04	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nails etc., complete for 3" dia (75 mm nominal size) Double Socket	1 RM	822.00
96	TBSP-C.I-05	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nails etc., complete for 4" dia (101.6mm) Double Socket	1 RM	1,097.00
97	TBSP-C.I-06	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nails etc., complete for 6" dia (152.4mm) Double Socket	1 RM	1,821.00
II	SUB-SECTION	SUPPLYING & LAYING OF C.I. FITTINGS		
98	TBSP-C.II-01	Supplying & fixing CI Plain bends Ist quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 3" dia (75 mm nominal size)	Each	293.00
99	TBSP-C.II-02	Supplying & fixing CI Plain bends Ist quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 4" dia (101.6 mm)	Each	372.00
100	TBSP-C.II-03	Supplying & fixing CI Plain bends Ist quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 6" dia (152.4 mm)	Each	617.00
101	TBSP-C.II-04	Supplying & fixing CI Plug (Door) bends Ist quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 3" dia (75 mm nominal size)	Each	363.00
102	TBSP-C.II-05	Supplying & fixing CI Plug (Door) bends Ist quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 4" dia (101.6 mm)	Each	450.00
103	TBSP-C.II-06	Supplying & fixing CI Plug (Door) bends Ist quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 6" dia (152.4 mm)	Each	983.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
104	TBSP-C.II-07	Supplying and fixing of 75 mm nominal size (3") CI soil single junction with plug : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	457.00
105	TBSP-C.II-08	Supplying and fixing of 101.6 mm (4") CI soil single junction with plug : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	715.00
106	TBSP-C.II-09	Supplying and fixing of 152.4 mm (6") CI soil single junction with plug : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	1,695.00
107	TBSP-C.II-10	Supplying and fixing of 75 mm nominal size (3") CI soil plain single junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	384.00
108	TBSP-C.II-11	Supplying and fixing of 101.6 mm (4") CI soil plain single junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	526.00
109	TBSP-C.II-12	Supplying and fixing of 152.4 mm (6") CI soil plain single junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	1,262.00
110	TBSP-C.II-13	Supplying and Fixing of 75 mm nominal size (3") CI soil Double junction with plug : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	696.00
111	TBSP-C.II-14	Supplying and Fixing of 101.6 mm (4") CI soil Double junction with plug : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	846.00
112	TBSP-C.II-15	Supplying and Fixing of 152.4 mm (6") CI soil Double junction with plug : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	1,977.00
113	TBSP-C.II-16	Supplying and Fixing of 75 mm nominal size (3") CI soil plain Double junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	602.00
114	TBSP-C.II-17	Supplying and Fixing of 101.6 mm (4") CI soil plain Double junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	790.00
115	TBSP-C.II-18	Supplying and Fixing of 152.4 mm (6") CI soil plain Double junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	1,851.00
116	TBSP-C.II-19	Supplying and Fixing of 75mm C.I. Offsets Ist quality conforming to IS:1729-1979 with cement caulked joints and fixing -for 76.20 mm (3") C.I. Pipe	Each	295.00
117	TBSP-C.II-20	Supplying and Fixing of 75mm C.I. Offsets Ist quality conforming to IS:1729-1979 with cement caulked joints and fixing -for 101.6 mm (4") C.I. Pipe	Each	412.00
118	TBSP-C.II-21	Supplying and Fixing of 75mm C.I. Offsets Ist quality conforming to IS:1729-1979 with cement caulked joints and fixing -for 152.4 mm (6") C.I. Pipe	Each	899.00
119	TBSP-C.II-22	Supplying and Fixing of 115 mm C.I. Offsets Ist quality conforming to IS:1729-1979 with cement caulked joints and fixing - for 76.20 mm (3") C.I. Pipe	Each	351.00
120	TBSP-C.II-23	Supplying and Fixing of 115 mm C.I. Offsets Ist quality conforming to IS:1729-1979 with cement caulked joints and fixing - for 101.6 mm (4") C.I. Pipe	Each	468.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
121	TBSP-C.II-24	Supplying and Fixing of 115 mm C.I. Offsets Ist quality conforming to IS:1729-1979 with cement caulked joints and fixing - for 152.4 mm (6") C.I. Pipe	Each	921.00
122	TBSP-C.II-25	Supplying and Fixing of 150 mm C.I. Offsets Ist quality conforming to IS:1729-1979 with cement caulked joints and fixing for 76.20 mm (3") C.I. Pipe	Each	406.00
123	TBSP-C.II-26	Supplying and Fixing of 150 mm C.I. Offsets Ist quality conforming to IS:1729-1979 with cement caulked joints and fixing for 101.6 mm (4") C.I. Pipe	Each	526.00
124	TBSP-C.II-27	Supplying and Fixing of 150 mm C.I. Offsets Ist quality conforming to IS:1729-1979 with cement caulked joints and fixing for 152.4 mm (6") C.I. Pipe	Each	1,070.00
125	TBSP-C.II-28	Supplying & fixing CI floor traps 1st quality ISI marked conforming to IS:1729-1979 with C.P. Grating fixing with white cement as per site requirements with standard practice for nominal dia 75 mm (3") and grating size 165 mm dia of weight not less than 5.5 Kgs	Each	533.00
126	TBSP-C.II-29	Supplying & fixing CI floor traps 1st quality ISI marked with C.P. Grating fixing with white cement as per site requirements with standard practice for nominal dia 100 mm (4") and grating size 100 mm dia of weight not less than 6 Kgs	Each	653.00
127	TBSP-C.II-30	Supplying & fixing CI floor traps 1st quality ISI marked conforming to IS:1729-1979 with C.P. Grating fixing with white cement as per site requirements with standard practice for nominal dia 75 mm (3") and grating size 100 mm dia of weight not less than 4.0 Kgs	Each	326.00
128	TBSP-C.II-31	Supplying & fixing CI Collars (double socket) Ist quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 76.20 mm (3") C.I. Pipe	Each	179.00
129	TBSP-C.II-32	Supplying & fixing CI Collars (double socket) Ist quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 101.6 mm (4") C.I. Pipe	Each	225.00
130	TBSP-C.II-33	Supplying & fixing CI Collars (double socket) Ist quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 152.4 mm (6") C.I. Pipe	Each	645.00
III	SUB-SECTION	LABOUR CHARGES FOR CI PIPE WORKS		
131	TBSP-C.III-01	Labour charges only for fixing of C.I. Single/ Double Socket soil pipes of any dia with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar and including fixing of M.S. clamps if necessary with required nails	1 RM	246.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
132	TBSP-C.III-02	Labour charges only for fixing CI Plain/ Plug (Door) bends with cement caulked joints and fixing as per site requirements with standard practice	Each	78.00
133	TBSP-C.III-03	Labour charges only fixing CI soil single junctions with cement caulked joints and fixing as per site requirements with standard practice	Each	98.00
134	TBSP-C.III-04	Labour charges only fixing CI soil Double junctions with cement caulked joints and fixing as per site requirements with standard practice	Each	106.00
135	TBSP-C.III-05	Labour charges only fixing CI soil Collars, Bends, Offsets etc., with cement caulked joints and fixing as per site requirements with standard practice	Each	49.00
136	TBSP-C.III-06	Labour charges only for fixing CI Nahany/ Floor traps with C.P. Grating fixing with white cement as per site requirements with standard practice	Each	64.00
137	TBSP-C.III-07	Boxing of Nahany traps in RCC floors	Each	207.00
138	TBSP-C.III-08	Boxing of W.C Traps in R.C.C floors	Each	415.00
D	SECTION	CENTRIFUGAL CAST IRON PIPES & FITTINGS AS PER IS: 3989 - 1984		
I	SUB-SECTION	SUPPLY OF CENTRIFUGAL CI PIPES		
139	TBSP-D.I-01	75 mm dia CI (spun) soils Waste & Ventilating pipe (3 M)	Each	1,484.00
140	TBSP-D.I-02	100 mm dia CI (spun) soils Waste & Ventilating pipe (3 M)	Each	1,975.00
141	TBSP-D.I-03	150 mm dia CI (spun) soils Waste & Ventilating pipe (3 M)	Each	3,620.00
142	TBSP-D.I-04	75 mm dia CI (spun) soils Waste & Ventilating pipe (3 M) Double socket	Each	1,647.00
143	TBSP-D.I-05	100 mm dia CI (spun) soils Waste & Ventilating pipe (3 M) Double socket	Each	2,222.00
144	TBSP-D.I-06	75 mm dia 9'-0" (2743.2 mm) CI (Spun) pipes	Each	1,334.00
145	TBSP-D.I-07	100 mm dia 9'-0" (2743.2 mm) CI (Spun) pipes	Each	1,782.00
146	TBSP-D.I-08	75 mm dia 8'-0" (2438.4 mm) CI (Spun) pipes	Each	1,194.00
147	TBSP-D.I-09	100 mm dia 8'-0" (2438.4 mm) CI (Spun) pipes	Each	1,587.00
148	TBSP-D.I-10	75 mm dia 6'-0" (1828.8 mm) CI (Spun) pipes	Each	971.00
149	TBSP-D.I-11	100 mm dia 6'-0" (1828.8 mm) CI (Spun) pipes	Each	1,267.00
150	TBSP-D.I-12	75 mm dia 6'-0" (1828.8 mm) Double Socket CI (Spun) pipes	Each	1,021.00
151	TBSP-D.I-13	100 mm dia 6'-0" (1828.8 mm) Double Socket CI (Spun) pipes	Each	1,267.00
II	SUB-SECTION	SUPPLY OF C.I. SPUN FITTINGS		
152	TBSP-D.II-01	75 mm dia Cut pipes (pieces) 1 foot (304.8 mm) CI (Spun) fittings	Each	354.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
153	TBSP-D.II-02	100 mm dia Cut pipes (pieces) 1 foot (304.8 mm) CI (Spun) fittings	Each	407.00
154	TBSP-D.II-03	75 mm dia Cut pipes (pieces) 1'.6" (457.2 mm) CI (Spun) fittings	Each	508.00
155	TBSP-D.II-04	100 mm dia Cut pipes (pieces) 1'.6" (457.2 mm) CI (Spun) fittings	Each	583.00
156	TBSP-D.II-05	150 mm dia Cut pipes (pieces) 1'.6" (457.2 mm) CI (Spun) fittings	Each	1,112.00
157	TBSP-D.II-06	75 mm dia Cut pipes (pieces) 2 feet (609.6 mm) CI (Spun) fittings	Each	699.00
158	TBSP-D.II-07	100 mm dia Cut pipes (pieces) 2 feet (609.6 mm) CI (Spun) fittings	Each	772.00
159	TBSP-D.II-08	150 mm dia Cut pipes (pieces) 2 feet (609.6 mm) CI (Spun) fittings	Each	1,393.00
160	TBSP-D.II-09	75 mm dia Cut pipes (pieces) 3 feet (914.4 mm) CI (Spun) fittings	Each	1,072.00
161	TBSP-D.II-10	100 mm dia Cut pipes (pieces) 3 feet (914.4 mm) CI (Spun) fittings	Each	1,447.00
162	TBSP-D.II-11	75 mm dia Cut pipes (pieces) 4 feet (1219.2 mm) CI (Spun) fittings	Each	1,180.00
163	TBSP-D.II-12	100 mm dia Cut pipes (pieces) 4 feet (1219.2 mm) CI (Spun) fittings	Each	1,766.00
164	TBSP-D.II-13	75 mm dia Plain Bend - CI (Spun) fittings	Each	365.00
165	TBSP-D.II-14	100 mm dia Plain Bend - CI (Spun) fittings	Each	429.00
166	TBSP-D.II-15	150 mm dia Plain Bend - CI (Spun) fittings	Each	1,022.00
167	TBSP-D.II-16	75 mm dia Door Bend - CI (Spun) fittings	Each	377.00
168	TBSP-D.II-17	100 mm dia Door Bend - CI (Spun) fittings	Each	489.00
169	TBSP-D.II-18	150 mm dia Door Bend - CI (Spun) fittings	Each	1,118.00
170	TBSP-D.II-19	75 mm dia Plain Bend 45 Degrees - CI (Spun) fittings	Each	365.00
171	TBSP-D.II-20	100 mm dia Plain Bend 45 Degrees - CI (Spun) fittings	Each	429.00
172	TBSP-D.II-21	150 mm dia Plain Bend 45 Degrees - CI (Spun) fittings	Each	1,022.00
173	TBSP-D.II-22	75 mm dia Door Bend 45 Degrees - CI (Spun) fittings	Each	377.00
174	TBSP-D.II-23	100 mm dia Door Bend 45 Degrees - CI (Spun) fittings	Each	489.00
175	TBSP-D.II-24	150 mm dia Door Bend 45 Degrees - CI (Spun) fittings	Each	1,118.00
176	TBSP-D.II-25	Horn Bend Plain 101.6 x 50 mm nominal size (4" x 2") 100 mm dia - CI (Spun) fittings	Each	742.00
177	TBSP-D.II-26	Horn Bend door 101.6 x 50 mm nominal size (4" x 2") 100 mm dia - CI (Spun) fittings	Each	866.00
178	TBSP-D.II-27	75 mm dia Heel Rest Bend - CI (Spun) fittings	Each	388.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
179	TBSP-D.II-28	100 mm dia Heel Rest Bend - CI (Spun) fittings	Each	496.00
180	TBSP-D.II-29	150 mm dia Heel Rest Bend - CI (Spun) fittings	Each	1,053.00
181	TBSP-D.II-30	75 mm dia Single Branch Plain "T" - CI (Spun) fittings	Each	489.00
182	TBSP-D.II-31	100 mm dia Single Branch Plain "T" - CI (Spun) fittings	Each	659.00
183	TBSP-D.II-32	150 mm dia Single Branch Plain "T" - CI (Spun) fittings	Each	1,360.00
184	TBSP-D.II-33	75 mm dia Single Branch Door "T" - CI (Spun) fittings	Each	576.00
185	TBSP-D.II-34	100 mm dia Single Branch Door "T" - CI (Spun) fittings	Each	765.00
186	TBSP-D.II-35	150 mm dia Single Branch Door "T" - CI (Spun) fittings	Each	1,436.00
187	TBSP-D.II-36	75 mm dia Single Branch plain "Y" - CI (Spun) fittings	Each	576.00
188	TBSP-D.II-37	100 mm dia Single Branch plain "Y" - CI (Spun) fittings	Each	765.00
189	TBSP-D.II-38	150 mm dia Single Branch plain "Y" - CI (Spun) fittings	Each	1,685.00
190	TBSP-D.II-39	75 mm dia Single Branch Door "Y" - CI (Spun) fittings	Each	631.00
191	TBSP-D.II-40	100 mm dia Single Branch Door "Y" - CI (Spun) fittings	Each	844.00
192	TBSP-D.II-41	150 mm dia Single Branch Door "Y" - CI (Spun) fittings	Each	1,816.00
193	TBSP-D.II-42	75 mm dia Double Branch Plain "T" - CI (Spun) fittings	Each	668.00
194	TBSP-D.II-43	100 mm dia Double Branch Plain "T" - CI (Spun) fittings	Each	898.00
195	TBSP-D.II-44	75 mm dia Double Branch Door "T" - CI (Spun) fittings	Each	744.00
196	TBSP-D.II-45	100 mm dia Double Branch Door "T" - CI (Spun) fittings	Each	937.00
197	TBSP-D.II-46	75 mm dia Double Branch Plain "Y" - CI (Spun) fittings	Each	744.00
198	TBSP-D.II-47	100 mm dia Double Branch Plain "Y" - CI (Spun) fittings	Each	937.00
199	TBSP-D.II-48	75 mm dia Double Branch Door "Y" - CI (Spun) fittings	Each	785.00
200	TBSP-D.II-49	100 mm dia Double Branch Door "Y" - CI (Spun) fittings	Each	1,017.00
201	TBSP-D.II-50	75 mm dia Shoe Bend - CI (Spun) fittings	Each	460.00
202	TBSP-D.II-51	100 mm dia Shoe Bend - CI (Spun) fittings	Each	538.00
203	TBSP-D.II-52	150 mm dia Shoe Bend - CI (Spun) fittings	Each	1,093.00
204	TBSP-D.II-53	75 mm dia Collar - CI (Spun) fittings	Each	315.00
205	TBSP-D.II-54	100 mm dia Collar - CI (Spun) fittings	Each	382.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
206	TBSP-D.II-55	150 mm dia Collar - CI (Spun) fittings	Each	785.00
207	TBSP-D.II-56	75 mm dia Cowl - CI (Spun) fittings	Each	278.00
208	TBSP-D.II-57	100 mm dia Cowl - CI (Spun) fittings	Each	315.00
209	TBSP-D.II-58	150 mm dia Cowl - CI (Spun) fittings	Each	707.00
210	TBSP-D.II-59	75 mm dia Offset 3" (75 mm nominal size) projection - CI (Spun) fittings	Each	403.00
211	TBSP-D.II-60	100 mm dia Offset 3" (75 mm nominal size) projection - CI (Spun) fittings	Each	489.00
212	TBSP-D.II-61	150 mm dia Offset 3" (75 mm nominal size) projection - CI (Spun) fittings	Each	987.00
213	TBSP-D.II-62	75 mm dia Offset 6" (152.4mm) projection - CI (Spun) fittings	Each	440.00
214	TBSP-D.II-63	100 mm dia Offset 6" (152.4mm) projection - CI (Spun) fittings	Each	576.00
215	TBSP-D.II-64	150 mm dia Offset 6" (152.4mm) projection - CI (Spun) fittings	Each	1,149.00
216	TBSP-D.II-65	75 mm dia Long Door Bend - CI (Spun) fittings	Each	926.00
217	TBSP-D.II-66	100 mm dia Long Door Bend - CI (Spun) fittings	Each	996.00
218	TBSP-D.II-67	75 mm dia Hand Hole pipe (Inspection pipe)	Each	532.00
219	TBSP-D.II-68	100 mm dia Hand Hole pipe (Inspection pipe)	Each	724.00
220	TBSP-D.II-69	150 mm dia Hand Hole pipe (Inspection pipe)	Each	965.00
221	TBSP-D.II-70	75 mm dia P Traps - CI (Spun) fittings	Each	576.00
222	TBSP-D.II-71	100 mm dia P Traps - CI (Spun) fittings	Each	790.00
223	TBSP-D.II-72	4" x 3" (101.6 mm x 76.2mm) P. Traps 100 mm dia - CI (Spun) fittings	Each	905.00
224	TBSP-D.II-73	4" x 3" (101.6 mm x 76.2mm) Vent Traps 100 mm dia - CI (Spun) fittings	Each	905.00
225	TBSP-D.II-74	4" x 3" (101.6 mm x 76.2mm) Reducer 75 mm dia - CI (Spun) fittings	Each	562.00
226	TBSP-D.II-75	6" x 4" (152.4 mm x101.6 mm) Reducer 75 mm dia - CI (Spun) fittings	Each	770.00
227	TBSP-D.II-76	3" x 2" (75 mm nominal size x 50 mm nominal size) plain T 75 mm dia - CI (Spun) fittings	Each	481.00
228	TBSP-D.II-77	3" x 2" (75 mm nominal size x 50 mm nominal size) Door T 75 mm dia - CI (Spun) fittings	Each	750.00
229	TBSP-D.II-78	3" x 2" (75 mm nominal size x 50 mm nominal size) Plain Y 75 mm dia - CI (Spun) fittings	Each	750.00
230	TBSP-D.II-79	3" x 2" (75 mm nominal size x 50 mm nominal size) Door Y 75 mm dia - CI (Spun) fittings	Each	750.00
231	TBSP-D.II-80	4" x 3" (101.6 mm x 76.2mm) Plain T 75 mm dia - CI (Spun) fittings	Each	750.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
232	TBSP-D.II-81	4" x 3" (101.6 mm x 76.2mm) Door T 75 mm dia - CI (Spun) fittings	Each	794.00
233	TBSP-D.II-82	4" x 3" (101.6 mm x 76.2mm) Plain Y 75 mm dia - CI (Spun) fittings	Each	794.00
234	TBSP-D.II-83	4" x 3" (101.6 mm x 76.2mm) Door Y 75 mm dia - CI (Spun) fittings	Each	848.00
235	TBSP-D.II-84	6" x 4" (152.4 mm x101.6 mm) Plain T 75 mm dia - CI (Spun) fittings	Each	1,110.00
236	TBSP-D.II-85	6" x 4" (152.4 mm x101.6 mm) Door T 75 mm dia - CI (Spun) fittings	Each	1,203.00
237	TBSP-D.II-86	6" x 4" (152.4 mm x101.6 mm) Plain Y 75 mm dia - CI (Spun) fittings	Each	1,272.00
238	TBSP-D.II-87	6" x 4" (152.4 mm x101.6 mm) Door Y 75 mm dia - CI (Spun) fittings	Each	1,554.00
239	TBSP-D.II-88	75 mm dia Plain " T" 27 " (685.8 mm) Special Types of Long Fittings	Each	1,611.00
240	TBSP-D.II-89	100 mm dia - Plain " T" 27 " (685.8 mm) Special Types of Long CI (Spun) fittings	Each	2,263.00
241	TBSP-D.II-90	75 mm dia Door "T" 27" (685.8 mm) Special Types of Long CI (Spun) fittings	Each	1,799.00
242	TBSP-D.II-91	100mm dia Door "T" 27" (685.8 mm) Special Types of Long CI (Spun) fittings	Each	2,486.00
243	TBSP-D.II-92	75 mm dia Plain " Y" 27" (685.8 mm) Special Types of Long CI (Spun) fittings	Each	1,799.00
244	TBSP-D.II-93	100mm dia Plain " Y" 27" (685.8 mm) Special Types of Long CI (Spun) fittings	Each	2,486.00
245	TBSP-D.II-94	75 mm dia Door " Y" 27" (685.8 mm) Special Types of Long CI (Spun) fittings	Each	2,006.00
246	TBSP-D.II-95	100mm dia Door " Y" 27" (685.8 mm) Special Types of Long CI (Spun) fittings	Each	2,730.00
E	SECTION	VITREOUS CHINAWARE - SANITARY APPLIANCES as per IS:2556 - 2004 (Materials shall be procured from the list of approved Brands/ Manufacturers/ Suppliers)		
I	SUB-SECTION	INDIAN WATER CLOSETS		
247	TBSP-E.I-01	Supplying & fixing approved make Indian pattern white glazed W.C 1st quality ISI marked conforming to IS:2556-Part-3-2004 with "P" or "S" trap: 580 mm Long	Each	865.00
248	TBSP-E.I-02	Supplying & fixing approved make Indian pattern white glazed W.C 1st quality ISI marked conforming to IS:2556-Part-3-2004 with "P" or "S" trap: 630 mm Long	Each	865.00
249	TBSP-E.I-03	Supplying & fixing approved make Orissa Pan white glazed W.C 1st quality ISI marked conforming to IS:2556-Part-3-2004 with "P" or "S" trap: 580 mm x 440 mm	Each	1,306.00
250	TBSP-E.I-04	Supplying & fixing approved make Orissa Pan white glazed W.C 1st quality ISI marked conforming to IS:2556-Part-3-2004 with "P" or "S" trap: 630 mm x 450 mm	Each	1,373.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
251	TBSP-E.I-05	Supplying & fixing approved make porcelain foot rest for squatting I.W.C. (Rectangular pair) of sizes 250 mm x 125 mm x 15 mm thick each foot rest 1st quality ISI marked conforming to IS:2556-Part-10:1974	Pair	210.00
252	TBSP-E.I-06	Providing Brick masonry seat for Orissa pan/ Indian W.C. using traditional common burnt clay bricks as per standard practice	Each	271.00
253	TBSP-E.I-07	Providing Cement Concrete Squatting plate for Orissa pan/ Indian W.C. in P.C.C. 1:2:4 as per standard practice	Each	81.00
II	SUB-SECTION	FLOOR MOUNTED EWC		
254	TBSP-E.II-01	Supplying and fixing approved make wash down European Water Closet of 1st quality conforming to IS:2556-Part-2-2004 of white glazed with 'P' trap	Each	1,534.00
255	TBSP-E.II-02	Supplying and fixing approved make wash down European Water Closet of 1st quality conforming to IS:2556-Part-2-2004 of white glazed with 'S' trap	Each	1,619.00
256	TBSP-E.II-03	Supply, Installation and commissioning approved make floor mounted Anglo Indian wash down EWC conforming to IS:2556 (Part 8)-2004 suit with 'P' or 'S' trap with dual flush porcelain cistern fixed on wash down EWC with all internal parts of dual flush cistern, ultra solid seat cover of approved make with rubber buffer and cap & 15 mm angle stop cock & 450 mm long PVC inter connection pipe wall flanges all of approved make etc. complete for finished item of work in all respects: White Colour	Each	5,440.00
257	TBSP-E.II-04	Supply, Installation and commissioning approved make floor mounted Close Coupled wash down EWC conforming to IS:2556 (Part 8)-2004 suit with 'P' or 'S' trap with dual flush porcelain cistern fixed on wash down EWC with all internal parts of dual flush cistern, ultra solid seat cover of approved make with rubber buffer and cap & 15 mm angle stop cock & 450 mm long PVC inter connection pipe wall flanges all of approved make etc. complete for finished item of work in all respects: White Colour	Each	7,986.00
258	TBSP-E.II-05	Supply, Installation and commissioning approved make floor mounted Close Coupled wash down EWC conforming to IS:2556 (Part 8)-2004 suit with 'P' or 'S' trap with dual flush porcelain cistern fixed on wash down EWC with all internal parts of dual flush cistern, ultra solid seat cover of approved make with rubber buffer and cap & 15 mm angle stop cock & 450 mm long PVC inter connection pipe wall flanges all of approved make etc. complete for finished item of work in all respects: Coloured - Grade - I/ Grade - II	Each	11,672.00
259	TBSP-E.II-06	Supply, Installation and commissioning approved make floor mounted Close Coupled wash down EWC conforming to IS:2556 (Part 8)-2004 with 'P' or 'S' trap with dual flush porcelain cistern fixed on wash down EWC with all internal parts of dual flush cistern, ultra solid seat cover of approved make with rubber	Each	14,866.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		buffer and cap & 15 mm angle stop cock & 450 mm long PVC inter connection pipe wall flanges all of approved make etc. complete for finished item of work in all respects: Special Colour - Grade - III		
III	SUB-SECTION	WALL MOUNTED EWC		
260	TBSP-E.III-01	Supply, Installation and commissioning approved make wash down wall mounted EWC conforming to IS:2556 (Part 16)-2002 with 'P' or 'S' trap with concealed flush cistern fixed in wall with all internal parts of dual flush cistern, ultra solid seat cover of approved make with rubber buffer and cap all of approved make etc. complete for finished item of work in all respects: White colour	Each	8,478.00
261	TBSP-E.III-02	Supply, Installation and commissioning approved make wash down wall mounted EWC conforming to IS:2556 (Part 16)-2002 with 'P' or 'S' trap with concealed flush cistern fixed in wall with all internal parts of dual flush cistern, ultra solid seat cover of approved make with rubber buffer and cap all of approved make etc. complete for finished item of work in all respects: Coloured Grade-I & II	Each	11,352.00
262	TBSP-E.III-03	Supply, Installation and commissioning approved make wash down wall mounted EWC conforming to IS:2556 (Part 16)-2002 with 'P' or 'S' trap with concealed flush cistern fixed in wall with all internal parts of dual flush cistern, ultra solid seat cover of approved make with rubber buffer and cap all of approved make etc. complete for finished item of work in all respects: Special Coloured Grade-III	Each	13,392.00
IV	SUB-SECTION	CISTERNS FOR WATER CLOSETS		
263	TBSP-E.IV-01	Supplying & Fixing low down porcelain flushing tank with lid 10 Lit Capacity with internal components	Each	2,089.00
264	TBSP-E.IV-02	Supplying & Fixing internal cistern fittings for dual flush cisterns	Each	1,442.00
265	TBSP-E.IV-03	Supplying & Fixing ultra slim concealed flushing cistern of HDPE body and of size 460 x 450 x 80 mm with internal component for wall mounted Wash down WC	Each	3,246.00
V	SUB-SECTION	PLASTIC SEATS FOR WATER CLOSETS		
266	TBSP-E.V-01	Supplying and Fixing best Indian make plastic seat and lid for European water closets with rubber or plastic Buffers as per IS 2548-1996	Each	734.00
267	TBSP-E.V-02	Supplying and Fixing best Indian make plastic soft closing seat and lid for European water closets with rubber or plastic Buffers as per IS 2548-1996	Each	1,460.00
VI	SUB-SECTION	WASH HAND BASINS		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
268	TBSP-E.VI-01	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 660 x 460 mm - Single C.P. Pillar cock	Each	2,237.00
269	TBSP-E.VI-02	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 630 x 450 mm - Single C.P. Pillar cock	Each	1,981.00
270	TBSP-E.VI-03	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 630 x 450 mm - Double C.P. Pillar cock	Each	2,428.00
271	TBSP-E.VI-04	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 550 x 400 mm - Single C.P. Pillar cock	Each	1,469.00
272	TBSP-E.VI-05	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 550 x 400 mm - Double C.P. Pillar cock	Each	1,789.00
273	TBSP-E.VI-06	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm	Each	1,278.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
		nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 450 x 300 mm - Single C.P. Pillar cock		
274	TBSP-E.VI-07	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 450 x 300 mm - Double C.P. Pillar cock	Each	1,661.00
275	TBSP-E.VI-08	Supplying & Fixing Indian make below counter Wash Hand Basin 1st quality with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block with single CP pillar cock	Each	3,491.00
276	TBSP-E.VI-09	Supplying & Fixing Indian make white glazed vitreous china porcelain sink conforming to IS:2556-Part-5-1994 on cantilever brackets with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 : 600 x 400 x 250	Each	4,087.00
277	TBSP-E.VI-10	Supplying & Fixing Indian make white glazed vitreous china porcelain sink conforming to IS:2556-Part-5-1994 on cantilever brackets with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 : 750 x 450 x 250	Each	4,599.00
278	TBSP-E.VI-11	Supplying & fixing oval shape basin white (520x410mm) parry or equivalent	Each	2,250.00
279	TBSP-E.VI-12	Supplying and Fixing Pedestal for Wash Hand Basin	Each	1,036.00
280	TBSP-E.VI-13	Supplying & fixing stainless steel sink size 36" x 18" (914.4x457.2mm) 1 mm thick with accessories	Each	6,224.00
281	TBSP-E.VI-14	Supplying & fixing SINGLE BOWL stainless steel sink size 24"x18"x8 " (609.6 x 457.2 x 203.2mm) 1 mm thick with accessories	Each	4,907.00
282	TBSP-E.VI-15	Supplying & fixing stainless steel sink size 20" x18" x 8 " (508x457.2x203.2mm) 1 mm thick with accessories	Each	4,448.00
283	TBSP-E.VI-16	S & F 609.6 x 457.2 x 254 mm RCC terrazzo finished sink (or constructed at site with 50.8mm thick) brass plug and chain including CI cantilever brackets	Each	652.00
VII	SUB-SECTION	URINALS		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
284	TBSP-E.VII-01	Supplying & Fixing white glazed flat back Bowl urinals of size 440 mm x 265 mm x 315 mm with internal flushing rim fixed with screws complete Indian make conforming to IS:2556-1995	Each	767.00
285	TBSP-E.VII-02	Supplying & Fixing white glazed flat back half stall urinals 1st quality conforming to IS:2556-1995 with standard C.P. Spreader fixed with screws complete Indian make : 410 x 265 x 305 mm	Each	2,300.00
286	TBSP-E.VII-03	Supplying & Fixing white glazed flat back half stall urinals 1st quality conforming to IS:2556-1995 with standard C.P. Spreader fixed with screws complete Indian make : 590 x 375 x 390 mm	Each	2,555.00
287	TBSP-E.VII-04	Supplying & fixing 4 " x 24 " (101.6x609.6mm) white glazed porcelain channel fixed in brick masonry white cement pointing.	Each	449.00
VIII	SUB-SECTION	LABOUR CHARGES FOR SANITARY WARE		
288	TBSP-E.VIII-01	Labour charges only for fixing Indian pattern W.C with "P" or "S" trap	Each	328.00
289	TBSP-E.VIII-02	Labour charges only Fixing Orissa pan W.C with "P" or "S" trap	Each	409.00
290	TBSP-E.VIII-03	Labour charges only for fixing porcelain foot rest for squatting I.W.C. (Rectangular pair)	Pair	75.00
291	TBSP-E.VIII-04	Labour charges only for fixing low down porcelain flushing tank with internal components	Each	572.00
292	TBSP-E.VIII-05	Labour charges only for fixing internal cistern fittings of any flushing tank	Each	285.00
293	TBSP-E.VIII-06	Labour charges only for fixing European Water Closet with 'P' or 'S' trap as per standard practice	Each	287.00
294	TBSP-E.VIII-07	Labour charges only for fixing plastic seat and lid for European water closet	Each	83.00
295	TBSP-E.VIII-08	Labour charges only for fixing Indian make Flat Back Wash Hand Basin with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting Pillar Taps complete with standard CI brackets including wooden block	Each	409.00
296	TBSP-E.VIII-09	Labour charges only for fixing pedestal for wash hand basin	Each	148.00
297	TBSP-E.VIII-10	Labour charges only for fixing bottle trap to the wash hand basin	Each	57.00
298	TBSP-E.VIII-11	Labour charges only Fixing flat back Bowl/ Half stall urinals with fixing C.P. Spreader and screws complete	Each	163.00
299	TBSP-E.VIII-12	Labour charges only for fixing Vitreous china porcelain sinks with waste fittings, rubber plug, chain, cantilever brackets etc.	Each	409.00
F	SECTION	CP FITTINGS (Materials shall be procured from the list of approved Brands/ Manufacturers/ Suppliers)		
I	SUB-SECTION	TAPS & FAUCETS - BIB TAPS		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
300	TBSP-F.I-01	S&F of 15 mm brass body CP finish bib tap of not less than 300 grams weight screw type (full turn) with internal / external threaded connection conforming to IS 8931	Each	223.00
301	TBSP-F.I-02	S&F of 15 mm brass body CP finish bib tap of not less than 300 grams weight with quarter turn spindle with either internal or external threaded connection conforming to IS 8931	Each	543.00
302	TBSP-F.I-03	S&F of 15 mm brass body premium variety Chromium Plated finish bib tap with wall flange of not less than 500 grams weight with quarter turn spindle with either internal or external threaded connection conforming to IS 8931 and with 10 years warranty	Each	771.00
303	TBSP-F.I-04	S&F of 15 mm brass body premium variety Chromium Plated finish bib tap angular shape with wall flange of not less than 500 grams weight with quarter turn spindle with either internal or external threaded connection conforming to IS 8931 and with 10 years warranty	Each	1,088.00
304	TBSP-F.I-05	S&F of 15 mm brass body CP finish two way bib tap of not less than 400 grams weight with quarter turn spindle internal/ external threaded connection conforming to IS 8931	Each	776.00
305	TBSP-F.I-06	S&F of 15 mm brass body premium variety Chromium Plated finish two way bib tap with flange of not less than 500 grams weight with quarter turn spindle internal/ external threaded connection conforming to IS 8931 and with 10 years warranty	Each	997.00
306	TBSP-F.I-07	S&F of Chromium plated finish brass body quarter turn Bibcock cum Health Faucet with 1m long tube and wall hook with 10 years warranty	Each	2,914.00
307	TBSP-F.I-08	S&F of 15 mm brass body CP finish long body bib tap of not less than 400 grams weight with quarter turn spindle internal / external threaded connection conforming to IS 8931	Each	694.00
II	SUB-SECTION	TAPS & FAUCETS - PILLAR TAPS		
308	TBSP-F.II-01	S&F of 15 mm brass body CP finish pillar tap of not less than 300 grams weight screw type (full turn) conforming to IS 8931	Each	568.00
309	TBSP-F.II-02	S&F of 15 mm brass body CP finish pillar tap of not less than 500 grams weight quarter turn spindle conforming to IS 8931	Each	734.00
310	TBSP-F.II-03	S&F of 15 mm brass body Premium variety Chromium plated finish pillar cock with aerator of not less than 500 grams weight quarter turn spindle conforming to IS 8931 and with a warranty of 10 years	Each	748.00
311	TBSP-F.II-04	S&F of 15 mm brass body Premium variety Chromium plated finish long neck pillar cock with aerator of not less than 500 grams weight quarter turn spindle conforming to IS 8931 and with a warranty of 10 years	Each	997.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
312	TBSP-F.II-05	S&F of 15 mm brass body Premium variety Chromium plated finish single lever pillar cock with aerator of not less than 500 grams weight quarter turn spindle conforming to IS 8931 and with a warranty of 10 years	Each	1,088.00
313	TBSP-F.II-06	S&F premium make Sensotronic sensor faucet for wash basin, and with 10 years warranty	Each	13,176.00
314	TBSP-F.II-07	S&F premium make Sensotronic concealed type flushing valve for urinal complete set with installation box with control cock, and with 10 years warranty	Each	13,176.00
315	TBSP-F.II-08	S&F premium make Auto closing system pillar cock for wash basin, and with 10 years warranty	Each	2,183.00
316	TBSP-F.II-09	S&F premium make Auto Closing system Bibcock, and with 10 years warranty	Each	2,291.00
III	SUB-SECTION	TAPS & FAUCETS - OTHER TAPS & SPOUTS		
317	TBSP-F.III-01	S&F of 15 mm brass body CP finish self closing tap push type conforming to IS 1711	Each	246.00
318	TBSP-F.III-02	S&F of 15 mm brass body CP finish self closing tap lift type conforming to IS 1711	Each	216.00
319	TBSP-F.III-03	S&F of 15 mm brass body Premium variety Chromium plated finish Swan neck tap with right/left hand operating knob with aerator of not less than 500 grams weight quarter turn spindle conforming to IS 8931 and with a warranty of 10 years	Each	1,452.00
320	TBSP-F.III-04	S&F of 15 mm brass body CP finish wall mounted sink spout with connecting legs & wall flanges swinging nozzle conforming to IS 8931 and with a warranty of 10 years	Each	2,086.00
321	TBSP-F.III-05	S&F of 15 mm brass body CP finish wall mounted sink spout with connecting legs & wall flanges fixed nozzle conforming to IS 8931 and with a warranty of 10 years	Each	1,270.00
322	TBSP-F.III-06	S&F of 15 mm bath tub spout minimum 180 mm projection with diverter system	Each	1,183.00
323	TBSP-F.III-07	S&F of 15 mm bath tub spout with tip ton minimum 180 mm projection with diverter system	Each	1,591.00
IV	SUB-SECTION	STOP & ANGLE VALVES		
324	TBSP-F.IV-01	S & F 15 mm nominal size CP finish brass stop valve screw type with internal /external threaded conforming to IS 8931	Each	210.00
325	TBSP-F.IV-02	S & F 15 mm nominal size brass concealed stop valve screw type with internal /external threaded conforming to IS 8931	Each	224.00
326	TBSP-F.IV-03	S & F 15 mm nominal size CP finish brass angled stop valve screw type with internal /external threaded conforming to IS 8931	Each	215.00
327	TBSP-F.IV-04	S&F of 15 mm CP finish brass stop valve of not less than 400 grams weight quarter turn spindle with internal threaded conforming to IS 8931	Each	710.00
328	TBSP-F.IV-05	S&F of 15 mm CP finish brass concealed stop valve of not less than 400 grams weight quarter turn spindle conforming to IS 8931	Each	551.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
329	TBSP-F.IV-06	S&F of 15 mm CP finish brass concealed stop valve of not less than 400 grams weight with adjustable wall flange and quarter turn spindle conforming to IS 8931 and with 10 years warranty	Each	862.00
330	TBSP-F.IV-07	S&F of 15 mm brass angle stop valve of quarter turn spindle type of not less than 400 grams weight with internal threaded conforming to IS 8931	Each	551.00
V	SUB-SECTION	COMBINATION FAUCETS		
330	TBSP-F.V-01	S&F of 15 mm CP finish brass body wall mixer with hand shower with centre distance 150 mm conforming to IS 8931	Each	2,527.00
331	TBSP-F.V-02	S&F of 15 mm CP finish brass body wall mixer conforming to IS 8931 with centre distance 150 mm conforming to IS 8931	Each	1,947.00
332	TBSP-F.V-03	S&F of 15 mm premium variety Chromium plated finish brass body wall mixer with hand shower with a provision for over head shower with 115 mm long bend pipe on upper side, connecting legs & wall flanges conforming to IS 8931 with 10 years warranty	Each	3,310.00
333	TBSP-F.V-04	S&F of 15 mm brass forged body concealed diverter with regular flow	Each	3,065.00
334	TBSP-F.V-05	S&F of 15 mm brass forged body concealed diverter with high flow	Each	3,975.00
335	TBSP-F.V-06	S&F of 15 mm brass forged body concealed diverter forged body with 3 way in let	Each	3,811.00
336	TBSP-F.V-07	S&F of 15 mm central hole Chromium plated finish brass body basin mixer 450 mm long pipe for hot & cold water mixing conforming to IS 8931 and with 10 years warranty	Each	2,486.00
337	TBSP-F.V-08	S&F of 15 mm central hole Chromium plated finish brass body single lever basin mixer 450 mm long braided pipe for hot & cold water mixing conforming to IS 8931 and with 10 years warranty	Each	2,902.00
338	TBSP-F.V-09	S&F of 15 mm central hole Chromium plated finish brass body sink mixer with swinging cascade round shape spout (wall/ table mounted model) with connecting legs & wall flanges conforming to IS 8931 and with 10 years warranty	Each	2,539.00
VI	SUB-SECTION	SHOWER ROSES & FITTINGS		
339	TBSP-F.VI-01	S&F 15 mm nominal size 152.0 mm CP finish iron body shower rose	Each	169.00
340	TBSP-F.VI-02	S&F 15 mm nominal size 137.0 mm CP finish iron body shower rose	Each	162.00
341	TBSP-F.VI-03	S&F 15 mm nominal size 101.6 mm CP finish iron body shower rose	Each	155.00
342	TBSP-F.VI-04	S&F 15 mm nominal size CP finish shower rose 200 mm dia with CP finish flexible pipe	Each	522.00
343	TBSP-F.VI-05	S&F 15 mm nominal size CP finish brass over head shower arm of 450 mm long with 90 degree bend & wall flange suitable for rain shower	Each	1,119.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
344	TBSP-F.VI-06	S&F 15 mm nominal size Chromium plated finish brass over head shower arm of 450 mm long with 90 degree bend & wall flange suitable for rain shower and with 10 years warranty	Each	1,361.00
345	TBSP-F.VI-07	S&F 15 mm nominal size over head 5 flow round massage shower rose	Each	792.00
346	TBSP-F.VI-08	S&F 15 mm nominal size 5 flow hand shower with rabbit cleaning system and 1.5 m long flexible hose and wall hook.	Each	1,632.00
VII	SUB-SECTION	MISCELLANEOUS CP FITTINGS		
347	TBSP-F.VII-01	S&F of 15 mm Stainless steel flexible hose 1.0 m long for hand shower / health faucet with brass nuts	Each	232.00
348	TBSP-F.VII-02	S&F of 15 mm CP finish brass body health faucet gun	Each	191.00
349	TBSP-F.VII-03	S&F CP finish brass bottle trap 250 mm long with wall connection pipe & wall Flange	Each	862.00
350	TBSP-F.VII-04	S&F CP finish brass bottle trap 190mm long with wall connection pipe & wall Flange	Each	866.00
351	TBSP-F.VII-05	S&F PVC bottle trap with wall connection pipe	Each	129.00
352	TBSP-F.VII-06	S&F CP finish brass body 32 mm dia nominal size waste coupling with half/full thread & brass check nut conforming to IS 2963: 1979	Each	212.00
353	TBSP-F.VII-07	S&F CP finish brass body 32 mm dia nominal size waste coupling with half/ full thread & brass body check nut and chain & plug conforming to IS 2963: 1979	Each	231.00
354	TBSP-F.VII-08	S&F CP finish brass body 32 mm dia nominal size waste coupling doom type with half/ full thread & brass body check nut conforming to IS 2963: 1979	Each	274.00
355	TBSP-F.VII-09	S&F brass body CP spreader for urinals	Each	141.00
356	TBSP-F.VII-10	S&F CP finish steel towel rod of 600 mm long and 20 mm dia with brackets	Each	360.00
357	TBSP-F.VII-11	S&F CP finish brass towel rod 600 mm long and 20 mm dia with brackets	Each	971.00
358	TBSP-F.VII-12	S&F of Towel rod 24 " premium make powder coated stainless steel body with 10 years warranty	Each	2,938.00
359	TBSP-F.VII-13	S&F CP finish brass wall mounted towel ring	Each	560.00
360	TBSP-F.VII-14	S&F of Chromium plated finish stainless steel body Towel Ring with 10 years warranty	Each	911.00
361	TBSP-F.VII-15	S&F of powder coated brass body finish Towel ring premium make with 10 years warranty	Each	1,880.00
362	TBSP-F.VII-16	S&F of Chromium plated finish stainless steel body towel rail 24" with 10 years warranty	Each	1,470.00
363	TBSP-F.VII-17	S&F powder coated stainless steel body wall mounted towel rack 600 mm long	Each	3,085.00
364	TBSP-F.VII-18	S&F CP finish brass metal body single coat hook	Each	368.00
365	TBSP-F.VII-19	S&F CP finish brass robe hook	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
				286.00
366	TBSP-F.VII-20	Supply & Fixing Double coat hook with 10 years warranty	Each	680.00
367	TBSP-F.VII-21	S&F CP finish brass soap dish	Each	514.00
368	TBSP-F.VII-22	S&F Stainless steel liquid soap container wall mounted and bottle type	Each	409.00
369	TBSP-F.VII-23	S&F premium make wall mirror with provision for over head shower and 115 mm long bend pipe with wall flange and with 10 years warranty	Each	4,996.00
370	TBSP-F.VII-24	S&F premium make wall mirror with provision for over head shower and 115 mm long bend pipe with wall flange powder coated with 10 years warranty	Each	7,858.00
371	TBSP-F.VII-25	S&F of Chromium plated finish stainless steel body Toilet paper holder with 10 years warranty	Each	792.00
372	TBSP-F.VII-26	S&F Stainless steel 4" dia round Grating with frame for nahany or floor trap cover with or without hole	Each	58.00
373	TBSP-F.VII-27	S&F Stainless steel 5" square Grating with frame for nahany or floor trap cover with or without hole	Each	69.00
374	TBSP-F.VII-28	S&F Stainless steel 4" dia round Grating for nahany or floor trap cover with cockroach trap with or without hole	Each	150.00
375	TBSP-F.VII-29	S&F Stainless steel 5" square Grating for nahany or floor trap cover with cockroach trap with or without hole	Each	156.00
376	TBSP-F.VII-30	S&F brass body plumber union of size 31.75 mm dia with check nut	Each	63.00
377	TBSP-F.VII-31	S&F brass body plumber union of size 38.1 mm dia with check nut	Each	68.00
378	TBSP-F.VII-32	S&F 4" dia CP thimble pipe: 150 mm long	Each	375.00
379	TBSP-F.VII-33	S&F 4" dia CP thimble pipe: 220 mm long	Each	560.00
380	TBSP-F.VII-34	S&F 4" dia CP thimble pipe: 300 mm long	Each	748.00
381	TBSP-F.VII-35	S&F CP long bend	Each	317.00
382	TBSP-F.VII-36	S&F CP short bend	Each	159.00
383	TBSP-F.VII-37	Supply & fixing of LLC handle set 1st quality	Each	72.00
384	TBSP-F.VII-38	S&F premium make copper pipe 450 mm long with nuts & washers with 10 years warranty	Each	380.00
385	TBSP-F.VII-39	S&F premium make copper pipe 450 mm long with nuts & washers power colour coated and with 10 years warranty	Each	735.00
386	TBSP-F.VII-40	S&F of Chromium plated finish stainless steel body Tumbler holder with 10 years warranty	Each	991.00
387	TBSP-F.VII-41	S&F of Chromium plated finish stainless steel body Glass shelf 22" with 10 years warranty	Each	1,948.00
VIII	SUB-SECTION	LABOUR CHARGES		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
388	TBSP-F.VIII-01	Labour charges for fixing all types of CP Taps & faucets	Each	51.00
389	TBSP-F.VIII-02	Labour charges for fixing all types of CP Stop & Angle Valves	Each	99.00
390	TBSP-F.VIII-03	Labour charges for fixing all types of wall combination taps, mixers & diverters	Each	175.00
391	TBSP-F.VIII-04	Labour charges for fixing all types of miscellaneous CP fittings	Each	99.00
392	TBSP-F.VIII-05	Mechanical Cleaning of water sumps with pumps & UV disinfecting	1000	29.00
G	SECTION	G.I. PIPES & FITTINGS (Materials shall be procured from the list of approved Brands/Manufacturers/ Suppliers)		
I	SUB-SECTION	G.I. PIPES		
393	TBSP-G.I-01	S& F 15 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	166.00
394	TBSP-G.I-02	S& F 20 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	190.00
395	TBSP-G.I-03	S& F 25 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	250.00
396	TBSP-G.I-04	S& F 32 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	347.00
397	TBSP-G.I-05	S& F 40 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	392.00
398	TBSP-G.I-06	S& F 50 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	428.00
399	TBSP-G.I-07	S& F 15 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	184.00
400	TBSP-G.I-08	S& F 20 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	204.00
401	TBSP-G.I-09	S& F 25 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	268.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
402	TBSP-G.I-10	S& F 32 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	375.00
403	TBSP-G.I-11	S& F 40 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	420.00
404	TBSP-G.I-12	S& F 50 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings & labour charges complete	1 RM	452.00
405	TBSP-G.I-13	S & F 65 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 with GI fittings such as elbows tees couplings, nipples, plugs including excavation for trenches and refilling the trenches complete except for GI bends union and GI connectors with checkout and socket Tata or Zenith make or equivalent.	1 RM	802.00
II	SUB-SECTION	G.I. FITTINGS		
406	TBSP-G.II-01	S& F GI union 15 mm nominal size Ist Quality	Each	41.00
407	TBSP-G.II-02	S& F GI union 20 mm nominal size Ist Quality	Each	49.00
408	TBSP-G.II-03	S& F GI union 25 mm nominal size Ist Quality	Each	74.00
409	TBSP-G.II-04	S& F GI union 30 mm nominal size Ist Quality	Each	92.00
410	TBSP-G.II-05	S& F GI union 40 mm nominal size Ist Quality	Each	110.00
411	TBSP-G.II-06	S& F GI union 50 mm nominal size Ist Quality	Each	136.00
412	TBSP-G.II-07	S& F GI connector 25 mm nominal size dia	Each	82.00
413	TBSP-G.II-08	S& F 15 mm nominal size GI 'T' A class Ist quality	Each	50.00
414	TBSP-G.II-09	S& F 30 mm nominal size dia GI bend Ist quality	Each	74.00
415	TBSP-G.II-10	S & F 30 mm nominal size dia GI 'T' 1st Quality	Each	73.00
416	TBSP-G.II-11	S & F 25 mm nominal size copper body float valve with PVC ball Indian make ISI mark	Each	422.00
417	TBSP-G.II-12	S & F 20 mm nominal size copper body float valve with PVC ball Indian make ISI mark	Each	346.00
418	TBSP-G.II-13	S & F 15 mm nominal size copper body float valve with PVC ball Indian make ISI mark	Each	224.00
419	TBSP-G.II-14	Supplying & fixing leather washers for 15 mm nominal size bib tap and stop cock	Each	2.00
420	TBSP-G.II-15	Supplying & fixing leather washers for 20 mm nominal size bib tap and stop cock	Each	4.00
421	TBSP-G.II-16	Supplying & Fixing 15 mm nominal size fibre washers	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
				4.00
422	TBSP-G.II-17	Supplying & Fixing 20 mm nominal size fibre washers	Each	4.00
423	TBSP-G.II-18	S & F 15 mm nominal size holder bat clamps	Each	12.00
424	TBSP-G.II-19	S & F 20 mm nominal size holder bat clamps	Each	19.00
425	TBSP-G.II-20	S & F 25 mm nominal size holder bat clamps	Each	25.00
426	TBSP-G.II-21	S & F 40 mm nominal size holder bat clamps	Each	30.00
427	TBSP-G.II-22	Supplying & fixing 15 mm nominal size GI drain pipe with plug for tanks (Mud valve) including making a hole	Each	43.00
428	TBSP-G.II-23	Supplying & fixing 20 mm nominal size GI drain pipe with plug for tanks (Mud valve) including making a hole	Each	62.00
429	TBSP-G.II-24	Supplying & fixing 25 mm nominal size GI drain pipe with plug for tanks (Mud valve) including making a hole	Each	73.00
III	SUB-SECTION	BRONZE (COPPER ALLOY) VALVES		
430	TBSP-G.III-01	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I, Indian make heavy type - 15 mm NB Size	Each	577.00
431	TBSP-G.III-02	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I, Indian make heavy type - 20 mm NB Size	Each	778.00
432	TBSP-G.III-03	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I, Indian make heavy type - 25 mm NB Size	Each	1,119.00
433	TBSP-G.III-04	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I, Indian make heavy type - 32 mm NB Size	Each	1,700.00
434	TBSP-G.III-05	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I, Indian make heavy type - 40 mm NB Size	Each	2,297.00
435	TBSP-G.III-06	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I, Indian make heavy type - 50 mm NB Size	Each	3,365.00
436	TBSP-G.III-07	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I, Indian make heavy type - 65 mm NB Size	Each	5,196.00
437	TBSP-G.III-08	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I, Indian make heavy type - 80 mm NB Size	Each	7,702.00
438	TBSP-G.III-09	Supplying & fixing Bronze Horizontal Check (Non return) Valve as per IS-778 I-class heavy duty - 15 mm NB Size	Each	426.00
439	TBSP-G.III-10	Supplying & fixing Bronze Horizontal Check (Non return) Valve as per IS-778 I-class heavy duty - 20 mm NB Size	Each	623.00
440	TBSP-G.III-11	Supplying & fixing Bronze Horizontal Check (Non return) Valve as per IS-778 I-class heavy duty - 25 mm NB Size	Each	973.00
441	TBSP-G.III-12	Supplying & fixing Bronze Horizontal Check (Non return) Valve as per IS-778 I-class heavy duty - 32 mm NB Size	Each	1,428.00
442	TBSP-G.III-13	Supplying & fixing Bronze Horizontal Check (Non return) Valve as per IS-778 I-class heavy duty - 40 mm NB Size	Each	1,981.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
443	TBSP-G.III-14	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 15 mm NB Size	Each	402.00
444	TBSP-G.III-15	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 20 mm NB Size	Each	522.00
445	TBSP-G.III-16	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 25 mm NB Size	Each	790.00
446	TBSP-G.III-17	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 32 mm NB Size	Each	1,088.00
447	TBSP-G.III-18	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 40 mm NB Size	Each	1,315.00
448	TBSP-G.III-19	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 50 mm NB Size	Each	2,086.00
449	TBSP-G.III-20	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 15 mm NB Size	Each	188.00
450	TBSP-G.III-21	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 20 mm NB Size	Each	273.00
451	TBSP-G.III-22	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 25 mm NB Size	Each	384.00
452	TBSP-G.III-23	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 32 mm NB Size	Each	681.00
453	TBSP-G.III-24	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 40 mm NB Size	Each	937.00
454	TBSP-G.III-25	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 50 mm NB Size	Each	1,408.00
455	TBSP-G.III-26	S & F Bronze Compact pressure reducing valve (Screwed) as per IS - Class -I, Indian make heavy type - 15 mm NB Size	Each	1,223.00
456	TBSP-G.III-27	S & F Bronze Compact pressure reducing valve (Screwed) as per IS - Class -I, Indian make heavy type - 20 mm NB Size	Each	1,556.00
IV	SUB-SECTION	LABOUR CHARGES FOR G.I PLUMBING		
457	TBSP-G.IV-01	Taking branch water connection from the existing 25 mm nominal size GI pipe including cutting threading, etc, complete with fitting	Each	168.00
458	TBSP-G.IV-02	Taking branch water connection from the existing 20 mm nominal size GI pipe including cutting threading, etc, complete with fitting	Each	96.00
459	TBSP-G.IV-03	Taking branch water connection from the existing 15 mm nominal size GI pipe including cutting threading, etc, complete with fitting	Each	62.00
H	SECTION	PVC PIPES & FITTINGS (Materials shall be procured from the list of approved Brands/Manufacturers/ Suppliers)		
I	SUB-SECTION	PVC PIPES		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
460	TBSP-H.I-01	75 mm dia 3 M Single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	252.00
461	TBSP-H.I-02	90 mm dia 3 M single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	401.00
462	TBSP-H.I-03	110 mm dia 3 M Single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	479.00
463	TBSP-H.I-04	75 mm dia 3 M Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	285.00
464	TBSP-H.I-05	90 mm dia 3 M Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	454.00
465	TBSP-H.I-06	110 mm dia 3 M Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	556.00
466	TBSP-H.I-07	75 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	177.00
467	TBSP-H.I-08	90 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	274.00
468	TBSP-H.I-09	110 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	341.00
469	TBSP-H.I-10	75 mm dia 1828.8 mm (6'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	190.00
470	TBSP-H.I-11	90 mm dia 1828.8 mm (6'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	291.00
471	TBSP-H.I-12	110 mm dia 1828.8 mm (6'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	352.00
472	TBSP-H.I-13	75 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	131.00
473	TBSP-H.I-14	90 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	200.00
474	TBSP-H.I-15	110 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	241.00
475	TBSP-H.I-16	75 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	110.00
476	TBSP-H.I-17	90 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	162.00
477	TBSP-H.I-18	110 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	209.00
478	TBSP-H.I-19	75 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	67.00
479	TBSP-H.I-20	90 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	111.00
480	TBSP-H.I-21	110 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	139.00
481	TBSP-H.I-22	160 MM dia 3 M Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	1,140.00
482	TBSP-H.I-23	75 mm dia 3 M Single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	428.00
483	TBSP-H.I-24	90 mm dia 3 M single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	689.00
484	TBSP-H.I-25	110 mm dia 3 M Single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	819.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
485	TBSP-H.I-26	75 mm dia 3 M Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	469.00
486	TBSP-H.I-27	90 mm dia 3 M Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	742.00
487	TBSP-H.I-28	110 mm dia 3 M Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	904.00
488	TBSP-H.I-29	75 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	281.00
489	TBSP-H.I-30	90 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	436.00
490	TBSP-H.I-31	110 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	520.00
491	TBSP-H.I-32	75 mm dia 1828.8 mm (6'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	300.00
492	TBSP-H.I-33	90 mm dia 1828.8 mm (6'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	454.00
493	TBSP-H.I-34	110 mm dia 1828.8 mm (6'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	561.00
494	TBSP-H.I-35	75 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	203.00
495	TBSP-H.I-36	90 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	315.00
496	TBSP-H.I-37	110 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	383.00
497	TBSP-H.I-38	75 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	175.00
498	TBSP-H.I-39	90 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	257.00
499	TBSP-H.I-40	110 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	310.00
500	TBSP-H.I-41	75 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	113.00
501	TBSP-H.I-42	90 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	176.00
502	TBSP-H.I-43	110 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	225.00
503	TBSP-H.I-44	160 mm dia 3 M Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	1,864.00
II	SUB-SECTION	PVC FITTINGS		
504	TBSP-H.II-01	Providing & Placing on Terrace (at all floor levels) polyethylene water storage tank with Double layer approved brand & manufacture with cover and suitable locking arrangement & making necessary holes for inlet & outlets and over flow pipes but without fittings & base support for tanks	1 Lit	7.00
505	TBSP-H.II-02	Supply of Plastic storage tank lid with hinges	Each	75.00
506	TBSP-H.II-03	Supply & Fixing 75 mm nominal size dia PVC elbow Ist quality	Each	47.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
507	TBSP-H.II-04	Supply & fixing 30 mm nominal size dia PVC flexible waste pipe of 914.4 mm length of Ist quality	Each	26.00
508	TBSP-H.II-05	Supply & Fixing 40 mm nominal size dia PVC solid waste pipe outlet	Each	89.00
509	TBSP-H.II-06	Supply & fixing Fancy PVC shelf including all fittings	Each	210.00
510	TBSP-H.II-07	Supply & fixing of PVC low level system with internal components & short bend: 10 Litres capacity Single Flush	Each	1,439.00
511	TBSP-H.II-08	Supply & fixing of PVC low level system with internal components & short bend: 10 litres capacity Dual Flush	Each	1,690.00
512	TBSP-H.II-09	Supply & fixing of PVC low level system with internal components & short bend: 8 Litres capacity single Flush	Each	814.00
513	TBSP-H.II-10	75 mm dia - Plain Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	50.00
514	TBSP-H.II-11	90 mm dia - Plain Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	70.00
515	TBSP-H.II-12	110 mm dia - Plain Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	83.00
516	TBSP-H.II-13	75 mm dia - Door Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	67.00
517	TBSP-H.II-14	90 mm dia - Door Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	94.00
518	TBSP-H.II-15	110 mm dia - Door Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	107.00
519	TBSP-H.II-16	75 mm dia - 45 Degree Bend - UPVC/SWR Pipe fittings	Each	39.00
520	TBSP-H.II-17	90 mm dia - 45 Degree Bend - UPVC/SWR Pipe fittings	Each	54.00
521	TBSP-H.II-18	110 mm dia - 45 Degree Bend - UPVC/SWR Pipe fittings	Each	70.00
522	TBSP-H.II-19	75 mm dia - Cleaning Pipe - UPVC/SWR Pipe fittings	Each	67.00
523	TBSP-H.II-20	90 mm dia - Cleaning Pipe - UPVC/SWR Pipe fittings	Each	97.00
524	TBSP-H.II-21	110 mm dia - Cleaning Pipe - UPVC/SWR Pipe fittings	Each	117.00
525	TBSP-H.II-22	75 mm dia - Single Tee - UPVC/SWR Pipe fittings	Each	59.00
526	TBSP-H.II-23	90 mm dia - Single Tee - UPVC/SWR Pipe fittings	Each	89.00
527	TBSP-H.II-24	110 mm dia - Single Tee - UPVC/SWR Pipe fittings	Each	108.00
528	TBSP-H.II-25	75 mm dia - Single Tee with Door - UPVC/SWR Pipe fittings	Each	72.00
529	TBSP-H.II-26	90 mm dia - Single Tee with Door - UPVC/SWR Pipe fittings	Each	108.00
530	TBSP-H.II-27	110 mm dia - Single Tee with Door - UPVC/SWR Pipe fittings	Each	129.00
531	TBSP-H.II-28	75 mm dia - Double Tee - UPVC/SWR Pipe fittings	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
				124.00
532	TBSP-H.II-29	90 mm dia - Double Tee - UPVC/SWR Pipe fittings	Each	181.00
533	TBSP-H.II-30	110 mm dia - Double Tee - UPVC/SWR Pipe fittings	Each	257.00
534	TBSP-H.II-31	75 mm dia - Double Tee with Door - UPVC/SWR Pipe fittings	Each	198.00
535	TBSP-H.II-32	90 mm dia - Double Tee with Door - UPVC/SWR Pipe fittings	Each	283.00
536	TBSP-H.II-33	110 mm dia - Double Tee with Door - UPVC/SWR Pipe fittings	Each	292.00
537	TBSP-H.II-34	75 mm dia - Single 'Y' - UPVC/SWR Pipe fittings	Each	73.00
538	TBSP-H.II-35	90 mm dia - Single 'Y' - UPVC/SWR Pipe fittings	Each	117.00
539	TBSP-H.II-36	110 mm dia - Single 'Y' - UPVC/SWR Pipe fittings	Each	135.00
540	TBSP-H.II-37	75 mm dia - Single 'Y' with Door - UPVC/SWR Pipe fittings	Each	94.00
541	TBSP-H.II-38	90 mm dia - Single 'Y' with Door - UPVC/SWR Pipe fittings	Each	148.00
542	TBSP-H.II-39	110 mm dia - Single 'Y' with Door - UPVC/SWR Pipe fittings	Each	170.00
543	TBSP-H.II-40	75 mm dia - Double 'Y' - UPVC/SWR Pipe fittings	Each	101.00
544	TBSP-H.II-41	90 mm dia - Double 'Y' - UPVC/SWR Pipe fittings	Each	157.00
545	TBSP-H.II-42	110 mm dia - Double 'Y' - UPVC/SWR Pipe fittings	Each	177.00
546	TBSP-H.II-43	75 mm dia - Double 'Y' with Door - UPVC/SWR Pipe fittings	Each	131.00
547	TBSP-H.II-44	90 mm dia - Double 'Y' with Door - UPVC/SWR Pipe fittings	Each	204.00
548	TBSP-H.II-45	110 mm dia - Double 'Y' with Door - UPVC/SWR Pipe fittings	Each	229.00
549	TBSP-H.II-46	75 mm dia - Coupler - UPVC/SWR Pipe fittings	Each	35.00
550	TBSP-H.II-47	90 mm dia - Coupler - UPVC/SWR Pipe fittings	Each	50.00
551	TBSP-H.II-48	110 mm dia - Coupler - UPVC/SWR Pipe fittings	Each	57.00
552	TBSP-H.II-49	90 x 75 mm dia - Reducer - UPVC/SWR Pipe fittings	Each	59.00
553	TBSP-H.II-50	110 x 75 mm dia - Reducer - UPVC/SWR Pipe fittings	Each	57.00
554	TBSP-H.II-51	90 x 110 mm dia - Reducer - UPVC/SWR Pipe fittings	Each	79.00
555	TBSP-H.II-52	63 mm dia - Vent Cowl - UPVC/SWR Pipe fittings	Each	10.00
556	TBSP-H.II-53	75 mm dia - Vent Cowl - UPVC/SWR Pipe fittings	Each	14.00
557	TBSP-H.II-54	90 mm dia - Vent Cowl - UPVC/SWR Pipe fittings	Each	17.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
558	TBSP-H.II-55	110 mm dia - Vent Cowl - UPVC/SWR Pipe fittings	Each	19.00
559	TBSP-H.II-56	40 mm dia - Pipe Clip - UPVC/SWR Pipe fittings - Pipe Clip - UPVC/SWR Pipe fittings	Each	11.00
560	TBSP-H.II-57	50 mm dia - Pipe Clip - UPVC/SWR Pipe fittings	Each	14.00
561	TBSP-H.II-58	63 mm dia - Pipe Clip - UPVC/SWR Pipe fittings	Each	14.00
562	TBSP-H.II-59	75 mm dia - Pipe Clip - UPVC/SWR Pipe fittings	Each	15.00
563	TBSP-H.II-60	90 mm dia - Pipe Clip - UPVC/SWR Pipe fittings	Each	17.00
564	TBSP-H.II-61	110 mm - Pipe Clip - UPVC/SWR Pipe fittings	Each	18.00
565	TBSP-H.II-62	160 mm dia - Pipe Clip - UPVC/SWR Pipe fittings	Each	35.00
566	TBSP-H.II-63	P' Trap (Small without Air vent) 110 mm - UPVC/SWR Pipe fittings	Each	187.00
567	TBSP-H.II-64	P' Trap (Small with Air vent) 110 mm - UPVC/SWR Pipe fittings	Each	206.00
568	TBSP-H.II-65	P' Trap (Big with Air vent) 110 mm - UPVC/SWR Pipe fittings	Each	236.00
569	TBSP-H.II-66	P' Trap (Big without Air vent) 110 mm - UPVC/SWR Pipe fittings	Each	217.00
570	TBSP-H.II-67	Floor Trap (Bell Mouth) 110 mm - UPVC/SWR Pipe fittings	Each	225.00
571	TBSP-H.II-68	Bell Mouth Trap 7 " (177.8 mm) - UPVC/SWR Pipe fittings	Each	327.00
572	TBSP-H.II-69	4" (101.6 mm) Nahany Trap (Without Jali with inlet)UPVC/SWR Pipe fittings	Each	111.00
573	TBSP-H.II-70	3" (75 mm nominal size) Nahany Trap (without Jali without inlet)UPVC/SWR Pipe fittings	Each	87.00
574	TBSP-H.II-71	4" (101.6 mm) Nahany Trap (without inlet with out Jali)UPVC/SWR Pipe fittings	Each	108.00
575	TBSP-H.II-72	Mini Trap - UPVC/SWR Pipe fittings	Each	53.00
576	TBSP-H.II-73	3" (75 mm nominal size) Nahany Trap with Jali - UPVC/SWR Pipe fittings	Each	101.00
577	TBSP-H.II-74	4" (101.6 mm) multi floor trap with Jali- UPVC/SWR Pipe fittings	Each	143.00
578	TBSP-H.II-75	4" (101.6) multi floor trap with out Jali- UPVC/SWR Pipe fittings	Each	111.00
579	TBSP-H.II-76	Round Jali - UPVC/SWR Pipe fittings	Each	24.00
580	TBSP-H.II-77	Square tile & Jali - UPVC/SWR Pipe fittings	Each	39.00
581	TBSP-H.II-78	Pipe connector (with LIP ring) - UPVC/SWR Pipe fittings	Each	150.00
582	TBSP-H.II-79	Pipe connector (with out LIP ring) - UPVC/SWR Pipe fittings	Each	116.00
583	TBSP-H.II-80	4" (101.6 mm) Floor Trap - UPVC/SWR Pipe fittings	Each	137.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
584	TBSP-H.II-81	5" (127.mm) floor Trap - UPVC/SWR Pipe fittings	Each	145.00
585	TBSP-H.II-82	75 mm dia - Door cap - UPVC/SWR Pipe fittings	Each	57.00
586	TBSP-H.II-83	90 mm dia - Door cap - UPVC/SWR Pipe fittings	Each	64.00
587	TBSP-H.II-84	110 mm dia - Door cap - UPVC/SWR Pipe fittings	Each	73.00
588	TBSP-H.II-85	75 mm dia - Socket plug - UPVC/SWR Pipe fittings	Each	53.00
589	TBSP-H.II-86	90 mm dia - Socket plug - UPVC/SWR Pipe fittings	Each	61.00
590	TBSP-H.II-87	110 mm dia - Socket plug - UPVC/SWR Pipe fittings	Each	64.00
591	TBSP-H.II-88	75 mm dia - Rubber ring for Socket - UPVC/SWR Pipe fittings	Each	9.00
592	TBSP-H.II-89	90 mm dia - Rubber ring for Socket - UPVC/SWR Pipe fittings	Each	10.00
593	TBSP-H.II-90	110 mm dia - Rubber ring for Socket - UPVC/SWR Pipe fittings	Each	11.00
594	TBSP-H.II-91	75 mm dia - Door Socket - UPVC/SWR Pipe fittings	Each	10.00
595	TBSP-H.II-92	90 mm dia - Door Socket - UPVC/SWR Pipe fittings	Each	11.00
596	TBSP-H.II-93	110 mm dia - Door Socket - UPVC/SWR Pipe fittings	Each	14.00
597	TBSP-H.II-94	LIP ring 110 mm - UPVC/SWR Pipe fittings	Each	69.00
598	TBSP-H.II-95	110mm x 90 mm - Internal Reducer - UPVC/SWR Pipe fittings	Each	90.00
599	TBSP-H.II-96	160 mm x 110 mm - Internal Reducer - UPVC/SWR Pipe fittings	Each	222.00
III	SUB-SECTION	PVC PLUMBING ACCESSORIES		
600	TBSP-H.III-01	Rubber Lubricant - 100 Grams	Each	30.00
601	TBSP-H.III-02	Rubber Lubricant - 250 Grams	Each	65.00
602	TBSP-H.III-03	Rubber Lubricant - 500 Grams	Each	117.00
603	TBSP-H.III-04	Rubber Lubricant - 1000 Grams	Each	217.00
604	TBSP-H.III-05	P' Trap with lip UPVC/SWR Pipe fittings	Each	295.00
605	TBSP-H.III-06	50 ml - Solvent Cement	Each	15.00
606	TBSP-H.III-07	100 ml - Solvent Cement	Each	25.00
607	TBSP-H.III-08	250 ml - Solvent Cement	Each	59.00
608	TBSP-H.III-09	500 ml - Solvent Cement	Each	115.00
609	TBSP-H.III-10	1000 ml - Solvent Cement	Each	225.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
IV	SUB-SECTION	LABOUR CHARGES FOR PVC PLUMBING		
610	TBSP-H.IV-01	Labour charges for laying, fixing and commissioning the PVC pipes including couplers/ bends/ tees etc any diameter including fixing necessary fittings like bends, plugs, couplers, junctions, tees, etc with solvent jointing as per standard practice	1 RM	76.00
611	TBSP-H.IV-02	Labour charges for laying, joining, welding, fixing and commissioning the PPR pipes including all specials such as couplers/ bends/ tees etc including fixing necessary fittings like bends, plugs, couplers, junctions, tees, etc with welding the joint as per standard practice - up to 40 mm dia	1 RM	34.00
612	TBSP-H.IV-03	Labour charges for laying, joining, welding, fixing and commissioning the PPR pipes including all specials such as couplers/ bends/ tees etc including fixing necessary fittings like bends, plugs, couplers, junctions, tees, etc with welding the joint as per standard practice - above 40 mm dia	1 RM	57.00
J	SECTION	MISCELLANEOUS ITEMS		
I	SUB-SECTION	MISCELLANEOUS PLUMBING WORK ITEMS		
613	TBSP-J.I-01	Supplying & Fixing solder joints up to 50 mm nominal size dia	Each	56.00
614	TBSP-J.I-02	Supplying & Fixing solution joints up to 50.8 dia 1st quality.	Each	11.00
615	TBSP-J.I-03	Chiselling the stone masonry wall for fixing of wooden blocks including finishing as directed by the department	Each	30.00
616	TBSP-J.I-04	Chiselling the stone masonry wall and repairs as directed by the department.	1 Rm	142.00
617	TBSP-J.I-05	Chiselling the brick masonry wall and repairs as directed by the department.	1 Rm	30.00
618	TBSP-J.I-06	Painting the flushing tank with white enamel paint	Each	96.00
619	TBSP-J.I-07	S & F internal cistern fittings for PVC flush tank	Each	852.00
620	TBSP-J.I-08	Repairing and over hauling flushing tank	Each	93.00
621	TBSP-J.I-09	Removing and refixing W.C s	Each	243.00
622	TBSP-J.I-10	Removing and refixing wash hand basins of any size with fittings complete	Each	219.00
623	TBSP-J.I-11	Removing 15 mm nominal size GI pipe and refixing the same	Mr.	67.00
624	TBSP-J.I-12	Removing 20 mm nominal size GI pipe and refixing the same	Mr.	75.00
625	TBSP-J.I-13	Removing 25 mm nominal size GI pipe and refixing the same	Mr.	111.00
626	TBSP-J.I-14	Removing 40 mm nominal size GI pipe and refixing the same	Rm	141.00
627	TBSP-J.I-15	Removing 50 mm nominal size GI pipe and refixing the same	Rm	164.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
628	TBSP-J.I-16	Cleaning the W.C with acid and Vim powder	Each	46.00
629	TBSP-J.I-17	Cleaning the Urinal with acid and Vim power	Each	46.00
630	TBSP-J.I-18	Cleaning the wash basin with acid and Vim powder	Each	46.00
631	TBSP-J.I-19	Cleaning the E.W.C with acid and Vim power	Each	46.00
632	TBSP-J.I-20	Cutting holes in C.C; basement & repairs Labour charges only	Each	107.00
633	TBSP-J.I-21	Cutting holes in stone masonry & basement and repairs Labour charges only	Each	72.00
634	TBSP-J.I-22	Cutting holes in Brick masonry & repairs Labour charges only	Each	47.00
635	TBSP-J.I-23	Cutting holes in RCC slab floor & repairs Labour charges only	Each	72.00
636	TBSP-J.I-24	Supplying & Fixing NP chain rubber and plug for basin	Each	38.00
637	TBSP-J.I-25	S & F 25 mm nominal size dia & 609.6 mm long aluminium anodized towel rod with brackets and aluminium screws	Each	149.00
638	TBSP-J.I-26	S & F 19.04 mm dia & 609.6 mm long aluminium anodized towel rod with brackets and aluminium screws	Each	129.00
639	TBSP-J.I-27	S & F 609.6 mm long 127 mm wide plate glass shelf with superior quality aluminium railing complete with aluminium screws	Each	190.00
640	TBSP-J.I-28	S & F 609.6 mm long 127 mm wide plate glass shelf only	Each	63.00
641	TBSP-J.I-29	Supplying & fixing 88.9 mm A.C cowls	Each	65.00
642	TBSP-J.I-30	Supplying & fixing A.C Cowl 63.5 mm dia	Each	44.00
643	TBSP-J.I-31	S & F 76.2 x 101.6 mm teak wood block complete	Each	24.00
644	TBSP-J.I-32	Supplying & Fixing 15 mm nominal size PVC connection with brass union nut C.P coated	Each	101.00
645	TBSP-J.I-33	Removing of 101.6 m or 75 mm nominal size CI pipe	1 RM	38.00
646	TBSP-J.I-34	Supplying & fixing 75 mm nominal size W.I clamps	Each	23.00
647	TBSP-J.I-35	Supplying and fixing TV shape mirror with plastic frame size 609.6 mm x 457.2 mm	Each	466.00
648	TBSP-J.I-36	Supplying & fixing GI pipe plug of size 15 mm nominal size dia	Each	10.00
649	TBSP-J.I-37	Supplying & fixing 20 mm dia GI plug	Each	14.00
650	TBSP-J.I-38	Supplying and fixing 40 mm nominal size dia of GI plug	Each	71.00
651	TBSP-J.I-39	Supplying & fixing 50 mm nominal size dia of GI PLUG	Each	110.00
652	TBSP-J.I-40	Supplying & fixing 75 mm nominal size dia of GI PLUG	Each	198.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
II	SUB-SECTION	POLYETHYLENE-ALUMINIUM-POLYETHYLENE COMPOSITE PIPES		
653	TBSP-J.II-01	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete for external works including laying pipes, fixing in position, testing and commissioning etc : 16 mm OD pipe	1 RM	142.00
654	TBSP-J.II-02	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete for external works including laying pipes, fixing in position, testing and commissioning etc : 20 mm OD pipe	1 RM	177.00
655	TBSP-J.II-03	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete for external works including laying pipes, fixing in position, testing and commissioning etc : 25mm OD pipe	1 RM	222.00
656	TBSP-J.II-04	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete for external works including laying pipes, fixing in position, testing and commissioning etc : 32 mm OD pipe	1 RM	298.00
657	TBSP-J.II-05	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete for external works including laying pipes, fixing in position, testing and commissioning etc : 40 mm OD pipe	1 RM	391.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
658	TBSP-J.II-06	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete for external works including laying pipes, fixing in position, testing and commissioning etc : 50 mm OD pipe	1 RM	497.00
659	TBSP-J.II-07	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc 16 mm OD pipe	1 RM	206.00
660	TBSP-J.II-08	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc 20 mm OD pipe	1 RM	247.00
661	TBSP-J.II-09	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc 25mm OD pipe	1 RM	305.00
662	TBSP-J.II-10	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc 32 mm OD pipe	1 RM	402.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
663	TBSP-J.II-11	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc 40 mm OD pipe	1 RM	521.00
664	TBSP-J.II-12	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc 50 mm OD pipe	1 RM	659.00
665	TBSP-J.II-13	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete including excavating trenches up to 1.0 M deep laying pipes, fixing in position, testing, refilling excavated earth and commissioning etc 16 mm OD pipe	1 RM	169.00
666	TBSP-J.II-14	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete including excavating trenches up to 1.0 M deep laying pipes, fixing in position, testing, refilling excavated earth and commissioning etc 20 mm OD pipe	1 RM	200.00
667	TBSP-J.II-15	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete including excavating trenches up to 1.0 M deep laying pipes, fixing in position, testing, refilling excavated earth and commissioning etc 25mm OD pipe	1 RM	243.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
668	TBSP-J.II-16	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete including excavating trenches up to 1.0 M deep laying pipes, fixing in position, testing, refilling excavated earth and commissioning etc 32 mm OD pipe	1 RM	314.00
669	TBSP-J.II-17	S&F Polyethylene-Aluminium-Polyethylene (PE-AL-PE) composite pressure pipes conforming to IS-15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc complete including excavating trenches up to 1.0 M deep laying pipes, fixing in position, testing, refilling excavated earth and commissioning etc 40 mm OD pipe	1 RM	401.00
III	SUB-SECTION	OTHER VARIETIES OF PIPES		
670	TBSP-J.III-01	S&F premium make CPVC Pipes of 15.90mm OD Pipe - SDR 13.5	1 RM	128.00
671	TBSP-J.III-02	S&F premium make CPVC Pipes of 22.20mm OD Pipe - SDR 13.5	1 RM	146.00
672	TBSP-J.III-03	S&F premium make CPVC Pipes of 28.60mm OD Pipe - SDR 13.5	1 RM	193.00
673	TBSP-J.III-04	S&F premium make CPVC Pipes of 34.90mm OD Pipe - SDR 13.5	1 RM	263.00
674	TBSP-J.III-05	S&F premium make CPVC Pipes of 41.30mm OD Pipe - SDR 13.5	1 RM	327.00
675	TBSP-J.III-06	S&F premium make CPVC Pipes of 54.00mm OD Pipe - SDR 13.5	1 RM	477.00
676	TBSP-J.III-07	S&F premium make CPVC Pipes of 15.90mm OD Pipe - SDR 11	1 RM	141.00
677	TBSP-J.III-08	S&F premium make CPVC Pipes of 22.20mm OD Pipe - SDR 11	1 RM	172.00
678	TBSP-J.III-09	S&F premium make CPVC Pipes of 28.60mm OD Pipe - SDR 11	1 RM	206.00
679	TBSP-J.III-10	S&F premium make CPVC Pipes of 34.90mm OD Pipe - SDR 11	1 RM	281.00
680	TBSP-J.III-11	S&F premium make CPVC Pipes of 41.30mm OD Pipe - SDR 11	1 RM	348.00
681	TBSP-J.III-12	S&F premium make CPVC Pipes of 54.00mm OD Pipe - SDR 11	1 RM	508.00
682	TBSP-J.III-13	Supply of 20mm x 1.9mm PN 10/PPR pipe conforming to DIN Standards 8077/8078	1 RM	44.00
683	TBSP-J.III-14	Supply of 25mm x 2.3mm PN 10/PPR pipe conforming to DIN Standards 8077/8078	1 RM	66.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
684	TBSP-J.III-15	Supply of 32mm x 2.9mm PN 10/PPR pipe conforming to DIN Standards 8077/8079	1 RM	105.00
685	TBSP-J.III-16	Supply of 40mm x 3.7mm PN 10/PPR pipe conforming to DIN Standards 8077/8079	1 RM	163.00
686	TBSP-J.III-17	Supply of 50mm x 4.6mm PN 10/PPR pipe conforming to DIN Standards 8077/8080	1 RM	292.00
687	TBSP-J.III-18	Supply of 63mm x 5.8mm PN 10/PPR pipe conforming to DIN Standards 8077/8081	1 RM	458.00
688	TBSP-J.III-19	Supply of 75mm x 6.8mm PN 10/PPR pipe conforming to DIN Standards 8077/8082	1 RM	637.00
689	TBSP-J.III-20	Supply of 90mm x 8.2mm PN 10/PPR pipe conforming to DIN Standards 8077/8083	1 RM	873.00
690	TBSP-J.III-21	Supply of 110mm x 10mm PN 10/PPR pipe conforming to DIN Standards 8077/8084	1 RM	1,294.00
691	TBSP-J.III-22	Supply of 20mm x 2.8mm PN 16/PPR pipe conforming to DIN Standards 8077/8078	1 RM	60.00
692	TBSP-J.III-23	Supply of 25mm x 3.5mm PN 16/PPR pipe conforming to DIN Standards 8077/8078	1 RM	93.00
693	TBSP-J.III-24	Supply of 32mm x 4.4mm PN 16/PPR pipe conforming to DIN Standards 8077/8079	1 RM	148.00
694	TBSP-J.III-25	Supply of 40mm x 5.5mm PN 16/PPR pipe conforming to DIN Standards 8077/8079	1 RM	228.00
695	TBSP-J.III-26	Supply of 50mm x 6.9mm PN 16/PPR pipe conforming to DIN Standards 8077/8080	1 RM	408.00
696	TBSP-J.III-27	Supply of 63mm x 8.6mm PN 16/PPR pipe conforming to DIN Standards 8077/8081	1 RM	641.00
697	TBSP-J.III-28	Supply of 75mm x 10.3mm PN 16/PPR pipe conforming to DIN Standards 8077/8082	1 RM	907.00
698	TBSP-J.III-29	Supply of 90mm x 12.3mm PN 16/PPR pipe conforming to DIN Standards 8077/8083	1 RM	1,293.00
699	TBSP-J.III-30	Supply of 110mm x 15.1mm PN 16/PPR pipe conforming to DIN Standards 8077/8084	1 RM	1,935.00
700	TBSP-J.III-31	Supply of 20mm x 3.4mm PN 20/PPR pipe conforming to DIN Standards 8077/8078	1 RM	70.00
701	TBSP-J.III-32	Supply of 25mm x 4.2mm PN 20/PPR pipe conforming to DIN Standards 8077/8078	1 RM	107.00
702	TBSP-J.III-33	Supply of 32mm x 5.4mm PN 20/PPR pipe conforming to DIN Standards 8077/8079	1 RM	173.00
703	TBSP-J.III-34	Supply of 40mm x 6.7mm PN 20/PPR pipe conforming to DIN Standards 8077/8079	1 RM	266.00
704	TBSP-J.III-35	Supply of 50mm x 8.3mm PN 20/PPR pipe conforming to DIN Standards 8077/8080	1 RM	471.00
705	TBSP-J.III-36	Supply of 63mm x 10.5mm PN 20/PPR pipe conforming to DIN Standards 8077/8081	1 RM	743.00
706	TBSP-J.III-37	Supply of 75mm x 12.5mm PN 20/PPR pipe conforming to DIN Standards 8077/8082	1 RM	1,054.00
707	TBSP-J.III-38	Supply of 90mm x 15mm PN 20/PPR pipe conforming to DIN Standards 8077/8083	1 RM	1,432.00
708	TBSP-J.III-39	Supply of 110mm x 18.3mm PN 20/PPR pipe conforming to DIN Standards 8077/8084	1 RM	2,255.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
709	TBSP-J.III-40	Supply of 20mm PPR Socket conforming to DIN Standards 8077/8084	Each	10.00
710	TBSP-J.III-41	Supply of 25mm PPR Socket conforming to DIN Standards 8077/8085	Each	14.00
711	TBSP-J.III-42	Supply of 32mm PPR Socket conforming to DIN Standards 8077/8086	Each	19.00
712	TBSP-J.III-43	Supply of 40mm PPR Socket conforming to DIN Standards 8077/8087	Each	33.00
713	TBSP-J.III-44	Supply of 50mm PPR Socket conforming to DIN Standards 8077/8088	Each	64.00
714	TBSP-J.III-45	Supply of 63mm PPR Socket conforming to DIN Standards 8077/8089	Each	122.00
715	TBSP-J.III-46	Supply of 75mm PPR Socket conforming to DIN Standards 8077/8090	Each	185.00
716	TBSP-J.III-47	Supply of 90mm PPR Socket conforming to DIN Standards 8077/8091	Each	355.00
717	TBSP-J.III-48	Supply of 110mm PPR Socket conforming to DIN Standards 8077/8092	Each	631.00
718	TBSP-J.III-49	Supply of 32mm PPR Core Flange conforming to DIN Standards 8077/8086	Each	38.00
719	TBSP-J.III-50	Supply of 40mm PPR Core Flange conforming to DIN Standards 8077/8087	Each	61.00
720	TBSP-J.III-51	Supply of 50mm PPR Core Flange conforming to DIN Standards 8077/8088	Each	79.00
721	TBSP-J.III-52	Supply of 63mm PPR Core Flange conforming to DIN Standards 8077/8089	Each	126.00
722	TBSP-J.III-53	Supply of 75mm PPR Core Flange conforming to DIN Standards 8077/8090	Each	147.00
723	TBSP-J.III-54	Supply of 90mm PPR Core Flange conforming to DIN Standards 8077/8091	Each	373.00
724	TBSP-J.III-55	Supply of 110mm PPR Core Flange conforming to DIN Standards 8077/8092	Each	482.00
725	TBSP-J.III-56	Supply of 20mm PPR Elbow conforming to DIN Standards 8077/8084	Each	17.00
726	TBSP-J.III-57	Supply of 25mm PPR Elbow conforming to DIN Standards 8077/8085	Each	20.00
727	TBSP-J.III-58	Supply of 32mm PPR Elbow conforming to DIN Standards 8077/8086	Each	39.00
728	TBSP-J.III-59	Supply of 40mm PPR Elbow conforming to DIN Standards 8077/8087	Each	68.00
729	TBSP-J.III-60	Supply of 50mm PPR Elbow conforming to DIN Standards 8077/8088	Each	128.00
730	TBSP-J.III-61	Supply of 63mm PPR Elbow conforming to DIN Standards 8077/8089	Each	249.00
731	TBSP-J.III-62	Supply of 75mm PPR Elbow conforming to DIN Standards 8077/8090	Each	402.00
732	TBSP-J.III-63	Supply of 90mm PPR Elbow conforming to DIN Standards 8077/8091	Each	748.00
733	TBSP-J.III-64	Supply of 110mm PPR Elbow conforming to DIN Standards 8077/8092	Each	1,388.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
734	TBSP-J.III-65	Supply of 20mm PPR Tee conforming to DIN Standards 8077/8084	Each	15.00
735	TBSP-J.III-66	Supply of 25mm PPR Tee conforming to DIN Standards 8077/8085	Each	26.00
736	TBSP-J.III-67	Supply of 32mm PPR Tee conforming to DIN Standards 8077/8086	Each	46.00
737	TBSP-J.III-68	Supply of 40mm PPR Tee conforming to DIN Standards 8077/8087	Each	82.00
738	TBSP-J.III-69	Supply of 50mm PPR Tee conforming to DIN Standards 8077/8088	Each	146.00
739	TBSP-J.III-70	Supply of 63mm PPR Tee conforming to DIN Standards 8077/8089	Each	295.00
740	TBSP-J.III-71	Supply of 75mm PPR Tee conforming to DIN Standards 8077/8090	Each	577.00
741	TBSP-J.III-72	Supply of 90mm PPR Tee conforming to DIN Standards 8077/8091	Each	837.00
742	TBSP-J.III-73	Supply of 110mm PPR Tee conforming to DIN Standards 8077/8092	Each	1,449.00
743	TBSP-J.III-74	Supply of 20mm PPR End Cap conforming to DIN Standards 8077/8084	Each	7.00
744	TBSP-J.III-75	Supply of 25mm PPR End Cap conforming to DIN Standards 8077/8085	Each	10.00
745	TBSP-J.III-76	Supply of 32mm PPR End Cap conforming to DIN Standards 8077/8086	Each	19.00
746	TBSP-J.III-77	Supply of 40mm PPR End Cap conforming to DIN Standards 8077/8087	Each	33.00
747	TBSP-J.III-78	Supply of 50mm PPR End Cap conforming to DIN Standards 8077/8088	Each	58.00
748	TBSP-J.III-79	Supply of 63mm PPR End Cap conforming to DIN Standards 8077/8089	Each	122.00
749	TBSP-J.III-80	Supply of 75mm PPR End Cap conforming to DIN Standards 8077/8090	Each	204.00
750	TBSP-J.III-81	Supply of 90mm PPR End Cap conforming to DIN Standards 8077/8091	Each	325.00
751	TBSP-J.III-82	Supply of 110mm PPR End Cap conforming to DIN Standards 8077/8092	Each	643.00
752	TBSP-J.III-83	Supply of 25mm x 20mm PPR Reducer conforming to DIN Standards 8077/8092	Each	12.00
753	TBSP-J.III-84	Supply of 32mm x 25mm PPR Reducer conforming to DIN Standards 8077/8092	Each	20.00
754	TBSP-J.III-85	Supply of 32mm x 20mm PPR Reducer conforming to DIN Standards 8077/8092	Each	19.00
755	TBSP-J.III-86	Supply of 40mm x 32mm PPR Reducer conforming to DIN Standards 8077/8092	Each	34.00
756	TBSP-J.III-87	Supply of 40mm x 25mm PPR Reducer conforming to DIN Standards 8077/8092	Each	33.00
757	TBSP-J.III-88	Supply of 40mm x 20mm PPR Reducer conforming to DIN Standards 8077/8092	Each	32.00
758	TBSP-J.III-89	Supply of 50mm x 20mm PPR Reducer conforming to DIN Standards 8077/8092	Each	50.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
759	TBSP-J.III-90	Supply of 50mm x 25mm PPR Reducer conforming to DIN Standards 8077/8092	Each	51.00
760	TBSP-J.III-91	Supply of 50mm x 32mm PPR Reducer conforming to DIN Standards 8077/8092	Each	52.00
761	TBSP-J.III-92	Supply of 50mm x 40mm PPR Reducer conforming to DIN Standards 8077/8092	Each	52.00
762	TBSP-J.III-93	Supply of 63mm x 20mm PPR Reducer conforming to DIN Standards 8077/8092	Each	113.00
763	TBSP-J.III-94	Supply of 63mm x 25mm PPR Reducer conforming to DIN Standards 8077/8092	Each	113.00
764	TBSP-J.III-95	Supply of 63mm x 32mm PPR Reducer conforming to DIN Standards 8077/8092	Each	114.00
765	TBSP-J.III-96	Supply of 63mm x 40mm PPR Reducer conforming to DIN Standards 8077/8092	Each	114.00
766	TBSP-J.III-97	Supply of 63mm x 50mm PPR Reducer conforming to DIN Standards 8077/8092	Each	115.00
767	TBSP-J.III-98	Supply of 75mm x 40mm PPR Reducer conforming to DIN Standards 8077/8092	Each	168.00
768	TBSP-J.III-99	Supply of 75mm x 50mm PPR Reducer conforming to DIN Standards 8077/8092	Each	169.00
769	TBSP-J.III-100	Supply of 75mm x 63mm PPR Reducer conforming to DIN Standards 8077/8092	Each	213.00
770	TBSP-J.III-101	Supply of 90mm x 63mm PPR Reducer conforming to DIN Standards 8077/8092	Each	408.00
771	TBSP-J.III-102	Supply of 90mm x 75mm PPR Reducer conforming to DIN Standards 8077/8092	Each	432.00
772	TBSP-J.III-103	Supply of 110mm x 63mm PPR Reducer conforming to DIN Standards 8077/8092	Each	544.00
773	TBSP-J.III-104	Supply of 110mm x 75mm PPR Reducer conforming to DIN Standards 8077/8092	Each	633.00
774	TBSP-J.III-105	Supply of 110mm x 90mm PPR Reducer conforming to DIN Standards 8077/8092	Each	683.00
775	TBSP-J.III-106	Supply of 25mm x 20mm x 25mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	32.00
776	TBSP-J.III-107	Supply of 32mm x 25mm x 32mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	56.00
777	TBSP-J.III-108	Supply of 32mm x 20mm x 32mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	57.00
778	TBSP-J.III-109	Supply of 40mm x 20mm x 40mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	92.00
779	TBSP-J.III-110	Supply of 40mm x 25mm x 40mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	93.00
780	TBSP-J.III-111	Supply of 40mm x 32mm x 40mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	96.00
781	TBSP-J.III-112	Supply of 50mm x 20mm x 50mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	133.00
782	TBSP-J.III-113	Supply of 50mm x 25mm x 50mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	134.00
783	TBSP-J.III-114	Supply of 50mm x 32mm x 50mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	138.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
784	TBSP-J.III-115	Supply of 50mm x 40mm x 50mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	139.00
785	TBSP-J.III-116	Supply of 63mm x 20mm x 63mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	384.00
786	TBSP-J.III-117	Supply of 63mm x 25mm x 63mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	386.00
787	TBSP-J.III-118	Supply of 63mm x 32mm x 63mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	391.00
788	TBSP-J.III-119	Supply of 63mm x 40mm x 63mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	397.00
789	TBSP-J.III-120	Supply of 63mm x 50mm x 63mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	403.00
790	TBSP-J.III-121	Supply of 75mm x 50mm x 75mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	542.00
791	TBSP-J.III-122	Supply of 75mm x 63mm x 75mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	551.00
792	TBSP-J.III-123	Supply of 90mm x 50mm x 90mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	730.00
793	TBSP-J.III-124	Supply of 90mm x 63mm x 90mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	776.00
794	TBSP-J.III-125	Supply of 110mm x 75mm x 110mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	1,323.00
795	TBSP-J.III-126	Supply of 110mm x 90mm x 110mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	1,376.00
796	TBSP-J.III-127	Supply of 20mm x ½" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	102.00
797	TBSP-J.III-128	Supply of 25mm x ½" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	105.00
798	TBSP-J.III-129	Supply of 25mm x ¾" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	183.00
799	TBSP-J.III-130	Supply of 32mm x ½" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	186.00
800	TBSP-J.III-131	Supply of 32mm x ¾" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	193.00
801	TBSP-J.III-132	Supply of 32mm x 1" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	297.00
802	TBSP-J.III-133	Supply of 40mm x 1¼" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	439.00
803	TBSP-J.III-134	Supply of 50mm x 1½" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	613.00
804	TBSP-J.III-135	Supply of 63mm x 2" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	816.00
805	TBSP-J.III-136	Supply of 75mm x 2½" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	1,572.00
806	TBSP-J.III-137	Supply of 20mm x ½" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	158.00
807	TBSP-J.III-138	Supply of 25mm x ½" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	163.00
808	TBSP-J.III-139	Supply of 25mm x ¾" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	238.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
809	TBSP-J.III-140	Supply of 32mm x ¾" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	249.00
810	TBSP-J.III-141	Supply of 32mm x 1" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	462.00
811	TBSP-J.III-142	Supply of 40mm x 1¼" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	541.00
812	TBSP-J.III-143	Supply of 50mm x 1½" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	756.00
813	TBSP-J.III-144	Supply of 63mm x 2" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	1,163.00
814	TBSP-J.III-145	Supply of 75mm x 2½" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	1,861.00
815	TBSP-J.III-146	Supply of 20mm x ½" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	109.00
816	TBSP-J.III-147	Supply of 25mm x ½" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	114.00
817	TBSP-J.III-148	Supply of 25mm x ¾" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	176.00
818	TBSP-J.III-149	Supply of 32mm x ½" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	169.00
819	TBSP-J.III-150	Supply of 32mm x ¾" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	197.00
820	TBSP-J.III-151	Supply of 32mm x 1" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	328.00
821	TBSP-J.III-152	Supply of 20mm x ½" PPR Male Threaded Elbow conforming to DIN Standards 8077/8092	Each	163.00
822	TBSP-J.III-153	Supply of 25mm x ½" PPR Male Threaded Elbow conforming to DIN Standards 8077/8092	Each	179.00
823	TBSP-J.III-154	Supply of 25mm x ¾" PPR Male Threaded Elbow conforming to DIN Standards 8077/8092	Each	237.00
824	TBSP-J.III-155	Supply of 32mm x ½" PPR Male Threaded Elbow conforming to DIN Standards 8077/8092	Each	228.00
825	TBSP-J.III-156	Supply of 32mm x 1" PPR Male Threaded Elbow conforming to DIN Standards 8077/8092	Each	491.00
826	TBSP-J.III-157	Supply of 20mm x ½" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	106.00
827	TBSP-J.III-158	Supply of 25mm x ½" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	115.00
828	TBSP-J.III-159	Supply of 25mm x ¾" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	193.00
829	TBSP-J.III-160	Supply of 32mm x ½" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	203.00
830	TBSP-J.III-161	Supply of 32mm x ¾" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	228.00
831	TBSP-J.III-162	Supply of 32mm x 1" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	320.00
832	TBSP-J.III-163	Supply of 20mm x ½" PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	164.00
833	TBSP-J.III-164	Supply of 25mm x ½" PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	176.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
834	TBSP-J.III-165	Supply of 25mm x ¾" PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	252.00
835	TBSP-J.III-166	Supply of 32mm x ½" PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	257.00
836	TBSP-J.III-167	Supply of 32mm x ¾" PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	272.00
837	TBSP-J.III-168	Supply of 32mm x 1" PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	501.00
838	TBSP-J.III-169	Supply of 20mm x ½" PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	423.00
839	TBSP-J.III-170	Supply of 25mm x ¾" PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	633.00
840	TBSP-J.III-171	Supply of 32mm x 1" PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	845.00
841	TBSP-J.III-172	Supply of 40mm x 1¼" PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	1,184.00
842	TBSP-J.III-173	Supply of 50mm x 1½" PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	1,904.00
843	TBSP-J.III-174	Supply of 63mm x 2" PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	3,024.00
844	TBSP-J.III-175	Supply of 20mm x ½" PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	485.00
845	TBSP-J.III-176	Supply of 25mm x ¾" PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	645.00
846	TBSP-J.III-177	Supply of 32mm x 1" PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	845.00
847	TBSP-J.III-178	Supply of 40mm x 1¼" PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	1,057.00
848	TBSP-J.III-179	Supply of 50mm x 1½" PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	2,009.00
849	TBSP-J.III-180	Supply of 63mm x 2" PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	3,384.00
850	TBSP-J.III-181	Supply of 20mm PPR Union conforming to DIN Standards 8077/8092	Each	93.00
851	TBSP-J.III-182	Supply of 25mm PPR Union conforming to DIN Standards 8077/8092	Each	108.00
852	TBSP-J.III-183	Supply of 32mm PPR Union conforming to DIN Standards 8077/8092	Each	178.00
853	TBSP-J.III-184	Supply of 20mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	169.00
854	TBSP-J.III-185	Supply of 25mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	223.00
855	TBSP-J.III-186	Supply of 32mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	233.00
856	TBSP-J.III-187	Supply of 40mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	478.00
857	TBSP-J.III-188	Supply of 50mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	556.00
858	TBSP-J.III-189	Supply of 63mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	900.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SS RATE FOR 2018-19
859	TBSP-J.III-190	Supply of 75mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	1,481.00
860	TBSP-J.III-191	Supply of 90mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	2,115.00
861	TBSP-J.III-192	Supply of 20mm PPR Clamp conforming to DIN Standards 8077/8092	Each	10.00
862	TBSP-J.III-193	Supply of 25mm PPR Clamp conforming to DIN Standards 8077/8092	Each	13.00
863	TBSP-J.III-194	Supply of 32mm PPR Clamp conforming to DIN Standards 8077/8092	Each	15.00
864	TBSP-J.III-195	Supply of 40mm PPR Clamp conforming to DIN Standards 8077/8092	Each	17.00
NOTE				
1	All the items to be used on work are of first quality & ISI and as approved by the Engineer In charge of the work.			
2	RATES			
	Note: All the prices of the material given in this section are excluding taxes but including cost of loading, cost of conveyance, unloading & stacking			
	a) Supply Rates for all the materials are based on market rates plus Sales Tax/ Material VAT.			
	b) Works Contract VAT for General/ Composition Scheme on finished items may be allowed as applicable.			
4	LABOUR charges are increased based on proposals and market rates			
5	Coloured porcelain items: 50% extra may be allowed on basic cost of white porcelain items excluding fittings			
6	SSR Rates for Sanitary & water supply items are purely for guidance for the officers for preparation of estimates vide Para 113 of APPWD code. Authority who prepares the estimate is however responsible for proper rates as envisaged in Para 45 of APPWD code.			
LEGEND				
	"TBSP" -A.I-01			
	"TBSP" -C.I-22			
	"TBSP" -D.III-14			
	TBSP - Denotes Plumbing item in the Telangana Buildings SoR			
	A.I/ C.IV - Denotes the Section & Sub-section			
	01/22 - Denotes the serial number of the item			

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
A	SECTION	S.W.G. PIPES & FITTINGS
		(Landing cost - including material VAT/ loading/ cost of conveyance/ unloading & stacking)
I	SUB-SECTION	SUPPLY & LAYING OF SWG PIPES - Any ISI Brand
II	SUB-SECTION	S.W.G. FITTINGS - Any ISI Brand
C	SECTION	CENTRIFUGAL CI PIPES & FITTINGS - IS : 1729
I	SUB-SECTION	SUPPLY & LAYING OF CAST IRON PIPES - BIC/ NECO/ Jayaswal Neco
II	SUB-SECTION	SUPPLYING & LAYING OF C.I. FITTINGS - BIC/ NECO/ Jayaswal Neco
D	SECTION	CENTRIFUGAL CI PIPES & FITTINGS - IS : 3989
I	SUB-SECTION	SUPPLY OF CENTRIFUGAL CI PIPES - BIC/ NECO/ Jayaswal Neco
II	SUB-SECTION	SUPPLY OF C.I. SPUN FITTINGS - BIC/ NECO/ Jayaswal Neco
E	SECTION	VITREOUS CHINAWARE - SANITARY APPLIANCES
I	SUB-SECTION	INDIAN WATER CLOSETS - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany
II	SUB-SECTION	FLOOR MOUNTED EWC - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany
III	SUB-SECTION	WALL MOUNTED EWC - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany
IV	SUB-SECTION	CISTERNS FOR WATER CLOSETS - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany
V	SUB-SECTION	PLASTIC SEATS FOR WATER CLOSETS - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany
VI	SUB-SECTION	WASH HAND BASINS - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany
VII	SUB-SECTION	URINALS - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany
F	SECTION	CP FITTINGS - TAPS/ FAUCETS & ACCESSORIES
I	SUB-SECTION	TAPS&FAUCETS - BIB TAPS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany
II	SUB-SECTION	TAPS&FAUCETS - PILLAR TAPS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany
III	SUB-SECTION	TAPS&FAUCETS - OTHER TAPS & SPOUTS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany
IV	SUB-SECTION	STOP & ANGLE VALVES - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany
V	SUB-SECTION	COMBINATION FAUCETS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany
VI	SUB-SECTION	SHOWERS & FITTINGS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany
VII	SUB-SECTION	MISCELLANEOUS CP FITTINGS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany
G	SECTION	G.I. PIPES & FITTINGS
I	SUB-SECTION	G.I. PIPES - Tata/ JSW/ Oswal/ Zenith
II	SUB-SECTION	G.I. FITTINGS - HB / Kirti/ R-Brand
III	SUB-SECTION	BRONZE (COPPER ALLOY) VALVES - Zoloto/ R-Brand
H	SECTION	PVC PIPES & FITTINGS
I	SUB-SECTION	PVC PIPES - Prince/Sudhakar/Kisan/Supreme/ Astral/ Finolex/ Ajay/ Ashirvad/Birla Aerocon
II	SUB-SECTION	PVC FITTINGS- Prince/Sudhakar/Kisan/Supreme/ Astral/ Finolex/ Ajay/ Ashirvad/ Birla Aerocon

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
III	SUB-SECTION	PVC PLUMBING ACCESSORIES - Prince/Sudhakar/Kisan/Supreme/ Astral/ Finolex/ Ajay/ Ashirvad/ Birla Aerocon
		PVC Tanks - Sintex
		PVC - LLC Cisterns - Parryware/ Slimlines/ CERA/ Hindware
J	SECTION	MISCELLANEOUS ITEMS
I	SUB-SECTION	POLYETHYLENE-ALUMINIUM-POLYETHYLENE COMPOSITE PIPES - Kitec/ Kisan/ Uniflex
II	SUB-SECTION	CPVC PIPES - Supreme/ Ashirvad/ Astral/ Prince / Kisan / Ajay
III	SUB-SECTION	PPR PIPES - Supreme/ Ashirvad/ Astral/ Prince/ Kisan / SFMC / KPT

ELECTRICAL ITEMS

SL. NO.	INDEX	PAGE NOS	
		FROM	TO
	SECTION - 1		
1.1	M.S.CONDUIT PIPES		
1.2	PVC CONDUIT PIPES		
1.3	HOT DIP GALVANISED METAL BOXES		
1.4	T.W. BOARDS		
1.5	COPPER FLEXIBLE CABLES		
1.6	SERVICE MAINS AND FLAT CABLES OF ISI FOR SUBMERSIBLE MOTORS.		
1.7	FLUSH TYPE SWITCHES AND ACCESSORIES		
1.8	MINI MODULAR SWITCHES AND ACCESSORIES		
1.9	MODULAR SWITCHES AND ACCESSORIES		
	SECTION - 2		
2.1	PANEL MOUNTING SWITCH DISCONNECTOR FUSE UNITS		
2.2	ON LOAD CHANGE OVER SWITCHES. (OPEN EXECUTION)		
2.3	OFF LOAD CHANGE OVER SWITCHES IN SS ENCLOSURE		
2.4	REWIRABLE / DOUBLE BREAK SWITCHES IN SS ENCLOSURE		
2.5	HRC FUSE LINKS (BOLTED TYPE)		
2.6	PORCELAIN REWIRABLE FUSE UNITS.		
2.7	VOLTAGE SURGE PROTECTORS		
2.8	PANEL MOUNTING MCCBs		
2.9	RCCBs		
2.10	RCBOs		
2.11	ACBs		
2.12	RAISING MAINS		
2.13	MCBs		
2.14	ISOLATORS		
2.15	SPN DBs		
2.16	TPN DBs		
	SECTION - 3		
3.1	STREET LIGHT LUMINAIRES		
3.2	POST TOP LANTERN LUMINAIRES		
3.3	ACCESSORIES FOR MV / SV / MH LUMINAIRES		
3.4	LAMPS		
3.5	AUTOMATIC STREET LIGHT CONTROL SYSTEMS		
3.6	INTERNAL LUMINAIRES		
3.7	FLOURSCENT TUBES / CFL LAMPS		
3.8	ENERGY CONSERVING FIXTURES		

SL. NO.	INDEX	PAGE NOS	
		FROM	TO
3.9	LED LUMINAIRES INDOOR		
3.10	LED INDOOR LAMPS		
3.11	LED STREET LIGHTS		
3.12	LED DRIVERS		
	SECTION - 4		
4.1	U.G. CABLES,11 KV H. T. XLPE CABLES		
4.2	11 KV H.T. XLPE CABLES		
4.3	CABLE GLANDS		
4.4	LUGS		
4.5	HEAT SHRINKABLE LT CABLE JOINTS		
4.6	11 KV 3 CORE HT CABLE STRAIGHT THROUGH JOINTS		
4.7	HT END TERMINATION KITS		
4.8	DOUBLE WALLED CORRUGATED HDPE PIPE		
4.9	CABLE TRAYS		
	SECTION - 5		
5.1	CEILING AND EXHAUST FANS		
5.2	WATER HEATERS		
5.3	ACCESSORIES FOR WATER HEATERS		
5.4	STARTERS FOR MOTORS		
5.5	SINGLE PHASE SUBMERSIBLE MOTOR PUMP SETS		
5.6	THREE PHASE SUBMERSIBLE MOTOR PUMP SETS.		
5.7	SINGLE PHASE OPEN WELL SUBMERSIBLE MOTOR PUMP SETS.		
5.8	THREE PHASE OPEN WELL SUBMERSIBLE PUMP SETS.		
5.9	SINGLE PHASE MONO BLOCK MOTOR PUMP SETS.		
5.10	CONTROL PANEL BOARD FOR MOTORS		
5.11	UPVC PIPES AND FITTINGS		
5.12	REPAIRS TO MOTORS AND REWINDING, BEARINGS		
5.13	ACCESSORIES OF MOTORS		

SL. NO.	INDEX	PAGE NOS	
		FROM	TO
	SECTION - 6		
6.1	AIR CONDITIONERS		
6.2	INVERTER SPLIT AC UNITS (COOLING ONLY)		
6.3	INVERTER CASSETTE TYPE AC UNITS		
6.4	TOWER MODEL TYPE AC UNITS		
6.5	REPAIRS TO AIR CONDITIONERS		
6.6	EVAPORATIVE AIR COOLING SYSTEM		
6.7	STABILIZERS		
	SECTION - 7		
7.1	SWAGED POLES, GARDEN POSTS AND ACCESSORIES		
7.2	OCTOGONAL POLES		
7.3	BRACKETS		
7.4	HIGH MAST POLES		
7.5	FEEDER PILLER BOX		
7.6	ERRECTION OF HIGH MAST POLES		
7.7	CONICAL POLES		
7.8	DECORATIVE DRAGON TYPE BRACKET WITH POLE		
7.9	THERMO PLASTIC POLE BOXES		
7.10	FOUNDATION AND ERRECTION CHARGES OF POLES		
7.11	G R P POLES		
7.12	CONTROL PANEL BOARD		
7.13	METERING EQUIPMENT		
7.14	SUB STATION EQUIPMENT		
7.15	TRANSFORMERS		
7.16	L.T. LINE MATERIALS AND LIGHTENING PROTECTIVE SYSTEM		
	SECTION - 8		
8.1	NET WORKING		
8.2	RACEWAYS AND JUNCTION BOXES		
8.3	EPABX SYSTEM		
	SECTION - 9		
9.1	MISCELLANIOUS ITEMS		
9.2	LEGEND PLATES		
9.3	COPPER / ALLUMINIUM / G.I. ITEMS (PER KG)		
9.4	SMC TYPE SUPPORTS FOR THE BUSBARS		

SL. NO.	INDEX	PAGE NOS	
		FROM	TO
	SECTION - 10		
10.1	WIRELESS FIRE ALARAM SYSTEM		
10.2	ADDRESSABLE - FIRE ALARAM SYSTEM		
10.3	CONVENTIONAL - FIRE ALARAM SYSTEM		
10.4	POWDER BASED FIRE EXTINGUISHERS		
10.5	CLEAN AGENT FIRE EXTINGUISHERS		
10.6	WATER MIST FIRE EXTINGUISHERS		
10.7	FIRE HYDRANT AND SPRINKLER SYSTEM		
	SECTION - 11		
11.1	GENERATORS		
	SECTION - 12		
12.1	U P S SYSTEMS		
12.2	UPS BATTERY RACKS AND WIRE LEADS		
12.3	OLD MATERIAL RATES		

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
		SECTION - 1		
	1.1	M.S. CONDUIT PIPES		
	ELEC-1.1.1	Supply of ISI, ----- dia, 1.6mm thickness MS conduit pipe as per IS 9537 Part II / 1981. Makes : NAI / Bharath / GB / BEC.		
1	a	20mm	1 Mtr	90.00
2	b	25mm	1 Mtr	115.00
3	c	32mm	1 Mtr	163.00
	ELEC-1.1.2	Supply of ISI, ----- dia, 2.0mm thickness MS conduit pipe as per IS 9537 Part II / 1981. Makes : NAI / Bharath / GB / BEC.		
4	a	40mm	1 Mtr	274.00
5	b	50mm	1 Mtr	344.00
		HOT DIP GALVANIZED CONDUIT PIPES		
	ELEC-1.1.3	Supply of ISI, ----- dia, 1.6mm thickness hot dip galvanized conduit pipe as per IS 9537 Part II / 1981. Makes : NAI / Bharath / GB / BEC.		
6	a	20mm	1 Mtr	145.00
7	b	25mm	1 Mtr	175.00
8	c	32mm	1 Mtr	270.00
	ELEC-1.1.4	Supply of ISI, ----- dia, 2.0mm thickness hot dip galvanized conduit pipe as per IS 9537 Part II / 1981. Makes : NAI / Bharath / GB / BEC.		
9	a	40mm	1 Mtr	430.00
10	b	50mm	1 Mtr	500.00
	ELEC-1.1.5	Supply of ----- MS Junction box normal range big size long neck.		
11	a	19 / 20 mm	1 No	24.00
12	b	25 mm	1 No	27.00
13	c	32 mm	1 No	73.00
14	d	40 / 38 mm	1 No	104.00
15	e	50 mm	1 No	202.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-1.1.6	Supply of-----MS Junction deep box.			
16	a	20/25mm	1	No	65.00
17	b	32mm	1	No	113.00
18	c	40mm	1	No	139.00
19	d	50mm	1	No	166.00
	ELEC-1.1.7	Supply of-----MS Inspection Bends.			
20	a	19/20mm	1	No	22.00
21	b	25mm	1	No	24.00
22	c	32mm	1	No	53.00
23	d	40/38mm	1	No	82.00
24	e	50mm	1	No	172.00
	ELEC-1.1.8	Supply of-----MS Inspection Tee.			
25	a	19/20mm	1	No	24.00
26	b	25mm	1	No	26.00
27	c	32mm	1	No	72.00
28	d	40/38mm	1	No	87.00
29	e	50mm	1	No	177.00
	ELEC-1.1.9	Supply of-----MS Inspection Elbow.			
30	a	19/20mm	1	No	19.00
31	b	25mm	1	No	20.00
32	c	32mm	1	No	56.00
33	d	40/38mm	1	No	72.00
34	e	50mm	1	No	160.00
	ELEC-1.1.10	Supply of MS Inspection 10 Guage G.I. checknut size			
35	a	19/20mm	100	Nos	198.00
36	b	25mm	100	Nos	252.00
37	c	32mm	100	Nos	510.00
38	d	40/38mm	100	Nos	766.00
39	e	50mm	100	Nos	1210.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-1.1.11	Supply of-----Saddles with Base.			
40	a	19/20mm	100	Nos	197.00
41	b	25mm	100	Nos	206.00
42	c	32mm	100	Nos	383.00
43	d	40/38mm	100	Nos	658.00
44	e	50mm	100	Nos	834.00
	ELEC-1.1.12	Supply of-----20 guage Saddles.			
45	a	19/20mm	100	Nos	109.00
46	b	25mm	100	Nos	140.00
47	c	32mm	100	Nos	228.00
48	d	40/38mm	100	Nos	305.00
49	e	50mm	100	Nos	393.00
	ELEC-1.1.13	Supply of-----16 Guage socket coupler.			
50	a	19/20mm	12	Nos	57.00
51	b	25mm	12	Nos	67.00
52	c	32mm	12	Nos	154.00
53	d	38mm	12	Nos	280.00
54	e	40mm	12	Nos	161.00
55	f	50mm	12	Nos	457.00
	ELEC-1.1.14	Supply of-----Ball Socket.			
56	a	19mm	12	Nos	237.00
57	b	25mm	12	Nos	354.00
	1.2	PVC CONDUIT PIPES			
	ELEC-1.2.1	Supply of ISI -----outer dia heavy grade, FRLS with IS:9537 part 3 rigid PVC pipe. Makes : Sudhakar / Finolex / Modi / VIP / Precision / Universal / Million Plast			
58	a	20mm	1	Mtr	23.00
59	b	25mm	1	Mtr	30.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
	ELEC-1.2.2	Supply of ISI ----- outer dia medium grade, FRLS with IS:9537 part 3 rigid PVC pipe. Makes : Sudhakar / Finolex / Modi / VIP / Precision / Universal / Million Plast		
60	a	20mm	1 Mtr	18.00
61	b	25mm	1 Mtr	24.00
62	c	32mm	1 Mtr	39.00
63	d	40mm	1 Mtr	53.00
64	e	50mm	1 Mtr	74.00
	ELEC-1.2.3	Supply of FRLS Non - ISI ----- 1.80mm thick rigid PVC pipe. Makes : Million Plast / Sudhakar / Durga / Nandi / Sunlight / Besto Plast / Gold Medal.		
65	a	19mm	1 Mtr	17.00
66	b	25mm	1 Mtr	22.00
	ELEC-1.2.4	Supply of ----- width and 12.5mm height Casing and Caping. Makes : Modi with ISI		
67	a	19/20mm	1 Mtr	24.00
68	b	25mm	1 Mtr	30.00
69	c	32mm	1 Mtr	34.00
70	d	38/40mm	1 Mtr	58.00
	ELEC-1.2.5	Supply of Non-ISI ----- width and 12.5mm height Casing and Caping.		
71	a	19/20mm	1 Mtr	16.00
72	b	25mm	1 Mtr	17.00
	ELEC-1.2.6	Supply of ----- FRPP Flexible Conduit Pipe. Make: Precision or its equivalet		
73	a	20mm	1 Mtr	12.00
74	b	25 mm	1 Mtr	15.00
75	c	32 mm	1 Mtr	24.00
76	d	40 mm	1 Mtr	33.00
77	e	50 mm	1 Mtr	54.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-1.2.7	Supply of ----- PVC Flexible Couplings. Make: Precision or its equivalet			
78	a	19/20mm	1	No	11.00
79	b	25mm	1	No	14.00
80	c	32mm	1	No	26.00
81	d	38/40mm	1	No	28.00
82	e	50mm	1	No	56.00
	ELEC-1.2.8	Supply of----- PVC Junction Boxes Normal. Makes : Sudhakar / Finolex / Modi / VIP / Precision			
83	a	19 / 20mm	1	No	17.00
84	b	25 mm	1	No	18.00
85	c	32 mm	1	No	32.00
86	d	40 mm	1	No	34.00
87	e	50 mm	1	No	47.00
	ELEC-1.2.9	Supply of PVC Junction Boxes Deep size Makes : Sudhakar / Finolex / Modi / VIP / Precision			
88	a	19 / 20mm	1	No	21.00
89	b	25 mm	1	No	24.00
90	c	32 mm	1	No	37.00
91	d	40 mm	1	No	40.00
92	e	50 mm	1	No	58.00
	ELEC-1.2.10	Supply of ----- dia 1.5mm thick PVC Bends. Makes : Sudhakar / Finolex / Modi / VIP / Precision / Universal			
93	a	19 / 20mm	1	No	5.00
94	b	25 mm	1	No	7.00
	ELEC-1.2.11	Supply of ----- dia 2.0mm thick PVC Bends. Makes : Sudhakar / Finolex / Modi / VIP / Precision / Universal			
95	c	32 mm	1	No	16.00
96	d	40 mm	1	No	18.00
97	e	50 mm	1	No	26.00
98	ELEC-1.2.12	Dummy Cover to PVC junction boxes	1	No	5.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	1.3	HOT DIP GALVANIZED METAL BOXES (MODULAR)			
	ELEC-1.3.1	Supply of ----- Module box Makes : Similar to Switches Make			
99	a	1 or 2	1	No	54.00
100	b	3	1	No	76.00
101	c	4	1	No	90.00
102	d	6	1	No	122.00
103	e	8 or 9 Module box Horizontal/Vertical.	1	No	160.00
104	f	12	1	No	195.00
		MODULAR COVER FRAMES			
	ELEC-1.3.2	Supply of ----- Modular Cover Frame. Makes : Legrand Arteur / Schneider Zen celo / Honeywell Blenge Plus / Cabtree Amare / Logus Platina.			
105	a	1 or 2	1	No	61.00
106	b	3	1	No	72.00
107	c	4	1	No	84.00
108	d	6	1	No	122.00
109	e	8 or 9 Modular Horizontal / Vertical Cover Frame.	1	No	161.00
110	f	12	1	No	196.00
		MODULAR COVER FRAMES			
	ELEC-1.3.3	Supply of ----- Modular Cover Frame. Makes : Legrand Myrius / Million Tap-Wood / Gold Medal Curve / Anchor Roma viola / GM Four-Five / Salzar / Stanjo Amron / Havells Fabio / C&S / Benlo.			
111	a	1 or 2	1	No	53.00
112	b	3	1	No	65.00
113	c	4	1	No	76.00
114	d	6	1	No	101.00
115	e	8 or 9 Modular Horizontal / Vertical Cover Frame.	1	No	128.00
116	f	12	1	No	156.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		METALLIC BOXES (MS)			
	ELEC-1.3.4	Supply of ----- Metal Box			
117	a	4" x 4"	1	No	49.00
118	b	4" x 7"	1	No	57.00
119	c	6" x 6"	1	No	72.00
120	d	6" x 8"	1	No	96.00
121	e	8" x 10"	1	No	167.00
122	f	10" x 12"	1	No	214.00
	1.4	T.W. BOARDS			
	ELEC-1.4.1	Supply of T.W.Deep Box of Size			
123	a	4" x 4"	1	No	10.00
124	b	4" x 7"	1	No	18.00
125	c	6" x 6"	1	No	22.00
126	d	6" x 8"	1	No	30.00
127	e	8" x 10"	1	No	48.00
128	f	10" x 12"	1	No	73.00
129	g	12" x 15"	1	No	109.00
	ELEC-1.4.2	Supply of Decolam Board of Size			
130	a	4" x 4"	1	No	14.00
131	b	4" x 7"	1	No	25.00
132	c	6" x 6"	1	No	33.00
133	d	6" x 8"	1	No	44.00
134	e	8" x 10"	1	No	73.00
135	f	10" x 12"	1	No	109.00
136	g	12" x 15"	1	No	164.00
	ELEC-1.4.3	Supply of Peeta Board of Size -----			
137	a	9" x 14"	1	No	54.00
138	b	12" x 10"	1	No	56.00
139	c	15" x 20"	1	No	191.00
140	d	18" x 24"	1	No	275.00
141	e	18" x 30"	1	No	343.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		SCREWS			
	ELEC-1.4.4	Supply of No.8 Screws of size-----			
142	a	12mm.	100	Nos	62.00
143	b	25mm.	100	Nos	76.00
144	c	30mm.	100	Nos	93.00
145	d	35/38mm.	100	Nos	101.00
146	e	50mm.	100	Nos	113.00
147	f	63/75mm.	100	Nos	138.00
	1.5	COPPER FLEXIBLE CABLES (AS PER IS:694)			
	ELEC-1.5.1	Supply of -----FRLS / HFFR PVC insulated 1100V grade as per IS:694/1990 specification for Copper cable. Makes : Finolex / RR kabel / Havells / APAR EBXL / KEI / L&T / V-Guard.			
148	a	14/0.3mm (1.0 Sqmm)	100	Mtrs	1002.00
149	b	22/0.3mm (1.5 Sqmm)	100	Mtrs	1482.00
150	c	36/0.3mm (2.5 Sqmm)	100	Mtrs	2391.00
151	d	56/0.3mm (4.0 Sqmm)	100	Mtrs	3650.00
152	e	84/0.3mm (6.0 Sqmm)	100	Mtrs	5549.00
153	f	140/0.3mm (10.0 Sqmm)	100	Mtrs	8597.00
154	g	126/0.4mm (16.0 Sqmm)	100	Mtrs	13595.00
	ELEC-1.5.2	Supply of -----FRLS / HFFR PVC insulated 1100V grade as per IS:694/1990 specification for Copper cable. Makes : Polycab / HPL / RPG / Kundancab / Nakoda / Anchor / GM / Million / Gold Medal / Power Flex / Fine Cab / Sun Cab / Fortune Art / Bonton / Gloster / Gemini / Uniflex / Sudhakar / Nandicab.			
155	a	14/0.3mm (1.0 Sqmm)	100	Mtrs	881.00
156	b	22/0.3mm (1.5 Sqmm)	100	Mtrs	1294.00
157	c	36/0.3mm (2.5 Sqmm)	100	Mtrs	2091.00
158	d	56/0.3mm (4.0 Sqmm)	100	Mtrs	3200.00
159	e	84/0.3mm (6.0 Sqmm)	100	Mtrs	4998.00
160	f	140/0.3mm (10.0 Sqmm)	100	Mtrs	7598.00
161	g	126/0.4mm (16.0 Sqmm)	100	Mtrs	12596.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-1.5.3	Supply of -----FRLS / HFFR PVC insulated 1100V grade as per IS:694/1990 specification for Copper cable. Makes : Benlo / Khanthi / Vimal / Stanjo / Airson / Rajnigandha / Orbit			
162	a	14/0.3mm (1.0 Sqmm)	100	Mtrs	759.00
163	b	22/0.3mm (1.5 Sqmm)	100	Mtrs	1095.00
164	c	36/0.3mm (2.5 Sqmm)	100	Mtrs	1768.00
165	d	56/0.3mm (4.0 Sqmm)	100	Mtrs	2650.00
166	e	84/0.3mm (6.0 Sqmm)	100	Mtrs	4099.00
167	f	140/0.3mm (10.0 Sqmm)	100	Mtrs	6498.00
168	g	126/0.4mm (16.0 Sqmm)	100	Mtrs	9996.00
169	ELEC-1.5.4	Supply of 23 / 0060 twin core twisted / flat heavy Copper wire. Makes : Finolex / RR Kabel / Havells / Polycab / GM / Million / V-Guard / Gold Medal / Kundancab / HPL / RPG / Nandicab / Nakoda / Payal / Finecab / Gemini / Vimal / Suncab	100	Mtrs	953.00
		SHEATHED FLEXIBLE COPPER CABLES			
	ELEC-1.5.5	Supply of PVC Insulated and FRLS Round Sheathed Multi Core Bright Annealed Bare Copper Conductor Heavy Duty Industrial Cables for Voltage Grade upto 1100 Volts as per IS: 694:1990 including all transportation charges etc complete. Makes : Finolex / RR kabel / Havells / Polycab / RPG / KEI / Nakoda / Sun cab / Sudhakar / Powerflex / Gemni / HPL / Gloster			
170	a	25 Sqmm Single Core	1	RM	209.00
171	b	35 Sqmm Single Core	1	RM	294.00
172	c	50 Sqmm Single Core	1	RM	416.00
173	d	70 Sqmm Single Core	1	RM	575.00
174	e	1.5 Sqmm (22/0.3mm)2 core	1	RM	44.00
175	f	2.5 Sqmm (36/0.3mm) 2 Core	1	RM	69.00
176	g	4.0 Sqmm (56/0.3) 2 Core	1	RM	92.00
177	h	6.0 Sqmm (84/0.3) 2 Core	1	RM	144.00
178	i	10.0 Sqmm (80/0.4) 2 Core	1	RM	206.00
179	j	16.0 Sqmm(126/0.4) 2 Core	1	RM	257.00
180	k	1.5 Sqmm (22/0.3mm) 3 core	1	RM	59.00
181	l	2.5 Sqmm (36/0.3mm)3 Core	1	RM	101.00
182	m	4.0 Sqmm (56/0.3) 3 Core	1	RM	132.00
183	n	6.0 Sqmm (84/0.3) 3 Core	1	RM	175.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
184	o	10.0 Sqmm (80/0.4) 3 Core	1	RM	226.00
185	p	16.0 Sqmm(126/0.4) 3 Core	1	RM	356.00
186	q	1.5 Sqmm (22/0.3mm)4 Core	1	RM	77.00
187	r	2.5 Sqmm (36/0.3mm) 4 Core	1	RM	117.00
188	s	4.0 Sqmm (56/0.3) 4 Core	1	RM	175.00
189	t	6.0 Sqmm (84/0.3) 4 Core	1	RM	277.00
190	u	10.0 Sqmm (80/0.4) 4 Core	1	RM	412.00
191	v	16.0 Sqmm(126/0.4) 4 Core	1	RM	534.00
192	w	25.0 Sqmm(196/0.4) 4 Core	1	RM	874.00
193	x	35.0 Sqmm(276.04) 4 Core	1	RM	1309.00
194	y	50.0 Sqmm(396/0.4) 4 Core	1	RM	1734.00
195	z	70.0 Sqmm(354/0.5) 4 Core	1	RM	2444.00
	ELEC-1.5.6	Supply of PVC Insulated, Flexible Armouring Flexible Copper cable as per IS 7098 / Part-I / 1988 including all transportation charges etc complete. Makes : Finolux / RR kabel / Havells / Polycab / RPG / KEI / Nakoda / Gemni / HPL / Gloster			
196	a	1.5 Sqmm (22/0.3) 2 Core	1	RM	68.00
197	b	4.0 Sqmm (56/0.3) 2 Core	1	RM	122.00
198	c	6.0 Sqmm (84/0.3) 2 Core	1	RM	170.00
199	d	10.0 Sqmm (80/0.4) 2 Core	1	RM	240.00
200	e	16.0 Sqmm(126/0.4) 2 Core	1	RM	333.00
201	f	1.5 Sqmm (22/0.3) 3 Core	1	RM	87.00
202	g	2.5 Sqmm (36/0.3) 3 Core	1	RM	114.00
203	h	4.0 Sqmm (56/0.3) 3 Core	1	RM	142.00
204	i	6.0 Sqmm (84/0.3) 3 Core	1	RM	203.00
205	j	10.0 Sqmm (80/0.4) 3 Core	1	RM	250.00
206	k	16.0 Sqmm(126/0.4) 3 Core	1	RM	354.00
207	l	1.5 Sqmm (22/0.3) 4 Core	1	RM	109.00
208	m	2.5 Sqmm (50/0.25) 4 Core	1	RM	140.00
209	n	4.0 Sqmm (56/0.3) 4 Core	1	RM	206.00
210	o	6.0 Sqmm (84/0.3) 4 Core	1	RM	293.00
211	p	10.0 Sqmm (80/0.4) 4 Core	1	RM	449.00
212	q	16.0 Sqmm(126/0.4) 4 Core	1	RM	760.00
213	r	25.0 Sqmm(196/0.4) 4 Core	1	RM	1174.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
214	s	35.0 Sqmm(276.04) 4 Core	1	RM	1608.00
215	t	50.0 Sqmm(396/0.4) 4 Core	1	RM	2283.00
216	u	70.0 Sqmm(354/0.5) 4 Core	1	RM	3510.00
217	v	2.5 Sqmm(36/0.3) 8 Core	1	RM	250.00
218	w	1.5 Sqmm(22/0.3) 10 Core	1	RM	213.00
	1.6	SERVICE MAINS AND FLAT CABLE OF ISI FOR SUBMERSIBLE MOTORS.			
	ELEC-1.6.1	Supply of ----- WPSC (Weather Proof Single Core) ISI Alluminium Wire. Makes : Polycab / GM / Million / V-Guard / Gold Medal / Kundancab / HPL / RPG / Nandicab / Nakoda / Payal / Finecab / Gemini / Vimal / Suncab / Stanjo / Rajnigandha / Orbit.			
219	a	2.5 Sqmm	100	Mtrs	689.00
220	b	6.0 Sqmm	100	Mtrs	1398.00
221	c	10.0 Sqmm	100	Mtrs	1504.00
222	d	16 Sqmm	100	Mtrs	2514.00
	ELEC-1.6.2	Supply of ----- WPTC (Weather Proof Twin Core) ISI Alluminium Wire. Makes : Polycab / GM / Million / V-Guard / Gold Medal / Kundancab / HPL / RPG / Nandicab / Nakoda / Payal / Finecab / Gemini / Vimal / Suncab / Stanjo / Rajnigandha / Orbit.			
223	a	6 Sqmm	100	Mtrs	2816.00
224	b	10 Sqmm	100	Mtrs	3387.00
	ELEC-1.6.3	Supply of 3 Core ----- Flat Copper cable of ISI for Submersible Motors. Makes : Finolex / RR Kabel / Havells / Nakoda / KEI / L&T			
225	a	1.5 Sqmm	100	Mtrs	5871.00
226	b	2.5 Sqmm	100	Mtrs	9013.00
227	c	4.0 Sqmm	100	Mtrs	13519.00
228	d	6.0 Sqmm	100	Mtrs	19923.00
229	e	10.0 Sqmm	100	Mtrs	32374.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-1.6.4	Supply of 3 Core ----- Flat Copper cable of ISI for Submersible Motors. Makes : Polycab / GM / Million / V-Guard / Gold Medal / Kundancab / HPL / RPG / Nandicab / Payal / Finecab / Gemini / Vimal / Suncab / Airson / Stanjo			
230	a	1.5 Sqmm	100	Mtrs	5576.00
231	b	2.5 Sqmm	100	Mtrs	8563.00
232	c	4.0 Sqmm	100	Mtrs	12844.00
233	d	6.0 Sqmm	100	Mtrs	18922.00
234	e	10.0 Sqmm	100	Mtrs	30760.00
	1.7	FLUSH TYPE SWITCHES AND ACCESSORIES			
	ELEC-1.7.1	Supply of ----- Makes : GM G Home / Gold Medal Olive / Million Zoom / Anchor Penta Cherry / Great white Omega / HPL / Vimal / CPL.			
235	a	6A 1 Way flush type Swich.	1	No	16.00
236	b	6A 2 Way flush type Swich.	1	No	19.00
237	c	6A 2 pin flush type Socket.	1	No	18.00
238	d	6A 3/2 pin flush type Socket with shutter.	1	No	24.00
239	e	6A flush type Neon Indicator.	1	No	18.00
240	f	6A Triangle Plug Top .	1	No	33.00
241	g	6A 1 Way flush type Bed Swich / Bell Push.	1	No	19.00
242	h	16A flush type Swich.	1	No	59.00
243	i	16A flush type Socket with shutter.	1	No	59.00
244	j	16A flush type Switch Socket combined (2 in one).	1	No	93.00
245	k	16A Triangle Plug Top.	1	No	46.00
246	l	Stepped type Electronic Regulator.	1	No	200.00
247	m	3 Plate Jumbo Ceiling Rose.	1	No	19.00
248	n	BH / SBH.	1	No	18.00
249	o	Pendent Holder / Adopter.	1	No	16.00
250	p	Telephone Jack with Connector	1	No	44.00
251	q	TV Antenna Outlet.	1	No	24.00
252	r	15A/10A Flush type Fuse.	1	No	30.00
253	s	32A DP Flush type	1	No	97.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-1.7.2	Supply of ----- Makes : GM / Million / Gold Medal / Anchor / Great white.			
254	a	Calling Bell	1	No	46.00
255	b	Buzzer.	1	No	41.00
256	c	Ding Dong Bell.	1	No	93.00
257	d	Electronic Musical Bell.	1	No	218.00
258	e	Remote Bell.	1	No	408.00
259	f	MC Holder.	1	No	19.00
260	g	Spike Guard with 1 No Switch and 4 Nos Sockets.	1	No	282.00
261	h	Spike Guard with 4 No Switches and 4 Nos Sockets.	1	No	372.00
	1.8	MINI MODULAR SWITCHES AND ACCESSORIES			
	ELEC-1.8.1	Supply of ----- Makes : GM / Anchor / Million / Vimal / Gold Medal / CPL / Great White.			
262	a	6A 1 Way Mini Modular Switch with Cover Frame.	1	No	21.00
263	b	6A 2 Way Mini Modular Switch with Cover Frame.	1	No	24.00
264	c	6A 2 Pin Mini Modular Socket with Cover Frame.	1	No	22.00
265	d	6A 3/2 Pin Mini Modular Socket with Cover Frame.	1	No	32.00
266	e	6A Mini Modular Neon Indicator with Cover Frame.	1	No	25.00
267	f	6A Mini Modular Bed Switch / Bell Push with Cover Frame.	1	No	24.00
268	g	6A 1 Way Mini Modular Switch with Neon Indicator with Cover Frame.	1	No	25.00
269	h	6A Mini Modular Bell Push with Neon Indicator with Cover Frame.	1	No	35.00
270	i	16A Mini Modular Switch with Cover Frame.	1	No	72.00
271	j	16A (2 in one) Mini Modular Switch & Socket combined with Cover Frame.	1	No	98.00
272	k	16A Triangle Top with Cover Frame.	1	No	44.00
273	l	Mini Modular Stepped type Electronic Regulator with Cover Frame.	1	No	214.00
274	m	Mini Modular Telephone Jack with Connector with Cover Frame.	1	No	48.00
275	n	Mini Modular TV Antenna Outlet with Cover Frame.	1	No	32.00
276	o	16A/10A Mini Modular Flush Fuse with Cover Frame.	1	No	36.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	1.9	MODULAR SWITCHES AND ACCESSORIES			
	ELEC-1.9.1	Supply of ----- Makes : Legrand Arteor / Schneider Zen celo / Honeywell Blenge Plus / Cabtree Amare / Logus Platina.			
277	a	6A / 10A 1 Way 1 Module Modular Switch	1	No	86.00
278	b	6A / 10A 2 Way 1 Module Modular Switch.	1	No	95.00
279	c	6A / 10A 2 Pin 2 Module Modular Socket.	1	No	87.00
280	d	6A / 10A 3/2 Pin 2 Module Modular Socket with shutter.	1	No	132.00
281	e	6A / 10A 1 Module Modular Switch with Neon Indicator.	1	No	109.00
282	f	6A / 10A Modular Bell Push with Neon Indicator.	1	No	128.00
283	g	16A / 10A Modular Flush Fuse with Neon Indicator.	1	No	118.00
284	h	16A / 20A 1 Way 1 Module Modular Switch.	1	No	118.00
285	i	16A / 20A 2 Way 1 Module Modular Switch.	1	No	129.00
286	j	20A 1 Way 1 Module Modular Switch with Indicator.	1	No	129.00
287	k	20A 2 Module Modular Socket with shutter.	1	No	176.00
288	l	16A / 6A 1 way 2 Module Combi Socket Modular Socket with shutter.	1	No	184.00
289	m	16A Triangle Top.	1	No	148.00
290	n	1 Module Modular type Electronic step type Fan Regulator.	1	No	442.00
291	o	Modular socket type Telephone jack with Connector.	1	No	93.00
292	p	Modular co-Axial socket type TV Antenna outlet.	1	No	92.00
	ELEC-1.9.2	Supply of ----- Makes : Legrand Myrius / Million mway / Gold Medal Curve / Anchor Roma viola / GM Four-Five / Salzar / Stanjo Amron / Havells Fabio / C&S / Benlo.			
293	a	6A / 10A 1 Way 1 Module Modular Switch	1	No	59.00
294	b	6A / 10A 2 Way 1 Module Modular Switch.	1	No	70.00
295	c	6A / 10A 2 Pin 2 Module Modular Socket.	1	No	60.00
296	d	6A / 10A 3/2 Pin 2 Module Modular Socket with shutter.	1	No	87.00
297	e	6A / 10A 1 Module Modular Switch with Neon Indicator.	1	No	70.00
298	f	6A / 10A Modular Bell Push with Neon Indicator.	1	No	84.00
299	g	16A / 10A Modular Flush Fuse with Neon Indicator.	1	No	78.00
300	h	16A / 20A 1 Way 1 Module Modular Switch.	1	No	78.00
301	i	16A / 20A 2 Way 1 Module Modular Switch.	1	No	89.00
302	j	20A 1 Way 1 Module Modular Switch with Indicator.	1	No	85.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
303	k	20A 2 Module Modular Socket with shutter.	1	No	125.00
304	l	16A / 6A 1 way 2 Module Combi Socket Modular Socket with shutter.	1	No	126.00
305	m	16A Triangle Top.	1	No	61.00
306	n	1 Module Modular type Electronic step type Fan Regulator.	1	No	351.00
307	o	Modular socket type Telephone jack with Connector.	1	No	61.00
308	p	Modular co-Axial socket type TV Antenna outlet.	1	No	60.00
SECTION - 2					
	2.1	PANEL MOUNTING SWITCH DISCONNECTOR FUSE UNITS (SDFU) AS PER IS: 13947			
	ELEC-2.1.1	Supply of ----- TPN Switch Disconnecter Fuse Unit Cubical type without fuses. Makes : L&T / G E / C&S / ABB / SIEMENS			
309	a	32A	1	No	1287.00
310	b	63A	1	No	2219.00
311	c	125A	1	No	5311.00
312	d	200A	1	No	6931.00
313	e	250A	1	No	8321.00
314	f	400A	1	No	12810.00
315	g	630A	1	No	21667.00
	ELEC-2.1.2	Supply of ----- TPN Switch Disconnecter Fuse Unit Cubical type without fuses. Makes : Havells / HPL / Indo Asian / Standard / Vimal.			
316	a	32A	1	No	1076.00
317	b	63A	1	No	1612.00
318	c	125A	1	No	3644.00
319	d	200A	1	No	5507.00
320	e	250A	1	No	6210.00
321	f	400A	1	No	9482.00
322	g	630A	1	No	15745.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	2.2	ON LOAD CHANGEOVER SWITCHES (OPEN EXECUTION) AS PER IS:13947			
	ELEC-2.2.1	Supply of-----4 Pole Change Over Switch on Load with open Execution. Makes : Socomec / L & T			
323	a	63A	1	No	4053.00
324	b	125A	1	No	7672.00
325	c	200A	1	No	10265.00
326	d	250A	1	No	14588.00
327	e	400A	1	No	22259.00
328	f	630A	1	No	26473.00
	ELEC-2.2.2	Supply of-----4 Pole Change Over Switch on Load with open Execution. Makes : ABB / Siemens / Havells / Indo Asian / HPL / Standard / C&S / Benlo.			
329	a	32A	1	No	1410.00
330	b	63A	1	No	3675.00
331	c	125A	1	No	7139.00
332	d	200A	1	No	9447.00
333	e	250A	1	No	13436.00
334	f	400A	1	No	20888.00
335	g	630A	1	No	25086.00
	2.3	OFF LOAD CHANGE OVER SWITCHES IN SS ENCLOSURE AS PER IS:13947			
	ELEC-2.3.1	Supply of ----- Off load Changeover Switch in sheet steel enclosure. Makes : HPL / Havells / Indo Asian / Sputnik			
336	a	32A 240V DP	1	No	1231.00
337	b	63A 415V FP	1	No	4288.00
338	c	100A 415V FP	1	No	6540.00
	ELEC-2.3.2	Supply of ----- Off load Changeover Switch in sheet steel enclosure. Makes : Million / Benlo / Gold Medal / Star/ Standard / C&S.			
339	a	32A 240V DP	1	No	710.00
340	b	63A 415V FP	1	No	2493.00
341	c	100A 415V FP	1	No	4685.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	2.4	REWIRABLE / DOUBLE BREAK SWITCHES IN SS ENCLOSURE AS PER IS:13947			
	ELEC-2.4.1	Supply of ----- Rewirable Fuse Switch in SS enclosure. Makes : HPL / Havells / Indo Asian / C&S			
342	a	32A 240V SPN	1	No	832.00
343	b	32A 415V TPN	1	No	1286.00
344	c	63A 415V TPN	1	No	2936.00
345	d	100A 415V TPN	1	No	5465.00
	ELEC-2.4.2	Supply of ----- Double Break Switch in SS enclosure without fuses. Makes : HPL / Havells / Indo Asian / C&S			
346	a	100A 415V TPN	1	No	5503.00
347	b	200A 415V TPN	1	No	8023.00
	ELEC-2.4.3	Supply of ----- Rewirable Fuse Switch in SS enclosure. Makes : GM / Million / Sputnik / Sigma / Gold Medal / Benlo / Star.			
348	a	32A 240V SPN	1	No	552.00
349	b	32A 415V TPN	1	No	919.00
350	c	63A 415V TPN	1	No	2089.00
351	d	100A 415V TPN	1	No	4071.00
	ELEC-2.4.4	Supply of ----- Double Break Switch in SS enclosure without fuses. Makes : GM / Million / Sputnik / Sigma / Gold Medal / Benlo / Star.			
352	a	100A 415V TPN	1	No	4205.00
353	b	200A 415V TPN	1	No	6887.00
	2.5	HRC FUSE LINKS (BOLTED TYPE)			
	ELEC-2.5.1	Supply of ----- HRC Fuse Links. Makes : L & T / C & S / Standard / HPL / Havells / Siemens / Indo Asian.			
354	a	Up to 32A	1	No	47.00
355	b	32A to 63A	1	No	72.00
356	c	125A to 200A	1	No	232.00
357	d	250A to 350A	1	No	339.00
358	e	400A	1	No	657.00
359	f	630A	1	No	1330.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	2.6	PORCELAIN REWIRABLE FUSE UNITS.			
	ELEC-2.6.1	Supply of ----- Porcelain Rewirable Fuse Units. Makes : C&S / GM / Sputnik / Kundancab / Million / Gold Medal / Vimal / Star / Benlo.			
360	a	32A 240V	1	No	92.00
361	b	32A 415V	1	No	116.00
362	c	63A 415V	1	No	243.00
363	d	100A 415V	1	No	453.00
	ELEC-2.6.2	Supply of ----- Porcelain Rewirable Fuse Units with extension strip. Makes : C&S / GM / Sputnik / Kundancab / Million / Gold Medal / Vimal / Star / Benlo.			
364	a	200A 415V	1	No	832.00
365	b	300A 415V	1	No	1104.00
	2.7	VOLTAGE SURGE PROTECTORS			
	ELEC-2.7.1	Supply of ----- Voltage Surge Protector. Make:Legrand / Siemens / Hager / L&T.			
366	a	2 Pole 2 Module 40 KA 1.4 KV	1	No	7254.00
367	b	4 Pole 4 Module 40 KA 1.4 KV	1	No	13601.00
368	c	2 Pole 2 Module 15 KA 1.2 KV	1	No	5803.00
369	d	4 Pole 4 Module 15 KA 1.2 KV	1	No	10880.00
	2.8	PANEL MOUNTING MCCBs			
	ELEC-2.8.1	Supply of ----- Adjustable, Confirms to IS/IEC 60947-2 having Breaking Capacity -----KA with thermal magnetic release Panel Mounted. Makes : L&T / Schneider / Siemens / Legrand / Hager / ABB.			
370	a	63A 3 Pole MCCB, 16KA	1	No	5939.00
371	b	63A 4 Pole MCCB, 16KA	1	No	6678.00
372	c	125A 3 Pole MCCB, 25KA	1	No	7051.00
373	d	125A 4 Pole MCCB, 25KA	1	No	8526.00
374	e	160A 3 Pole MCCB, 25KA	1	No	9350.00
375	f	160A 4 Pole MCCB, 25KA	1	No	12210.00
376	g	250A 3 Pole MCCB, 35/36KA	1	No	15706.00
377	h	250A 4 Pole MCCB, 35/36KA	1	No	20403.00
378	i	400A 3 Pole MCCB, 35/36KA	1	No	21257.00
379	j	400A 4 Pole MCCB, 35/36KA	1	No	25685.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
380	k	630A 3 Pole MCCB, 50KA	1	No	30620.00
381	l	630A 4 Pole MCCB, 50KA	1	No	37900.00
382	m	800A 3 Pole MCCB, 50KA	1	No	54600.00
383	n	800A 4 Pole MCCB, 50KA	1	No	60500.00
	ELEC-2.8.2	Supply of ----- Adjustable, Confirms to IS/IEC 60947-2 having Breaking Capacity -----KA with thermal magnetic release Panel Mounted. Makes : Havells / HPL / Indo Asian / C&S / Standard.			
384	a	63A 3 Pole MCCB, 16KA	1	No	4145.00
385	b	63A 4 Pole MCCB, 16KA	1	No	5556.00
386	c	125A 3 Pole MCCB, 25KA	1	No	5420.00
387	d	125A 4 Pole MCCB, 25KA	1	No	7125.00
388	e	160A 3 Pole MCCB, 25KA	1	No	7350.00
389	f	160A 4 Pole MCCB, 25KA	1	No	9900.00
390	g	250A 3 Pole MCCB, 35/36KA	1	No	14528.00
391	h	250A 4 Pole MCCB, 35/36KA	1	No	17651.00
392	i	400A 3 Pole MCCB, 35/36KA	1	No	18621.00
393	j	400A 4 Pole MCCB, 35/36KA	1	No	22433.00
394	k	630A 3 Pole MCCB, 50KA	1	No	25600.00
395	l	630A 4 Pole MCCB, 50KA	1	No	31000.00
396	m	800A 3 Pole MCCB, 50KA	1	No	45000.00
397	n	800A 4 Pole MCCB, 50KA	1	No	50200.00
	2.9	RCCBs CONFIRMS TO IEC:61008 AND IS:12640			
	ELEC-2.9.1	Supply of ----- Makes : Legrand-DX3 / Schneider-Acti9 / Siemens / L&T Exora.			
398	a	40A 2 Pole RCCB 30mA.	1	No	2570.00
399	b	40A 2 Pole RCCB 100mA.	1	No	2762.00
400	c	40A 4 Pole RCCB 30mA.	1	No	2829.00
401	d	40A 4 Pole RCCB 100mA.	1	No	2985.00
402	e	63A 2 Pole RCCB 30mA.	1	No	3142.00
403	f	63A 2 Pole RCCB 100mA.	1	No	3171.00
404	g	63A 4 Pole RCCB 30mA.	1	No	3347.00
405	h	63A 4 Pole RCCB 100mA.	1	No	3808.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-2.9.2	Supply of ----- Makes : ABB / Havells / HPL(Techno) / Hager / Indo Asian (Gold Plus) / C&S / Honeywell sentry.			
406	a	40A 2 Pole RCCB 30mA.	1	No	2050.00
407	b	40A 2 Pole RCCB 100mA.	1	No	2017.00
408	c	40A 4 Pole RCCB 30mA.	1	No	2520.00
409	d	40A 4 Pole RCCB 100mA.	1	No	2436.00
410	e	63A 2 Pole RCCB 30mA.	1	No	2764.00
411	f	63A 2 Pole RCCB 100mA.	1	No	2647.00
412	g	63A 4 Pole RCCB 30mA.	1	No	2875.00
413	h	63A 4 Pole RCCB 100mA.	1	No	2806.00
	2.10	RCBOs CONFIRMS TO IEC:61008 AND IS:12640			
	ELEC-2.10.1	Supply of ----- Makes : Legrand-DX3 / Schneider-Acti9 / Siemens / L&T Exora / Cabtree.			
414	a	40A 2 Pole RCBO 30mA.	1	No	4784.00
415	b	40A 2 Pole RCBO 100mA.	1	No	5236.00
416	c	40A 4 Pole RCBO 30mA.	1	No	5442.00
417	d	40A 4 Pole RCBO 100mA.	1	No	5758.00
418	e	63A 2 Pole RCBO 30mA.	1	No	5722.00
419	f	63A 2 Pole RCBO 100mA.	1	No	6060.00
420	g	63A 4 Pole RCBO 30mA.	1	No	6420.00
421	h	63A 4 Pole RCBO 100mA.	1	No	6542.00
422	ELEC-2.10.2	Supply of MCB type Change Over Switch 20A Double Pole 2 way 400V AC suitable to fix on Din Channel.			1800.00
	2.11	PANEL MOUNTING ACBs (Microprocessor Based)			
	ELEC-2.11.1	Supply of ----- Air Circuit Breaker Confirms to IS 13947-2, IEC 60947-2 and BS-EN 60947 with Micro processor based having over load, shot circuit and earth fault Protection Makes : Siemens / L&T / Schneider / ABB			
423	a	630A 3 Pole, 50kA, electrically fixed	1	No	102356.00
424	b	630A 3 Pole, 50kA, electrically drawout	1	No	136998.00
425	c	630A 4 Pole, 50kA, electrically fixed	1	No	127245.00
426	d	630A 4 Pole, 50kA, electrically drawout	1	No	169685.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
427	e	800A 3 Pole, 50kA, electrically drawout	1	No	144331.00
428	f	800A 4 Pole, 50kA, electrically drawout	1	No	179090.00
429	g	1000A 3 Pole, 50kA, electrically drawout	1	No	151685.00
430	h	1000A 4 Pole, 50kA, electrically drawout	1	No	191000.00
431	i	1250A 3 Pole, 50kA, electrically drawout	1	No	204000.00
432	j	1250A 4 Pole, 50kA, electrically drawout	1	No	250000.00
433	k	1600A 3 Pole, 50kA, electrically drawout	1	No	226000.00
434	l	1600A 4 Pole, 50kA, electrically drawout	1	No	270000.00
435	m	2000A 3 Pole, 50kA, electrically drawout	1	No	263000.00
436	n	2000A 4 Pole, 50kA, electrically drawout	1	No	320000.00
437	o	2500A 3 Pole, 50kA, electrically drawout	1	No	375000.00
438	p	2500A 4 Pole, 50kA, electrically drawout	1	No	460000.00
439	q	3200A 3 Pole, 50kA, electrically drawout	1	No	390000.00
440	r	3200A 4 Pole, 50kA, electrically drawout	1	No	490000.00
	ELEC-2.11.2	Supply of ----- Air Circuit Breaker Confirms to IS 13947-2, IEC 60947-2 and BS-EN 60947 with Micro processor based having over load, shot circuit and earth fault Protection Makes : Legrand / HPL / Hager / Havells / Indo Asian.			
441	a	630A 3 Pole, 50kA, electrically fixed	1	No	92121.00
442	b	630A 3 Pole, 50kA, electrically drawout	1	No	123297.00
443	c	630A 4 Pole, 50kA, electrically fixed	1	No	114520.00
444	d	630A 4 Pole, 50kA, electrically drawout	1	No	152716.00
445	e	800A 3 Pole, 50kA, electrically drawout	1	No	129898.00
446	f	800A 4 Pole, 50kA, electrically drawout	1	No	161181.00
	2.12	RAISING MAINS			
		Makes for the following items : Legrand (Zucchini) / L&T / Seimens / Schneider			
447	ELEC-2.12.1	Supply, instalation, testing and commisioning of 800 Amp, 50KA breaking capacity (100% Neutral busbar) air insulated compact Raising mains system made of CRCA sheet steel encloser of thickness not less than 1.5 mm having degree of protection of IP 55 as per 2127. wall strapas, fully PVC insulated four strip ALUMINIUM busbar in convinent sections including , end feed unit, end cover units suitable for 415 volts 3 phase, 4 wire, 50 Hz A.C. System,etc.,	1	Mtr	10664.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
448	ELEC-2.12.2	Supply and Fixing of Spring suspension hanger for rising Main for 400A / 800A Raising Mains.	1	No	4094.00
449	ELEC-2.12.3	Supply and Fixing of Suspension brackets for rising main for 400A / 800A Raising Mains.	1	No	3546.00
450	ELEC-2.12.4	Supply and Fixing of 800 Amps Horizontal / Vertical bends.	1	No	26448.00
451	ELEC-2.12.5	Supply and Fixing of Adopter box for 400A / 800A Raising Mains.	1	No	11400.00
452	ELEC-2.12.6	Supply and Fixing of 800 Amps Copper Flexibles for three phases and neutral.	1	No	35379.00
453	ELEC-2.12.7	Supply, instalation, testing and commisioning of 400 Amp, 50KA breaking capacity (100% Neutral busbar) air insulated compact Raising mains system made of CRCA sheet steel encloser of thickness not less than 1.5 mm having degree of protection of IP 55 as per 2127. wall strapes, fully PVC insulated four strip ALUMINIUM busbar in convinent sections including required end feed unit, end cover units suitable for 415 volts 3 phase, 4 wire, 50 Hz A.C. System, etc.	1	Mtr	7914.00
454	ELEC-2.12.8	Supply and Fixing of 400 Amps Horizontal / Vertical bends.	1	No	24891.00
455	ELEC-2.12.9	Supply and Fixing of 400 Amps Copper Flexibles for three phases and neutral.	1	No	31048.00
456	ELEC-2.12.10	Supply and Fixing of 400 Amps Tap off box.	1	No	33859.00
457	ELEC-2.12.11	Supply and Fixing of 250 Amps Tap off box.	1	No	31616.00
	2.13	MCBs (AS PER IS:60898-1:2002)			
	ELEC-2.13.1	Supply of -----10KA, C/D Curve ISI Mark. Makes : Legrand-DX3 / Schneider-Acti9 / Siemens / L&T Exora / Cabtree.			
458	a	6-32A SP MCB	1	No	193.00
459	b	40-63A SP MCB	1	No	403.00
460	c	6-32A DP MCB	1	No	567.00
461	d	40-63A DP MCB	1	No	917.00
462	e	6-32A TP MCB	1	No	910.00
463	f	40-63A TP MCB	1	No	1407.00
464	g	6-32A FP MCB	1	No	1220.00
465	h	40-63A FP MCB	1	No	1808.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-2.13.2	Supply of -----10KA, C/D Curve ISI Mark. Makes : ABB / Havells / HPL(Techno) / Hager / Indo Asian (Gold Plus) / C&S / Honeywell sentry.			
466	a	6-32A SP MCB	1	No	155.00
467	b	40-63A SP MCB	1	No	340.00
468	c	6-32A DP MCB	1	No	488.00
469	d	40-63A DP MCB	1	No	669.00
470	e	6-32A TP MCB	1	No	780.00
471	f	40-63A TP MCB	1	No	1080.00
472	g	6-32A FP MCB	1	No	1012.00
473	h	40-63A FP MCB	1	No	1357.00
	ELEC-2.13.3	Supply of ----- 10KA, C/D Curve ISI Mark. Makes : Gold Medal / GM / Milltec / Sputnik / Benlo / Stanjo Amron.			
474	a	6-32A SP MCB	1	No	117.00
475	b	40-63A SP MCB	1	No	211.00
476	c	6-32A DP MCB	1	No	319.00
477	d	40-63A DP MCB	1	No	479.00
478	e	6-32A TP MCB	1	No	584.00
479	f	40-63A TP MCB	1	No	900.00
480	g	6-32A FP MCB	1	No	750.00
481	h	40-63A FP MCB	1	No	1059.00
	2.14	ISOLATORS CONFIRMS TO I E C 60947 PART-III			
	ELEC-2.14.1	Supply of -----Isolator. Makes : Legrand-DX3 / Schneider-Acti9 / Siemens / L&T Exora / Cabtree.			
482	a	32A DP	1	No	322.00
483	b	40A DP	1	No	351.00
484	c	63A DP	1	No	465.00
485	d	40A TP	1	No	595.00
486	e	63A TP	1	No	691.00
487	f	40A FP	1	No	776.00
488	g	63A FP	1	No	848.00
489	h	100A FP	1	No	911.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-2.14.2	Supply of -----Isolator. Makes : ABB / Havells / HPL(Techno) / Hager / Indo Asian (Gold Plus) / C&S / Honeywell sentry.			
490	a	32A DP	1	No	303.00
491	b	40A DP	1	No	319.00
492	c	63A DP	1	No	393.00
493	d	40A TP	1	No	558.00
494	e	63A TP	1	No	563.00
495	f	40A FP	1	No	647.00
496	g	63A FP	1	No	699.00
497	h	100A FP	1	No	875.00
	ELEC-2.14.3	Supply of -----Isolator. Makes : Gold Medal / GM / Milltec / Sputnik / Benlo / Stanjo Amron.			
498	a	32A DP	1	No	206.00
499	b	40A DP	1	No	247.00
500	c	63A DP	1	No	329.00
501	d	40A TP	1	No	365.00
502	e	63A TP	1	No	408.00
503	f	40A FP	1	No	546.00
	2.15	MCB DISTRIBUTION BOARDS (AS PER IS:13032)			
		SPN DB			
	2.15.1	Supply of ----- Protection as per IS:13032 and suitable for-----S.P out goings and for 1 No Incommer etc complete. Makes : Legrand / Schneider / Siemens / L&T / Cabtree Xpro.			
504	a	4 Way SPN DB with IP 20, 4 Nos	1	No	794.00
505	b	4 Way SPN DB with IP 43, 4 Nos	1	No	1033.00
506	c	8 Way SPN DB with IP 20, 8 Nos	1	No	919.00
507	d	8 Way SPN DB with IP 43, 8 Nos	1	No	1298.00
508	e	12 Way SPN DB with IP 20, 12 Nos	1	No	1090.00
509	f	12 Way SPN DB with IP 43, 12 Nos	1	No	1571.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	2.15.2	Supply of ----- Protection as per IS:13032 and suitable for-----S.P out goings and for 1 No Incommer etc complete. Makes : ABB / Havells / HPL / Hager / Indo Asian (Gold Plus) / C&S / Honeywell sentry.			
510	a	4 Way SPN DB with IP 20, 4 Nos	1	No	484.00
511	b	4 Way SPN DB with IP 43, 4 Nos	1	No	835.00
512	c	8 Way SPN DB with IP 20, 8 Nos	1	No	634.00
513	d	8 Way SPN DB with IP 43, 8 Nos	1	No	1179.00
514	e	12 Way SPN DB with IP 20, 12 Nos	1	No	726.00
515	f	12 Way SPN DB with IP 43, 12 Nos	1	No	1408.00
	2.15.3	Supply of ----- Protection as per IS:13032 and suitable for-----S.P out goings and for 1 No Incommer etc complete. Makes : Gold Medal / GM / Milltec / Sputnik / Benlo / Stanjo Amron.			
516	a	4 Way SPN DB with IP 20, 4 Nos	1	No	343.00
517	b	4 Way SPN DB with IP 43, 4 Nos	1	No	576.00
518	c	8 Way SPN DB with IP 20, 8 Nos	1	No	466.00
519	d	8 Way SPN DB with IP 43, 8 Nos	1	No	790.00
520	e	12 Way SPN DB with IP 20, 12 Nos	1	No	570.00
521	f	12 Way SPN DB with IP 43, 12 Nos	1	No	999.00
	2.16	TPN DB			
	2.16.1	Supply of ----- Protection as per IS:13032 and suitable for ----- S.P. out goings and for 1 No 4 pole Incommer (FP Isolator / MCB) etc complete Makes : Legrand / Schneider / Siemens / L&T / Cabtree Xpro.			
522	a	(8+12) 4 Way TPN DB Horizontal with IP 20, 12 Nos	1	No	1564.00
523	b	(8+12) 4 Way TPN DB Horizontal with IP 43, 12 Nos	1	No	2598.00
524	c	(8+18) 6 Way TPN DB Horizontal with IP 43, 18 Nos	1	No	3500.00
525	d	(8+24) 8 Way TPN DB Horizontal with IP 43, 24 Nos	1	No	3910.00
	2.16.2	Supply of ----- Protection as per IS:13032 and suitable for T.P. / S.P. out goings and for 1 No 4 pole Incommer etc complete Makes : Legrand / Schneider / Siemens / L&T / Cabtree Xpro.			
526	a	4 Way VTPN DB with IP 43	1	No	6303.00
527	b	8 Way VTPN DB with IP 43	1	No	8103.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	2.16.3	Supply of ----- Protection as per IS:13032 and suitable for accommodating T.P. / S.P. as out goings and 125A / 160A 4 pole MCCB as Incommer etc complete Makes : Legrand / Schneider / Siemens / L&T / Cabtree Xpro.			
528	a	4 Way VTPN DB with IP 43	1	No	8179.00
529	b	8 Way VTPN DB with IP 43	1	No	10243.00
	2.16.4	Supply of ----- Protection as per IS:13032 and suitable for ----- S.P. out goings and for 1 No 4 pole Incommer (FP Isolator / MCB) etc complete Makes : GE / ABB / Havells / HPL / Hager / Indo Asian (Gold Plus) / C&S / Honeywell sentry.			
530	a	(8+12) 4 Way TPN DB Horizontal with IP 20, 12 Nos	1	No	1455.00
531	b	(8+12) 4 Way TPN DB Horizontal with IP 43, 12 Nos	1	No	2294.00
532	c	(8+18) 6 Way TPN DB Horizontal with IP 43, 18 Nos	1	No	
533	d	(8+24) 8 Way TPN DB Horizontal with IP 43, 24 Nos	1	No	3650.00
	2.16.5	Supply of ----- Protection as per IS:13032 and suitable for T.P. / S.P. out goings and for 1 No 4 pole Incommer etc complete Makes : GE / ABB / Havells / HPL / Hager / Indo Asian (Gold Plus) / C&S / Honeywell sentry.			
534	a	4 Way VTPN DB with IP 43	1	No	5840.00
535	b	8 Way VTPN DB with IP 43	1	No	7117.00
	2.16.6	Supply of ----- Protection as per IS:13032 and suitable for ----- S.P. out goings and for 1 No 4 pole Incommer (FP Isolator / MCB) etc complete Makes : Gold Medal / GM / Miltec / Sputnik / Benlo / Stanjo Amron.			
536	a	(8+12) 4 Way TPN DB Horizontal with IP 20, 12 Nos	1	No	1331.00
537	b	(8+12) 4 Way TPN DB Horizontal with IP 43, 12 Nos	1	No	1720.00
538	c	(8+18) 6 Way TPN DB Horizontal with IP 43, 18 Nos	1	No	
539	d	(8+24) 8 Way TPN DB Horizontal with IP 43, 24 Nos	1	No	2639.00
	2.16.7	Supply of ----- Protection as per IS:13032 and suitable for T.P. / S.P. out goings and for 1 No 4 pole Incommer etc complete Makes : Gold Medal / GM / Miltec / Sputnik / Benlo / Stanjo Amron.			
540	a	4 Way VTPN DB with IP 43	1	No	3379.00
541	b	8 Way VTPN DB with IP 43	1	No	5391.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	2.16.8	Supply of -----Plug and Socket with SS enclosure. Makes : Legrand / Schneider / Siemens / L&T / Cabtree Xpro.			
542	a	20A SP	1	No	941.00
543	b	20A TP	1	No	1773.00
544	c	32A TP	1	No	2086.00
	2.16.9	Supply of -----Plug and Socket with SS enclosure. Makes : ABB / Havells / HPL / Hager / Indo Asian (Gold Plus) / C&S / Honeywell sentry.			
545	a	20A SP	1	No	616.00
546	b	20A TP	1	No	1251.00
547	c	32A TP	1	No	1564.00
	2.16.10	Supply of -----Plug and Socket with SS enclosure. Makes : Gold Medal / GM / Milltec / Sputnik / Benlo.			
548	a	20A SP	1	No	469.00
549	b	20A TP	1	No	966.00
550	c	32A TP	1	No	1356.00
	2.16.11	Supply of ----- Metal Enclosure with IP 20 Protection. Makes : Legrand / Schneider / Siemens / L&T / Cabtree Xpro.			
551	a	SP	1	No	280.00
552	b	DP/TP/FP	1	No	400.00
	2.16.12	Supply of ----- Metal Enclosure with IP 20 Protection. Makes : ABB / Havells / HPL / Hager / Indo Asian (Gold Plus) / C&S / Honeywell sentry.			
553	a	SP	1	No	261.00
554	b	DP/TP/FP	1	No	383.00
	2.16.13	Supply of ----- Metal Enclosure with IP 20 Protection. Makes : Gold Medal / GM / Milltec / Sputnik / Benlo.			
555	a	SP	1	No	230.00
556	b	DP/TP/FP	1	No	330.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		SECTION - 3			
	3.1	STREET LIGHT LUMINAIRES			
	ELEC-3.1.1	Supply of----- Flood light luminaire with integral weather proof diecast alluminium housing with IP66 protection with Control Gear Box without lamp Makes : Wipro / G.E. Venture / Phillips / Bajaj / Crompton / Surya / Halonix.			
557	a	1 x 400W MH	1	No	5438.00
558	b	2 x 400W MH	1	No	10602.00
	ELEC-3.1.2	Supply of----- Flood light luminaire with integral weather proof diecast alluminium housing with IP66 protection with Control Gear Box without lamp Makes : Style Lamp / Mahita Electro / Capart / Akhil / RK / Pro-Lite.			
559	a	1 x 400W MH	1	No	4139.00
	ELEC-3.1.3	Supply of ----- Hallozen Flood light luminaire with cast alluminium housing and tough end glass cover with all standard accessories. Makes : Style Lamp / Mahita Electro / Capart / Akhil / RK / GE Venture / Pro-Lite.			
560	a	500 W	1	No	386.00
561	b	1000 W	1	No	769.00
	ELEC-3.1.4	Supply of 1 x 26W CFL well glass, low bay luminaire with die cast alluminium housing epoxy gray powder coated built in Electronic ballast with gink plated wire guard and eye bolt. Makes : Wipro / G.E. / Phillips / Bajaj / Crompton / Havells.	1	No	1454.00
	3.2	POST TOP LANTERN LUMINAIRES			
562	ELEC-3.2.1	Supply of 1 x 18W CFL integral post top luminaire with conical shape, opal clear acrylic diffuser with cast alluminium pole mounting capsule complete with all accessories and ballast. Makes : Crompton / Bajaj / Surya / Havells / HPL.	1	No	1746.00
563	ELEC-3.2.2	Supply of 70W SV / MH integral HID lamp post top lantern with diamond / Mushroom / Spherical diffuser etc complete with all accessories. Makes : Wipro / Phillips / Bajaj / Crompton / Surya.	1	No	3631.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		ACCESSORIES FOR MV / SV / MH LUMINAIRES			
	3.3	COPPER BALLASTS			
	ELEC-3.3.1	Supply of -----copper ballast. Makes : G.E. / Phillips / Crompton / Bajaj / Surya / Havells.			
564	a	80W MV	1	No	570.00
565	b	125W MV	1	No	623.00
566	c	70 W SV / MH	1	No	517.00
567	d	150 W SV / MH	1	No	807.00
568	e	250 W SV / MH	1	No	1147.00
569	f	400 W SV / MH	1	No	1677.00
	ELEC-3.3.2	Supply of -----copper ballast. Makes : RK / Style Lamp / Akhil / Capart / Mahitha Electro / GE Venture / Prolite.			
570	a	80W MV	1	No	517.00
571	b	125W MV	1	No	524.00
572	c	70 W SV / MH	1	No	494.00
573	d	150 W SV / MH	1	No	724.00
574	e	250 W SV / MH	1	No	981.00
575	f	400 W SV / MH	1	No	1361.00
		HPF CAPACITORS			
	ELEC-3.3.3	Supply of -----HPF Capacitor. Makes : TIBCON / Phillips / Crompton / Bajaj / Surya / Havells.			
576	a	4 mfd	1	No	77.00
577	b	10 mfd	1	No	129.00
578	c	15 mfd	1	No	153.00
579	d	20 mfd	1	No	209.00
580	e	33 mfd	1	No	334.00
581	f	42 mfd	1	No	370.00
		IGNITOR			
582	ELEC-3.3.4	Supply of Ignitor for SV / MH Lamp Makes : Wipro / GE Venture / Phillips / Crompton / Bajaj / Surya / HPL / Havells / Capart / Prolite / Halonix.	1	No	144.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		ENEGRY SAVING ELECTRONIC BALLAST FOR STREET LIGHT			
	ELEC-3.3.5	Supply of ----- Electronic ballast having < 3W loss, PF > 0.90, THD < 15% with 3 years guarantee Makes : Phillips / Whipro / Trinic / GE.			
583	a	70W SV / MH	1	No	1862.00
584	b	150W SV / MH	1	No	2546.00
585	c	250W SV / MH	1	No	3192.00
	3.4	LAMPS			
	ELEC-3.4.1	Supply of ----- Lamp with ISI mark. Makes : Phillips / Osram / Crompton / Bajaj / Surya / HPL / Havells / Halonix.			
586	a	500W Hallozen	1	No	91.00
587	b	1000W Hallozen	1	No	110.00
588	c	70W SV	1	No	418.00
589	d	150W SV	1	No	600.00
590	e	250W SV	1	No	651.00
591	f	400W SV	1	No	710.00
592	g	70W double end MH	1	No	511.00
593	h	150W double end MH	1	No	760.00
594	i	70W MH	1	No	752.00
595	j	150W MH	1	No	836.00
596	k	250W MH	1	No	1140.00
597	l	400W MH	1	No	1301.00
	ELEC-3.4.2	Supply of ----- Lamp with ISI mark. Makes : Elton / Style Lamp / Mahita Electro / Capart			
598	a	500W Hallozen	1	No	51.00
599	b	1000W Hallozen	1	No	68.00
600	c	70W SV	1	No	338.00
601	d	150W SV	1	No	507.00
602	e	250W SV	1	No	575.00
603	f	400W SV	1	No	659.00
604	g	70W double end MH	1	No	448.00
605	h	150W double end MH	1	No	676.00
606	i	70W MH	1	No	718.00
607	j	150W MH	1	No	760.00
608	k	250W MH	1	No	929.00
609	l	400W MH	1	No	1183.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	3.5	AUTOMATIC STREET LIGHT CONTROL SYSTEMS			
	ELEC-3.5.1	Supply and fixing of Automatic Street Light Control System with Optical Sensor, Low volatage / High voltage trip and reset, operating voltage 150 - 280V AC, 50 HZ with suitable SMC enclosure of IP 54 protection, MCBs of Legrand / Schneider / L&T / Siemens of 10KA C/D curve and Contactor suitable to control the load of ----- Single phase load with necessary clamping arrangements. Makes : Swadep Nature Switch / Light Mate / L&T / Siemens / Bajaj			
610	a	1 KW	1	No	8500.00
611	b	3 KW	1	No	10756.00
612	c	5 KW	1	No	11245.00
613	d	8 KW	1	No	12810.00
	ELEC-3.5.2	Supply and fixing of Automatic Street Light Control System with Optical Sensor, Low volatage / High voltage trip and reset, operating voltage 380 - 450 V AC, 50 HZ with suitable SMC enclosure of IP 54 protection, MCBs of Legrand / Schneider / L&T / Siemens of 10KA C/D curve and Contactor suitable to control the load of ----- Three phase load with necessary clamping arrangements. Makes : Swadep Nature Switch / Light Mate / L&T / Siemens / Bajaj			
614	a	5 KW	1	No	14080.00
615	b	8 KW	1	No	14570.00
616	c	12 KW	1	No	17600.00
617	d	25 KW	1	No	28000.00
	3.6	INTERNAL LUMINAIRES			
618	ELEC-3.6.1	Supply of 1 x 11W Mirror light with all standard accessories diffuser Makes : G.E. Venture / Phillips / Crompton / Bajaj.	1	No	544.00
619	ELEC-3.6.2	Supply of 1 x 11W Mirror light with all standard accessories diffuser Makes : Surya / Havells / HPL / Fortune Art	1	No	464.00
	ELEC-3.6.3	Supply of -----Box type tube light luminaire powder coated CRCA sheet steel housing with Electronic Ballast and all standard accessories. Makes : Wipro / GE Venture / Phillips / Crompton / Bajaj .			
620	a	1 x 36/40W	1	No	651.00
621	b	2 x 36/40W	1	No	978.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-3.6.4	Supply of -----Box type tube light luminaire powder coated CRCA sheet steel housing with Electronic Ballast and all standard accessories. Makes : Surya / Havells / HPL / Fortune Art			
622	a	1 x 36/40W	1	No	614.00
623	b	2 x 36/40W	1	No	939.00
624	ELEC-3.6.5	Supply of 1 x 18W CFL Indoor recessed mounting horizontal type down lights luminaire with alluminium/Matt finished reflector with Electronic Ballast. Makes : Phillips / Crompton / Bajaj / Surya / HPL / Havells.	1	No	600.00
		ACCESSORIES			
		Makes For the Following Items : Phillips / Crompton / Bajaj / Surya / HPL / Havells.			
625	ELEC-3.6.6	Supply of 9/13W VPIT Ballast for CFL with ISI mark.	1	No	102.00
626	ELEC-3.6.7	Supply of 18W VPIT Ballast for CFL with ISI mark.	1	No	96.00
627	ELEC-3.6.8	Supply of 20W / 40W Copper Wound Ballast.	1	No	128.00
628	ELEC-3.6.9	Supply of 18/20W VPIT Ballast.	1	No	128.00
629	ELEC-3.6.10	Supply of 36/40W VPIT Ballast of makes Phillips / Crompton / Bajaj / Surya.	1	No	168.00
630	ELEC-3.6.11	Supply of 40W Starter of makes Phillips / Crompton / Bajaj / Surya.	1	No	9.00
631	ELEC-3.6.12	Supply of Rotor holder(FTL).	1	No	17.00
632	ELEC-3.6.13	Supply of HID Lamp holder.	1	No	43.00
633	ELEC-3.6.14	Supply of CFL holder of makes Phillips / Crompton / Bajaj / Surya.	1	No	26.00
634	ELEC-3.6.15	Supply of FTL Starter holder.	1	No	13.00
		Makes For the Following Items : Fortune Art / Style Lamp / Mahita Electro / Capart			
635	ELEC-3.6.16	Supply of 9/13W VPIT Ballast for CFL with ISI mark.	1	No	88.00
636	ELEC-3.6.17	Supply of 18W VPIT Ballast for CFL with ISI mark.	1	No	88.00
637	ELEC-3.6.18	Supply of 20W / 40W Copper Wound Ballast.	1	No	118.00
638	ELEC-3.6.19	Supply of 18/20W VPIT Ballast.	1	No	117.00
639	ELEC-3.6.20	Supply of 36/40W VPIT Ballast of makes Phillips / Crompton / Bajaj / Surya.	1	No	136.00
640	ELEC-3.6.21	Supply of 40W Starter of makes Phillips / Crompton / Bajaj / Surya.	1	No	8.00
641	ELEC-3.6.22	Supply of Rotor holder(FTL).	1	No	15.00
642	ELEC-3.6.23	Supply of HID Lamp holder.	1	No	34.00
643	ELEC-3.6.24	Supply of CFL holder of makes Phillips / Crompton / Bajaj / Surya.	1	No	21.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
644	ELEC-3.6.25	Supply of FTL Starter holder.	1	No	10.00
645	ELEC-3.6.26	Supply of 36W Electronic Ballast with total harmonic distortion is less than 10% for FTL. Makes : Phillips / Crompton / Bajaj / Surya / HPL / Havells.	1	No	492.00
646	ELEC-3.6.27	Supply of 36W Electronic ballast with power factor greater than 0.9 to 0.95 suitable for FTL. Make : Crompton / Bajaj / Havells or its equivalent.	1	No	221.00
647	ELEC-3.6.28	Supply of Bulk head fitting with cast aluminium enamel painted body with water tight, clear glass with wire guard hinged with lock and key arrangements etc., complete. Makes : Bajaj / Crompton / Surya.	1	No	280.00
648	ELEC-3.6.29	Supply of single fancy bracket with glass shade best Indian make	1	No	173.00
649	ELEC-3.6.30	Supply of double fancy bracket with glass shade best Indian make	1	No	309.00
	3.7	FLOURSCENT TUBES / CFL LAMPS			
		Makes for the following items: Phillips / Crompton / Bajaj / Surya / Style Lamp / Mahita Electro / Capart.			
650	ELEC-3.7.1	Supply of 40W-60W Lamp.	1	No	11.00
651	ELEC-3.7.2	Supply of Night Lamp.	1	No	10.00
652	ELEC-3.7.3	Supply of 18/20W fluorescent tube. Makes : Phillips / Crompton / Bajaj / Surya.	1	No	37.00
653	ELEC-3.7.4	Supply of 36/40W fluorescent tube. Makes : Phillips / Crompton / Bajaj / Surya.	1	No	40.00
	ELEC-3.7.5	Supply of 36/40W fluorescent tube. Makes : Fortune Art / Style lamp / Mahita Electro / Capart	1	No	34.00
654	ELEC-3.7.6	Supply of 28W T5 fluorescent tube. Makes : Crompton / Bajaj / Phillips / Surya / Havells.	1	No	107.00
	ELEC-3.7.7	Supply of ----- Pin type CFL Lamp. Makes : Phillips / Crompton / Bajaj / Surya / Havells / HPL / Halonix.			
655	a	9W	1	No	67.00
656	b	11W	1	No	72.00
657	c	13W	1	No	94.00
658	d	18W	1	No	103.00
659	e	26W	1	No	143.00
660	f	36W	1	No	120.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-3.7.8	Supply of ----- Retrofit tiny CFL. Makes : Phillips / Crompton / Bajaj / Surya / Havells / HPL / Halonix.			
661	a	Up to 5W	1	No	103.00
662	b	Up to 8W	1	No	112.00
663	c	Up to 10/11W	1	No	120.00
664	d	Up to 13/14W	1	No	98.00
665	e	15W	1	No	160.00
666	f	Up to 18/20W Retrofit CFL.	1	No	152.00
667	g	23W Retrofit CFL.	1	No	178.00
668	h	Up to 25/26W Retrofit CFL.	1	No	178.00
	3.8	ENERGY CONSERVING FIXTURES			
669	ELEC-3.8.1	Supply of 1 x 28W Box type powder coated energy conserving tube light luminaire with Electronic ballast operating voltage range of 90 volts to 350 volts power factor > 0.98 current less than 130ma crest factor and total harmonic distortion shall be as per IS Specification with auto cut off at high voltage suitable for 36/40W tube with 5 years guarantee for luminaire. Makes: Trinic or its equivalent.	1	No	806.00
670	ELEC-3.8.2	Supply of 28 W Electronic Ballast with less than 10% total harmonic distortion and auto cut off at High Voltage suitable for FTL with 5 years guarantee for luminaire. Makes: Trinic or its equivalent.	1	No	608.00
	3.9	LED LUMINAIRES INDOOR			
	ELEC-3.9.1	Supply and transportation of ----- LED Spot Light Recessed mounting with housing made of Powder coated Pressure die cast aluminium , IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / Ib LED/ HPL / Syska / Surya / Keselec. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
671	a	5 W / 6 W	1	No	637.00
672	b	7 W	1	No	1274.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-3.9.2	Supply and transportation of ----- LED Spot Light Recessed mounting with housing made of Powder coated Pressure die cast aluminium , IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >90 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Pharox / Muelux / Fortune Art / Capart / Green Lites / Kashyap BLU / GM / Million / Goldwyn / Goldmedal / Trinic / Stanjo / Eveready / Mic / Promptec / Lighting Technologies / C&S / RR Electric. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			/
673	a	5 W / 6 W	1	No	478.00
674	b	7 W	1	No	1035.00
	ELEC-3.9.3	Supply and transportation of ----- LED Spot Light Recessed mounting with housing made of Powder coated Pressure die cast aluminium , IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >80 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Avni / Kripa Lights / Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Sieger / Goldmedal / Taiyolux / Link Well/ Ecova / RYON / Enrich / Kiran / Benlo. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
675	a	5 W / 6 W	1	No	430.00
676	b	7 W	1	No	796.00
	ELEC-3.9.4	Supply and transportation of ----- back lit LED Down Light Recessed / Surface mounting round/ square with housing made of Powder coated Pressure die cast aluminium housing with extended heat sink, with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / Ib LED/ HPL / Syska / Surya / Keselec. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
677	a	12 W	1	No	1871.00
678	b	18 W	1	No	2301.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-3.9.5	Supply and transportation of ----- back lit LED Down Light Recessed / Surface mounting round/ square with housing made of Powder coated Pressure die cast aluminium housing with extended heat sink, with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >90 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Pharox / Muelux / Fortune Art / Capart / Green Lites / Kashyap BLU / GM / Million / Goldwyn / Goldmedal / Trinic / Stanjo / Eveready / Mic / Promptec / Lighting Technologies / C&S / RR Electric. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
679	a	12 W	1	No	1560.00
680	b	18 W	1	No	1760.00
	ELEC-3.9.6	Supply and transportation of ----- back lit LED Down Light Recessed / Surface mounting with housing made of Powder coated Pressure die cast aluminium housing with extended heat sink, with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >80 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Avni / Kripa Lights / Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Sieger / Goldmedal / Taiyolux / Link Well/ Ecova / RYON / Enrich / Kiran / Benlo. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
681	a	12 W	1	No	933.00
682	b	18 W	1	No	1282.00
	ELEC-3.9.7	Supply and transportation of ----- edge lit LED slimline panel light Housing made of Powder coated, round / Square with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / Ib LED/ HPL / Syska / Surya / Keselec. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
683	a	12W	1	No	1003.00
684	b	18W	1	No	1489.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-3.9.8	Supply and transportation of ----- edge lit LED slimline panel Light Housing made of Powder coated, round / Square with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >90 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Pharox / Muelux / Fortune Art / Capart / Green Lites / Kashyap BLU / GM / Million / Goldwyn / Goldmedal / Trinic / Stanjo / Eveready / Mic / Promptec / Lighting Technologies / C&S / RR Electric. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
685	a	12W	1	No	932.00
686	b	18W	1	No	1322.00
	ELEC-3.9.9	Supply and transportation of ----- edge lit LED slimline panel Light Housing made of Powder coated, round / Square with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >80 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Avni / Kripa Lights / Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Sieger / Goldmedal / Taiyolux / Link Well/ Ecova / RYON / Enrich / Kiran / Benlo. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
687	a	12W	1	No	837.00
688	b	18W	1	No	1210.00
689	ELEC-3.9.10	Supply and transportation of 20W, 2000 lumens, T5 / T8, 1200mm length LED retro tube light, housing made with alluminium anodised body, wide operating voltage with double side connection, PF≥0.9, Surge protection: > 2KV, THD<15%, with inbuilt driver and frosted cover CCT: 3000K - 6500K as desired by the department and as per IS specifications, minimum CRI≥80,.etc complete. LUMINAIRE MAKE: Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / Ib LED/ HPL / Syska / Surya / Keselec. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.	1	No	922.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
690	ELEC-3.9.11	Supply and transportation of 20W, 1900 lumens, T5 / T8,1200mm length LED retro tube light, housing made with alluminium anodised body, wide operating voltage, double side connection, with PF \geq 0.9, Surge protection: > 2KV, THD<10%, with inbuilt driver and frosted cover CCT: 3000K - 6500K as desired by the department and as per IS specifications, minimum CRI \geq 80, etc.complete. LUMINAIRE MAKE: Pharox / Muelux / Fortune Art / Capart / Green Lites / Kashyap BLU / GM / Million / Goldwyn / Goldmedal / Trinic / Stanjo / Eveready / Mic / Promptec / Lighting Technologies / C&S / RR Electric. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.	1	No	716.00
691	ELEC-3.9.12	Supply and transportation of 20W, 1800 lumens, T5 / T8,1200mm length LED retro tube light, housing made with alluminium anodised body, wide operating voltage, with double side connection, with PF \geq 0.9, Surge protection: \geq 2KV, THD<15%, with inbuilt driver and frosted cover CCT: 3000K - 5700K, minimum CRI \geq 70, etc.,complete. LUMINAIRE MAKE : Avni / Kripa Lights / Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Sieger / Goldmedal / Taiyolux / Link Well/ Ecova / RYON / Enrich / Kiran / Benlo. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.	1	No	645.00
692	ELEC-3.9.13	Supply and transportation of 22W, 2300 lumens, 1200mm length T5 LED light housing made with alluminium anodised body, wide operating voltage with PF \geq 0.9, Surge protection: > 2KV, THD<10%, with inbuilt driver and frosted cover CCT: 3000K - 6500K as desired by the department as per IS, minimum CRI \geq 80 etc., complete. LUMINAIRE MAKE: Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / Ib LED/ HPL / Syska / Surya / Keselec. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.	1	No	850.00
693	ELEC-3.9.14	Supply and Transportation of 36W Edge lit, 2' x2' (600mm x 600mm) slim panel LED luminaire Square Housing Made of Aluminum alloy with corrosion resistant powder coat, with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / Ib LED/ HPL / Syska / Surya / Keselec. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.	1	No	4259.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
694	ELEC-3.9.15	Supply and Transportation of 36W Edge lit, 2' x2' (600mm x 600mm) slim panel LED luminaire Square Housing Made of Aluminum alloy with corrosion resistant powder coat, with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE: Pharox / Muelux / Fortune Art / Capart / Green Lites / Kashyap BLU / GM / Million / Goldwyn / Goldmedal / Trinic / Stanjo / Eveready / Mic / Promptec / Lighting Technologies / C&S / RR Electric. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.	1	No	3789.00
695	ELEC-3.9.16	Supply and Transportation of 36W Edge lit 2' x2' (600mm x 600mm) Slim panel LED luminaire Square Housing Made of Aluminum alloy with corrosion resistant powder coat, with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Avni / Kripa Lights / Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Sieger / Goldmedal / Taiyolux / Link Well/ Ecova / RYON / Enrich / Kiran / Benlo. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.	1	No	3518.00
	ELEC-3.9.17	Supply and Transportation of ----- Back lit, 2' x2' (600mm x 600mm) Recessed / Surface mounted LED luminaire made of CRCA sheet housing with powder coated with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / Ib LED/ HPL / Syska / Surya / Keselec. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
696	a	36 W	1	No	4123.00
697	b	45 W	1	No	4601.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-3.9.18	Supply and Transportation of ----- Back lit, 2' x2' (600mm x 600mm) Recessed / Surface mounted LED luminaire made of CRCA sheet housing with powder coated with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE: Pharox / Muelux / Fortune Art / Capart / Green Lites / Kashyap BLU / GM / Million / Goldwyn / Goldmedal / Trinic / Stanjo / Eveready / Mic / Promptec / Lighting Technologies / C&S / RR Electric. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
698	a	36 W	1	No	3518.00
699	b	45 W	1	No	4259.00
	ELEC-3.9.19	Supply and Transportation of ----- Back lit, 2' x2' (600mm x 600mm) Recessed / Surface mounted LED luminaire made of CRCA sheet housing with powder coated with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% etc., complete. LUMINAIRE MAKE : Avni / Kripa Lights / Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Sieger / Goldmedal / Taiyolux / Link Well/ Ecova / RYON / Enrich / Kiran / Benlo. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
700	a	36 W	1	No	3311.00
701	b	45 W	1	No	3640.00
702	ELEC-3.9.20	Supply and transportation of MS frame with powder coating suitable for 600mm x 600mm LED panel light.	1	No	454.00
703	ELEC-3.9.21	Supply & Fixing of LED box type batten frame made with CRCA sheet powder coated.	1	No	144.00
	3.10	LED INDOOR LAMPS			
	ELEC-3.10.1	Supply of ----- with input voltage 90 to 300V, Colour temperature 3000k - 6500k, Beam angle 170 - 220 degrees, B22 base. Makes: Phillips / OSRAM / GE Venture / Crompton / Bajaj / Havells / Pharox / Halonix / Greenlites / Ib LED/ Jaquar / C&S / GM / Gold Medal / Million / Stanjo.			
704	a	0.5W LED Lamp with 40 Lumens.	1	No	57.00
705	b	3.0W LED Lamp with 210 Lumens	1	No	130.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
706	c	5.0W LED Lamp with 350 Lumens	1	No	150.00
707	d	7.0W LED Lamp with 490 Lumens.	1	No	160.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
708	ELEC-3.10.2	Supply of LED Candel Lamp for shandliers. Makes: Phillips / OSRAM / GE Venture / Crompton / Bajaj / Havells / Pharox / Halonix / Greenlites / Ib LED/ Jaquar / C&S / GM / Gold Medal / Million / Stanjo.	1	No	205.00
	3.11	LED STREET LIGHTS			
	ELEC-3.11.1	Supply and transportation of LED Street light Body made of high grade pressure die – cast Aluminium alloy with corrosion resistant powder coat, having protective toughened glass cover, Less Glare, IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66) protected, wide operating voltage range, P.F > 0.90, System having efficacy >100 lumens/watt, with Ingress protection IP66, Driver surge protection more than 10KV inbuilt and more than 4KV external, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>80, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete. LUMINAIRE MAKE : PHILIPS / OSRAM / GE Venture / CROMPTON / BAJAJ / VIN / Wipro / Jaquar / Keselec / HAVELLS / HPL / SURYA / SYSKA. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
709	a	20 W	1	No	2248.00
710	b	30 W	1	No	3521.00
711	c	43 / 45 W	1	No	5244.00
712	d	60 / 65 W	1	No	6667.00
713	e	72 W	1	No	7753.00
714	f	90W	1	No	10562.00
715	g	100 W	1	No	11020.00
716	h	110 W	1	No	11520.00
717	i	120 W	1	No	12884.00
718	j	150 W	1	No	14982.00
719	k	180 W	1	No	17229.00
720	l	210 W	1	No	20974.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-3.11.2	Supply and transportation of LED Street light Body made of high grade pressure die – cast Aluminium alloy with corrosion resistant powder coat, having protective toughened glass cover, Less Glare, IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66) protected, wide operating voltage range, P.F > 0.90, System having efficacy >90 lumens/watt, with Ingress protection IP66, Driver surge protection more than 10KV inbuilt and more than 4KV external, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>80, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete. LUMINAIRE MAKE : AVNI / GOLDWYN / MUELUX / KRIPA LIGHTS / FORTUNE ART / CAPART / GREENLITES / POLYCAB / INSTA POWER / GM / MILLION / C&S / RR Electric / Lb LED / Halonix / MIC / Promptec / Eveready / TRINIC / STANJO / PANASONIC. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
721	a	20 W	1	No	2023.00
722	b	30 W	1	No	3169.00
723	c	43 / 45 W	1	No	4720.00
724	d	60 / 65 W	1	No	6000.00
725	e	72 W	1	No	6978.00
726	f	90W	1	No	9506.00
727	g	100 W	1	No	10020.00
728	h	110 W	1	No	10520.00
729	i	120 W	1	No	11596.00
730	j	150 W	1	No	13484.00
731	k	180 W	1	No	15506.00
732	l	210 W	1	No	18727.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-3.11.3	Supply and transportation of LED Street light Body made of high grade pressure die – cast Aluminium alloy with corrosion resistant powder coat, having protective toughened glass cover, Less Glare, IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66) protected, wide operating voltage range, P.F > 0.90, System having efficacy >80 lumens/watt, with Ingress protection IP66, Driver surge protection more than 10KV inbuilt and more than 4KV external, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>80, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete. LUMINAIRE MAKE : COSMO / VRILISO / KASHYAP BLU / PRO-LITE / SCINTILLA / GOLDMEDAL / ECOVA / TAIYOLUX / LINK WELL / RYON / Enrich / Kiran / Benlo. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
733	a	20 W	1	No	1911.00
734	b	30 W	1	No	2993.00
735	c	43 / 45 W	1	No	4457.00
736	d	60 / 65 W	1	No	5667.00
737	e	90W	1	No	8978.00
738	f	100 W	1	No	9400.00
739	g	110 W	1	No	9950.00
740	h	120 W	1	No	10952.00
741	i	150 W	1	No	12735.00
742	j	180 W	1	No	14645.00
743	k	210 W	1	No	17828.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		LED FLOOD LIGHTS			
	ELEC-3.11.4	Supply and transportation of LED Flood light Luminaire made of pressure die cast aluminum housing with powder coated, having toughened glass cover,IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66)protected, wide operating voltage range , P.F > 0.90, System having efficacy >100 lumens/watt, with Ingress protection IP66, Driver surge protection more than 10KV inbuilt and more than 4KV external, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>80, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete. LUMINAIRE MAKE : PHILIPS / OSRAM / GE Venture / CROMPTON / BAJAJ / VIN / Wipro / Jaquar / Keselec / HAVELLS / HPL / SURYA / SYSKA. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
744	a	60 W	1	No	7930.00
745	b	90 W	1	No	11104.00
746	c	120 W	1	No	14911.00
747	d	150 W	1	No	19115.00
748	e	200 W	1	No	22000.00
749	f	250 W	1	No	25000.00
	ELEC-3.11.5	Supply and transportation of LED Flood light Luminaire made of pressure die cast aluminum housing with powder coated, having toughened glass cover,IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66)protected, wide operating voltage range , P.F > 0.90, System having efficacy >90 lumens/watt, with Ingress protection IP66, Driver surge protection more than 10KV inbuilt and more than 4KV external, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>80, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete. LUMINAIRE MAKE : AVNI / GOLDWYN / MUELUX / KRIPA LIGHTS / FORTUNE ART / CAPART / GREENLITES / POLYCAB / INSTA POWER / GM / MILLION / C&S / RR Electric / Lb LED / Halonix / MIC / Promptec / Eveready / TRINIC / STANJO / PANASONIC. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
750	a	60 W	1	No	6682.00
751	b	90 W	1	No	9866.00
752	c	120 W	1	No	12412.00
753	d	150 W	1	No	14684.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-3.11.6	Supply and transportation of LED Flood light Luminaire made of pressure die cast aluminum housing with powder coated, having toughened glass cover, IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66)protected, wide operating voltage range , P.F > 0.90, System having efficacy >80 lumens/watt, with Ingress protection IP66, Driver surge protection more than 10KV inbuilt and more than 4KV external, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>80, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete. LUMINAIRE MAKE : COSMO / VRILISO / KASHYAP BLU / PRO-LITE / SCINTILLA / GOLDMEDAL / ECOVA / TAIYOLUX / LINK WELL / RYON / Enrich / Kiran / Benlo. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
754	a	60 W	1	No	5847.00
755	b	90 W	1	No	8633.00
756	c	120 W	1	No	10861.00
757	d	150 W	1	No	13216.00
	ELEC-3.11.7	Supply and transportation of LED High Bay Luminaire with high power COB LED made of pressure diecast aluminium housing with powder coated, Supply Input voltage 120 - 270 V AC, P.F > 0.90, high power LED's having efficacy >95 lumens/watt, System efficacy >95lm/W and junction temperature < 70°C, with Ingress protection IP65, IK05, Driver surge protection 4KV, external Surge protection ≥ 5KV with wide/ Narrow beam optics, THD<10% at 110 Volts AC, driver efficiency >90%, , CCT: 3000K - 5700K, minimum CRI>70, etc., complete LUMINAIRE MAKE : PHILIPS / OSRAM / GE / CROMPTON / BAJAJ / Keselec / VIN / HALONIX / HAVELLS / HPL / SYSKA / SURYA. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
758	a	60 W	1	No	9000.00
759	b	90 W	1	No	11000.00
760	c	120 W	1	No	13000.00
761	d	150 W	1	No	15000.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	3.12	LED DRIVERS			
	ELEC-3.12.1	Supply and transportation of LED Driver with input line voltage 120V-270V AC, 50Hz with surge protection more than 2.5 KV, IP20, suitable for----- LED down lighter. MAKES : PHILIPS / OSRAM / GE / CROMPTON / BAJAJ / Keselec / VIN / HALONIX / HAVELLS / HPL / SURYA / SYSKA / Jaquar.			
762	a	6 W / 9 W	1	No	207.00
763	b	12 W / 18 W / 20W / 22 W LED	1	No	309.00
764	c	36W	1	No	479.00
765	d	40 W / 45 W	1	No	578.00
	ELEC-3.12.2	Supply and transportation of LED Driver with input line voltage 120V-270V AC, 50Hz with surge protection of 4.0 KV, IP20, suitable for ---- -----LED street light fitting. Makes : PHILIPS / OSRAM / GE / CROMPTON / BAJAJ / Keselec / VIN / HALONIX / HAVELLS / HPL / SURYA / SYSKA / Jaquar.			
766	a	15-30W	1	No	347.00
767	b	45-80W	1	No	734.00
768	c	90-180W	1	No	1401.00
	ELEC-3.12.3	Supply and transportation of LED Driver with input line voltage 120V-270V AC, 50Hz with surge protection more than 2.5 KV, IP20, suitable for----- LED down lighter. MAKES : PHAROX / AVNI / GOLDWYN / KRIPA LIGHTS / FORTUNE ART / CAPART / STANJO / GREENLITES / TRINIC / PRO-LITE / SCINTILLA / JSTC - SOLAR / INSTA POWER / GM / MILLION / PANASONIC.			
769	a	6 W / 9 W	1	No	195.00
770	b	12 W / 18 W / 20W / 22 W LED	1	No	289.00
771	c	36W	1	No	450.00
772	d	40 W / 45 W	1	No	545.00
	ELEC-3.12.4	Supply and transportation of LED Driver with input line voltage 120V-270V AC, 50Hz with surge protection of 4.0 KV, IP20, suitable for ---- -----LED street light fitting. MAKES : PHAROX / AVNI / GOLDWYN / KRIPA LIGHTS / FORTUNE ART / CAPART / STANJO / GREENLITES / TRINIC / PRO-LITE / SCINTILLA / JSTC - SOLAR / INSTA POWER / GM / MILLION / PANASONIC.			
773	a	15-30W	1	No	326.00
774	b	45-80W	1	No	693.00
775	c	90-180W	1	No	1319.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		SECTION - 4			
	4.1	U.G. CABLES			
	ELEC-4.1.1	Supply of ----- XLPE insulated, 1100V grade armoured alluminium cable as per specification confirming to IS:7098 (Part - I) Makes : Torrent / Unicab / Polycab / Havells / Gloster / KEI / Finolex / Paragon			
776	a	4 Sqmm 2 Core	1	Mtr	88.00
777	b	6 Sqmm 2 Core	1	Mtr	103.00
778	c	10 Sqmm 2 Core	1	Mtr	123.00
779	d	6 Sqmm 4 Core	1	Mtr	124.00
780	e	10 Sqmm 4 Core	1	Mtr	140.00
781	f	16 Sqmm 4 Core	1	Mtr	154.00
782	g	25 Sqmm 3.5 Core	1	Mtr	197.00
783	h	35 Sqmm 3.5 Core	1	Mtr	235.00
784	i	50 Sqmm 3.5 Core	1	Mtr	310.00
785	j	70 Sqmm 3.5 Core	1	Mtr	401.00
786	k	95 Sqmm 3.5 Core	1	Mtr	521.00
787	l	120 Sqmm 3.5 Core	1	Mtr	637.00
788	m	150 Sqmm 3.5 Core	1	Mtr	725.00
789	n	185 Sqmm 3.5 Core	1	Mtr	889.00
790	o	240 Sqmm 3.5 Core	1	Mtr	1128.00
791	p	300 Sqmm 3.5 Core	1	Mtr	1378.00
792	q	400 Sqmm 3.5 Core	1	Mtr	1727.00
	ELEC-4.1.2	Supply of ----- XLPE insulated, 1100V grade armoured alluminium cable as per specification confirming to IS:7098 (Part - I) Makes : RPG / V-Guard / Fortune Art / Suncab / Finecab / Gemscab / Payal / Orbit / RR Kabel.			
793	a	4 Sqmm 2 Core	1	Mtr	75.00
794	b	6 Sqmm 2 Core	1	Mtr	89.00
795	c	10 Sqmm 2 Core	1	Mtr	107.00
796	d	6 Sqmm 4 Core	1	Mtr	107.00
797	e	10 Sqmm 4 Core	1	Mtr	122.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
798	f	16 Sqmm 4 Core	1	Mtr	134.00
799	g	25 Sqmm 3.5 Core	1	Mtr	171.00
800	h	35 Sqmm 3.5 Core	1	Mtr	202.00
801	i	50 Sqmm 3.5 Core	1	Mtr	266.00
802	j	70 Sqmm 3.5 Core	1	Mtr	346.00
803	k	95 Sqmm 3.5 Core	1	Mtr	449.00
804	l	120 Sqmm 3.5 Core	1	Mtr	551.00
805	m	150 Sqmm 3.5 Core	1	Mtr	626.00
	ELEC-4.1.3	Supply of -----XLPE insulated, 1100V grade armoured alluminium cable as per specification confirming to IS:7098 (Part - I) Makes : RPG / V-Guard.			
806	a	185 Sqmm 3.5 Core	1	Mtr	767.00
807	b	240 Sqmm 3.5 Core	1	Mtr	974.00
808	c	300 Sqmm 3.5 Core	1	Mtr	1190.00
809	d	400 Sqmm 3.5 Core	1	Mtr	1492.00
	4.2	11 KV H.T. XLPE CABLES			
	ELEC-4.2.1	Supply of ----- HT XLPE (E) insulated 11000 V grade armoured Cable, as per IS specification confirming to IS 7098/II/85 with latest amendments. Makes : Torrent / Unicab / Polycab / Havells / KEI / RPG / Gloster.			
810	a	35 Sqmm 3 Core	1	Mtr	563.00
811	b	50 Sqmm 3 Core	1	Mtr	638.00
812	c	70 Sqmm 3 Core	1	Mtr	762.00
813	d	95 Sqmm 3 Core	1	Mtr	907.00
814	e	120 Sqmm 3 Core	1	Mtr	1031.00
815	f	150 Sqmm 3 Core	1	Mtr	1166.00
816	g	185 Sqmm 3 Core	1	Mtr	1378.00
817	h	240 Sqmm 3 Core	1	Mtr	1569.00
818	i	300 Sqmm 3 Core	1	Mtr	1773.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-4.2.2	Supply of ----- HT XLPE (E) insulated 33000 V grade armoured Cable, as per IS specification confirming to IS 7098/II/85 with latest amendments. Makes : Torrent / Unicab / Polycab / Havells / KEI.			
819	a	95 Sqmm 3 Core	1	Mtr	1370.00
820	b	120 Sqmm 3 Core	1	Mtr	1520.00
821	c	150 Sqmm 3 Core	1	Mtr	1660.00
822	d	185 Sqmm 3 Core	1	Mtr	1830.00
823	e	240 Sqmm 3 Core	1	Mtr	2100.00
824	f	300 Sqmm 3 Core	1	Mtr	2360.00
825	g	400 Sqmm 3 Core	1	Mtr	2730.00
	4.3	CABLE GLANDS			
		SINGLE COMPRESSION HEAVY DUTY GLANDS FOR ARMoured CABLES			
	ELEC-4.3.1	Supply of heavy duty type single compression brass cable glands duly nickel plated complete with brass checknut, outer sheath sealing rubber ring and washers suitable for ----- XLPE insulated armoured cable etc complete. Makes: SMI / Commet / Dowels.			
826	a	Up to 16.0 Sq.mm 2 Core	1	No	66.00
827	b	Up to 16.0 Sq.mm 4 Core	1	No	84.00
828	c	25 Sqmm to 50.0 Sq.mm 3.5 Core	1	No	123.00
829	d	70 Sqmm to 95.0 Sq.mm 3.5 core	1	No	190.00
830	e	120 Sqmm to 150.0 Sq.mm 3.5 core	1	No	320.00
831	f	185 Sq.mm 3.5 core	1	No	393.00
832	g	240 Sq.mm 3.5 core	1	No	454.00
833	h	300 Sq.mm 3.5 core	1	No	565.00
834	i	400 Sq.mm 3.5 core	1	No	669.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		DOUBLE COMPRESSION HEAVY DUTY GLANDS FOR ARMoured CABLES			
	ELEC-4.3.2	Supply of heavy duty type double compression weather proof type brass cable glands duly nickel plated as per BS 6121 and IP66 complete with brass checknut, outer sheath sealing gasket suitable for ----- XLPE insulated armoured cable etc complete. Makes: SMI / Commet / Dowels.			
835	a	Up to 16.0 Sq.mm 2 Core	1	No	140.00
836	b	10 Sq.mm 4 Core	1	No	141.00
837	c	16 to 25 Sq.mm 4 Core	1	No	188.00
838	d	35 Sq mm 3.5 Core	1	No	230.00
839	e	50 Sq mm 3.5 Core	1	No	300.00
840	f	70 to 95 Sq.mm 4 Core	1	No	450.00
841	g	120 to 150 Sq.mm 4 Core	1	No	630.00
842	h	185 Sq mm 3.5 Core	1	No	770.00
843	i	240 Sq mm 3.5 Core	1	No	1020.00
844	j	300 Sq mm 3.5 Core	1	No	1180.00
845	k	400 Sq mm 3.5 Core	1	No	1350.00
		SHROUDS FOR DOUBLE COMPRESSION GLANDS			
	ELEC-4.3.3	Supply and erecting of PVC shrouds for double compression brass cable glands suitable for ----- XLPE insulated armoured cable etc complete.			
846	a	Up to 16.0 Sq.mm 2 Core	1	No	6.00
847	b	10 Sq.mm 4 Core	1	No	10.00
848	c	16 to 25 Sq.mm 4 Core	1	No	10.00
849	d	35 Sq mm 3.5 Core	1	No	15.00
850	e	50 Sq mm 3.5 Core	1	No	18.00
851	f	70 to 95 Sq.mm 4 Core	1	No	25.00
852	g	120 to 150 Sq.mm 4 Core	1	No	25.00
853	h	185 Sq mm 3.5 Core	1	No	38.00
854	i	240 Sq mm 3.5 Core	1	No	38.00
855	j	300 Sq mm 3.5 Core	1	No	54.00
856	k	400 Sq mm 3.5 Core	1	No	54.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		EARTH TAGS FOR GLANDS			
	ELEC-4.3.4	Supply and erecting of brass earth tag for cable glands suitable for ----- etc complete.			
857	a	up to 10.0 Sq.mm	1	No	10.00
858	b	16 to 35.0 Sq.mm	1	No	10.00
859	c	50.0 Sq.mm	1	No	15.00
860	d	70 to 95.0 Sq.mm	1	No	18.00
861	e	120 to 185.0 Sq.mm	1	No	25.00
862	f	240 to 300.0 Sq.mm	1	No	40.00
863	g	400.0 Sq.mm	1	No	55.00
	4.4	LUGS			
	ELEC-4.4.1	Supply of heavy duty long barrel copper lugs confirming to I.S specifications suitable for ----- cable etc complete with nuts, bolts and washers. Makes: DMI / Jainson / Dowels			
864	a	Up to 16 Sq.mm	1	No	20.00
865	b	25 Sq.mm	1	No	28.00
866	c	35 Sq.mm	1	No	32.00
867	d	50 Sq.mm	1	No	47.00
868	e	70 Sq.mm	1	No	81.00
869	f	95 Sq.mm	1	No	99.00
870	g	120 Sq.mm	1	No	134.00
871	h	150 Sq.mm	1	No	158.00
872	i	185 Sq.mm	1	No	226.00
873	j	240 Sq.mm	1	No	326.00
874	k	300 Sq.mm	1	No	430.00
875	l	400 Sq.mm	1	No	632.00
	ELEC-4.4.2	Supply of heavy duty long barrel alluminium lugs confirming to I.S specifications suitable for ----- cable etc complete with nuts, bolts and washers. Makes: DMI / Jainson / Dowels			
876	a	Upto 16 Sq.mm	1	No	11.00
877	b	25 Sq.mm	1	No	13.00
878	c	35 Sq.mm	1	No	16.00
879	d	50 Sq.mm	1	No	18.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
880	e	70 Sq.mm	1	No	23.00
881	f	95 Sq.mm	1	No	24.00
882	g	120 Sq.mm	1	No	33.00
883	h	150 Sq.mm	1	No	43.00
884	i	185 Sq.mm	1	No	55.00
885	j	240 Sq.mm	1	No	80.00
886	k	300 Sq.mm	1	No	103.00
887	l	400 Sq.mm	1	No	170.00
	4.5	HEAT SHRINKABLE LT CABLE JOINTS			
	ELEC-4.5.1	Supply and erecting of heat shrinkable straight through joint Indoor / Out door for L.T. XLPE Armoured 1100V grade cable complete with necessary accessories and suitable clamps including cost and conveyance of materials complete for ----- with outer tubing seamless type etc complete for finished item of work. Makes : Raychem / M Seal			
888	a	10 to 16 Sqmm 4 Core	1	No	1387.00
889	b	25 to 50 Sqmm 3.5 Core	1	No	1649.00
890	c	70 to 185 Sqmm 3.5 Core	1	No	2380.00
891	d	240 to 300 Sqmm 3.5 Core	1	No	4267.00
892	e	400 Sqmm 3.5 Core	1	No	5788.00
	4.6	11 KV 3 CORE HT CABLE STRAIGHT THROUGH JOINTS			
	ELEC-4.6.1	Providing and erecting heat shrinkable straight through joint for out door / indoor for H.T, XLPE Insulated armoured cable 11000V grade complete with necessary accessories and suitable clamps for ----- cable including cost and conveyance of materials and all labour charges etc., complete with outer tubing tubular type. Makes : Raychem / M Seal			
893	a	16 to 35Sqmm	1	No	14066.00
894	b	50 to 95Sqmm	1	No	16889.00
895	c	120 to 185Sqmm	1	No	21484.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	4.7	HT END TERMINATION KITS			
	ELEC-4.7.1	Providing and erecting heat shrinkable indoor termination kit for 11 KV HT XLPE insulated armoured cable ----- with necessary materials etc., complete. Makes : Raychem / M Seal			
896	a	70-95 Sqmm 3 core	1	No	8029.00
897	b	120 Sqmm 3 core	1	No	8137.00
898	c	150-185 Sqmm 3 core	1	No	8727.00
899	d	240-300 Sqmm 3 core	1	No	9290.00
900	e	70-95 Sqmm 3 core	1	No	12176.00
901	f	120 Sqmm 3 core	1	No	12284.00
902	g	150-185 Sqmm 3 core	1	No	13445.00
903	h	240-300 Sqmm 3 core	1	No	13885.00
	4.8	DOUBLE WALLED CORRUGATED HDPE PIPE			
	ELEC-4.8.1	Supply and Transportation of double walled corrugated HDPE duct made as per specification BSEN - 500 86/IS 14930 Part-II with all accessories like couplers, bends, end caps, Ts etc., complete. Makes: DURA LINE (Dura Guard) / Bajaj / Gamson / Ultra Plus			
904	a	Outer dia 50mm and Inner dia 38mm	1	Mtr	91.00
905	b	Outer dia 63mm and Inner dia 51mm	1	Mtr	117.00
906	c	Outer dia 78mm and Inner dia 63mm	1	Mtr	143.00
907	d	Outer dia 90mm and Inner dia 76mm	1	Mtr	152.00
908	e	Outer dia 120mm and Inner dia 103.50mm	1	Mtr	237.00
909	f	Outer dia 160mm and Inner dia 136mm	1	Mtr	352.00
910	g	Outer dia 180mm and Inner dia 152mm	1	Mtr	462.00
911	h	Outer dia 200mm and Inner dia 170mm	1	Mtr	538.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	4.9	CABLE TRAYS			
	ELEC-4.9.1	Supply, Transportation and Installation of ----- hot dip GI perforated cable tray without cover along with coupler plates, Anchor bolts and nuts etc complete and the tray should be fitted on the wall / Ceiling etc. complete for finished item of work.			
		Note: Add 30% Extra for Perforated cable tray with cover on below rates.			
912	a	600mm x 75mm x 2mm thick	1	Mtr	1270.00
913	b	600mm x 50mm x 2mm thick	1	Mtr	940.00
914	c	450mm x 50mm x 2mm thick	1	Mtr	830.00
915	d	300mm x 50mm x 2mm thick	1	Mtr	700.00
916	e	150mm x 50mm x 2mm thick	1	Mtr	390.00
917	f	100mm x 25mm x 2mm thick	1	Mtr	230.00
918	g	75mm x 25mm x 2mm thick	1	Mtr	200.00
919	h	600mm x 75mm x 1.6mm thick	1	Mtr	1015.00
920	i	600mm x 50mm x 1.6mm thick	1	Mtr	750.00
921	j	450mm x 50mm x 1.6mm thick	1	Mtr	660.00
922	k	300mm x 50mm x 1.6mm thick	1	Mtr	570.00
923	l	150mm x 50mm x 1.6mm thick	1	Mtr	310.00
924	m	100mm x 25mm x 1.6mm thick	1	Mtr	180.00
925	n	75mm x 25mm x 1.6mm thick	1	Mtr	160.00
	ELEC-4.9.2	Supply, Transportation and Installation of ----- GI Ladder type cable tray along with required coupler plates, Anchor bolts and nuts including required welding for joints etc complete and the tray should be fitted on the wall / Ceiling etc. complete for finished item of work.			
926	a	1000mm x 75mm x 2mm thick	1	Mtr	1010.00
927	b	750mm x 75mm x 2mm thick	1	Mtr	910.00
928	c	600mm x 75mm x 2mm thick	1	Mtr	800.00
929	d	300mm x 50mm x 2mm thick	1	Mtr	500.00
930	e	150mm x 50mm x 2mm thick	1	Mtr	400.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		SECTION - 5			
	5.1	FANS			
931	ELEC-5.1.1	Supply of 48" (1200mm) 5 star rated Sweep ISI mark Ceiling Fan as per IS 374 - 1979 Makes : Crompton / Havells / Orient	1	No	1995.00
932	ELEC-5.1.2	Supply of 48" (1200mm) 5 star rated Sweep Ceiling Fan as per IS 374 - 1979 Makes : Crompton / Havells / Orient	1	No	1750.00
933	ELEC-5.1.3	Supply of 48" (1200mm) Sweep 5 Star rated Ceiling Fan as per IS 374 - 1979 Makes : Crompton High Speed Decora / Havells Fusion 50 / Orient Summer Crown	1	No	2432.00
934	ELEC-5.1.4	Supply of 56" (1400mm) Sweep Ceiling Fan as per IS 374 - 1979 Makes : Crompton High Speed / Havells Velocity / Orient	1	No	1976.00
935	ELEC-5.1.5	Supply of 12" (300mm) Cabin fan. Makes : Crompton / Havells ciera / Orient AP12.	1	No	1714.00
936	ELEC-5.1.6	Supply of 16" (400mm) Pedestal Fan. Makes : Crompton SDX Block Gold / Bajaj Spectrum / Havells Swing Remote / Orient.	1	No	2890.00
937	ELEC-5.1.7	Supply of 16" (400mm) Wall mounted Fan. Makes : Crompton SDX Block Gold / Bajaj Elite / Havells Swing Premia gold / Orient Wall 43.	1	No	2516.00
	ELEC-5.1.8	Supply of -----Wall mounting / Pedestal Air Circulators Makes : Crompton / Havells Turbo Force / Orient / Almounard.			
938	a	18" (450mm)	1	No	5418.00
939	b	24" (600mm)	1	No	6618.00
	ELEC-5.1.9	Supply of ----- Light duty exhaust fan with wire guard etc complete Makes : Crompton / Bajaj Bahar WG / Havells Ventilair-DB / Orient hill air.			
940	a	9" (225mm)	1	No	1227.00
941	b	12" (300mm)	1	No	1368.00
	ELEC-5.1.10	Supply of ----- ISI, 900 RPM Heavy duty exhaust fan with metallic blades with Mark Makes : Crompton / Almounard / Havells Turbo Force.			
942	a	12" (300mm)	1	No	2829.00
943	b	15" (375mm)	1	No	3337.00
944	c	18" (450mm)	1	No	4360.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-5.1.11	Supply and fixing of GI louver shutter for -----Exhaust fan.			
945	a	9"			140.00
946	b	12"			150.00
947	c	15" /16"			165.00
948	d	18"			180.00
	ELEC-5.1.12	Providing recessing brick wall suitable for erection of exhaust fan up to 450mm sweep completed with grouting, nuts, bolts, plastering and colour wash to match the the colour of wall.			
949	a	Wall thickness 9" Brick			230.00
950	b	Wall thickness 12" Brick			400.00
951	c	Wall thickness 15" / 18" Brick			500.00
	5.2	WATER HEATERS			
	ELEC-5.2.1	Supply, Transportation and fixing of storage / Pressure type Vertical / Horizontal 230/250V single phase 2000watts ISI mark 5 Star rated water heater with ABS plastic body of ----- capacity to withstand up to 6.5 bar of water pressure including all standard accessories and dead weight pressure reducing valve on out let side, including cost of 2 Nos SS flexible braided hose pipe, testing and all labour charges etc., complete. Makes : Crompton / Jaquar / Venus / Racold / AO Smith / Havells.			
952	a	15 Ltrs	1	No	8941.00
953	b	25 Ltrs	1	No	10479.00
	5.3	ACCESSORIES FOR WATER HEATERS			
954	ELEC-5.3.1	Heating element of 1.5 / 2.0 / 3.0 KW.	1	No	385.00
955	ELEC-5.3.2	Supply of thermostat with range 30 ⁰ to 90 ⁰ C adjustable and suitable for 25 to 50 Ltrs capacity.	1	No	266.00
956	ELEC-5.3.3	Supply of pressure release valve for water heater of 15 to 50 Ltrs.capacity.	1	No	266.00
957	ELEC-5.3.4	Flexible Nylon / PVC Metallic hose pipe	1	No	160.00
	5.4	STARTERS FOR MOTORS			
	ELEC-5.4.1	Supply & Fixing of D.O.L Starter 250V, Single phase, 50Hz. With SS encloser comprising of contactor with bi-metalic relay with necessary push buttons, etc., complete suitable ----- Makes: Siemens / Crompton / L&T / BCH.			
958	a	Up to 3.0 HP.	1	No	900.00
959	b	Upto 7.5.HP.	1	No	2100.00
960	c	Upto 10.0.HP.	1	No	3500.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-5.4.2	Supply & Fixing of Star Delta Starter 415V, Three phase, 50Hz. With SS enclosure comprising of contactor with bi-metallic relay with necessary push buttons, etc., complete suitable from ----- Makes: Siemens / Crompton / L&T / BCH.			
961	a	12.5 HP to 15.0 HP.	1	No	6800.00
962	b	25.0 HP to 30.0 HP.	1	No	11220.00
	5.5	SINGLE PHASE SUBMERSIBLE MOTOR PUMP SETS			
	ELEC-5.5.1	Supply and Transportation of ----- single phase ISI submersible motor pumpset suitable for 4" Bore well. Makes: Kirloskar / Crompton / Texmo / CRI / KSB / Aryan Varsha			
963	a	0.75HP 8 Stage	1	No	14145.00
964	b	1.00HP 10 Stage	1	No	16167.00
965	c	1.00HP 15 Stage	1	No	16672.00
966	d	1.50HP 21 Stage	1	No	20208.00
967	e	2.00HP 25 Stage	1	No	24249.00
	ELEC-5.5.2	Supply and Transportation of ----- single phase ISI submersible motor pumpset suitable for 4" Bore well. Makes: Varuna / Flowell / Waterman / Techno / Mahavir / unitek / Fitwell / Lubi / Falcon / Sterling / Ellen / Karvel / LPS / Varsha / Ajantha.			
968	a	0.75 HP 8 Stage	1	No	13472.00
969	b	1.00 HP 10 Stage	1	No	15397.00
970	c	1.00 HP 15 Stage	1	No	15878.00
971	d	1.50 HP 21 Stage	1	No	19245.00
972	e	2.00 HP 25 Stage	1	No	23095.00
	5.6	THREE PHASE SUBMERSIBLE MOTOR PUMP SETS.			
	ELEC-5.6.1	Supply and Transportation of star rated -----Three phase ISI submersible motor pumpset suitable for 6" Bore well. Makes: Kirloskar / Crompton / Texmo / CRI / KSB / Aryan Varsha			
973	a	3.00 HP 5-10 Stage	1	No	30311.00
974	b	5.00 HP 5-10 Stage	1	No	34161.00
975	c	5.00 HP 12-16 Stage	1	No	38395.00
976	d	7.50 HP 5-10 Stage	1	No	37818.00
977	e	7.50 HP 12-16 Stage	1	No	41859.00
978	f	7.50 HP 20-24 Stage	1	No	42918.00
979	g	10.00 HP 5-10 Stage	1	No	44265.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
980	h	10.00 HP 12-16 Stage	1	No	45708.00
981	i	10.00 HP 20-24 Stage	1	No	51963.00
982	j	12.50 HP 8-12 Stage	1	No	44265.00
983	k	12.50 HP 16-24 Stage	1	No	53888.00
984	l	15.00 HP 8-12 Stage	1	No	57736.00
985	m	15.00 HP 16-24 Stage	1	No	59661.00
	ELEC-5.6.2	Supply and Transportation of star rated ----- Three phase ISI submersible motor pumpset suitable for 6" Bore well. Makes: Varuna / Flowell / Waterman / Techno / Mahavir / unitek / Fitwell / Lubi / Falcon / Sterling / Ellen / Karvel / LPS / Varsha / Ajantha.			
986	a	3.00 HP 5-10 Stage	1	No	27281.00
987	b	5.00 HP 5-10 Stage	1	No	30310.00
988	c	5.00 HP 12-16 Stage	1	No	34556.00
989	d	7.50 HP 5-10 Stage	1	No	34035.00
990	e	7.50 HP 12-16 Stage	1	No	37673.00
991	f	7.50 HP 20-24 Stage	1	No	38625.00
992	g	10.00 HP 5-10 Stage	1	No	39838.00
993	h	10.00 HP 12-16 Stage	1	No	41138.00
994	i	10.00 HP 20-24 Stage	1	No	46767.00
995	j	12.50 HP 8-12 Stage	1	No	39838.00
996	k	12.50 HP 16-24 Stage	1	No	48499.00
997	l	15.00 HP 8-12 Stage	1	No	51963.00
998	m	15.00 HP 16-24 Stage	1	No	53695.00
	5.7	SINGLE PHASE OPEN WELL SUBMERSIBLE MOTOR PUMP SETS.			
	ELEC-5.7.1	Supply and Transportation of-----Single phase open well ISI submersible motor pumpset. Makes: Kirloskar / Crompton / Texmo / CRI / KSB / Aryan Varsha			
999	a	1.00 HP	1	No	11115.00
1000	b	1.50 HP	1	No	12631.00
1001	c	3.00 HP	1	No	17177.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-5.7.2	Supply and Transportation of-----Single phase open well ISI submersible motor pumpset. Makes: Varuna / Flowell / Waterman / Techno / Mahavir / unitek / Fitwell / Lubi / Falcon / Sterling / Ellen / Karvel / LPS / Varsha.			
1002	a	1.00 HP	1	No	10586.00
1003	b	1.50 HP	1	No	12029.00
1004	c	3.00 HP	1	No	16359.00
	5.8	THREE PHASE OPEN WELL SUBMERSIBLE PUMP SETS.			
	ELEC-5.8.1	Supply and Transportation of ----- Three phase open well ISI submersible motor pumpset----- Makes: Kirloskar / Crompton / Texmo / CRI / KSB / Aryan Varsha			
1005	a	3.00 HP (65x50).	1	No	17177.00
1006	b	5.00 HP (75x65).	1	No	21218.00
1007	c	7.50 HP (100x75).	1	No	25260.00
1008	d	10.00 HP (100x75).	1	No	32333.00
	ELEC-5.8.2	Supply and Transportation of ----- Three phase open well ISI submersible motor pumpset----- Makes: Varuna / Flowell / Waterman / Techno / Mahavir / unitek / Fitwell / Lubi / Falcon / Sterling / Ellen / Karvel / LPS / Varsha / Ajantha.			
1009	a	3.00 HP (65x50).	1	No	16359.00
1010	b	5.00 HP (75x65).	1	No	20208.00
1011	c	7.50 HP (100x75).	1	No	24057.00
1012	d	10.00 HP (100x75).	1	No	30793.00
	5.9	SINGLE PHASE MONO BLOCK MOTOR PUMP SETS.			
1013	ELEC-5.9.1	Supply and Transportation of 0.5HP Single phase, 2880 RPM 50 Hz ISI Mono block CI body motor pumpset (25x25mm). Makes: Kirloskar / Crompton / Texmo / CRI / KSB / Aryan Varsha	1	No	4951.00
1014	ELEC-5.9.2	Supply and Transportation of 0.5HP Single phase, 2880 RPM 50 Hz ISI Mono block CI body motor pumpset (25x25mm). Makes: Varuna / Flowell / Waterman / Techno / Mahavir / unitek / Fitwell / Lubi / Falcon / Sterling / Ellen / Karvel / LPS / Varsha.	1	No	4715.00
	ELEC-5.9.3	Supply and Transportation of-----Single phase ISI Mono block CI body motor pumpset----- Makes: Kirloskar / Crompton / Texmo / CRI / KSB / Aryan Varsha			
1015	a	1.00 HP (25x25mm).	1	No	7175.00
1016	b	1.50 HP (32x25mm).	1	No	9599.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-5.9.4	Supply and Transportation of-----Single phase ISI Mono block CI body motor pumpset. Makes: Varuna / Flowell / Waterman / Techno / Mahavir / unitek / Fitwell / Lubi / Falcon / Sterling / Ellen / Karvel / LPS / Varsha.			
1017	a	1.00 HP (25x25mm).	1	No	6833.00
1018	b	1.50 HP (32x25mm).	1	No	9142.00
	ELEC-5.9.5	Supply and Transportation of -----ISI self priming Mono block IP44 motor pumpset----- Makes: Kirloskar / Crompton / Texmo / CRI / KSB / Aryan Varsha			
1019	a	1.02 HP Single phase (40x40mm).	1	No	12125.00
1020	b	2.00 HP Three phase (40x40mm).	1	No	14145.00
1021	c	3.00 HP Three phase (50x50mm).	1	No	19197.00
1022	d	5.00 HP Three phase (80x80mm).	1	No	23240.00
	ELEC-5.9.6	Supply and Transportation of -----ISI self priming Mono block IP44 motor pumpset----- Makes: Varuna / Flowell / Waterman / Techno / Mahavir / unitek / Fitwell / Lubi / Falcon / Sterling / Ellen / Karvel / LPS / Varsha.			
1023	a	1.02 HP Single phase (40x40mm).	1	No	11547.00
1024	b	2.00 HP Three phase (40x40mm).	1	No	13472.00
1025	c	3.00 HP Three phase (50x50mm).	1	No	18284.00
1026	d	5.00 HP Three phase (80x80mm).	1	No	22133.00
	5.10	CONTROL PANEL BOARD FOR MOTORS			
1027	ELEC-5.10.1	Supply and Transportation of control panel for single phase submersible motors up to 3 HP @ 220V 50Hz operating range between 80 to 240V including supply and fixing of Direct - on - Line LTLK / SIEMENS / CROMPTON make Volt meter and Ammeter with starting and running capacitors assembled with ISI mark contactors and fitted with Legrand make ISI mark MCB etc., complete.	1	No	4480.00
1028	ELEC-5.10.2	Supply and Transportation of control panel for three phase submersible motors up to 5 HP @ 415V 50Hz operating fitted with supply and fixing of Direct - on - Line LTLK /BCH/ SIEMENS / CROMPTON make, 0-500V Volt meter and 0-30A Ammeter, Indication lamps, selector switches, CTS, 32A TP MCB, Single phase preventor,suitable contactor to with stand low voltage pick up and high voltage resistant, with ISI marked capacitors assembled with ISI mark contactors and fitted with Legrand make ISI mark MCB etc., complete.	1	No	7000.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1029	ELEC-5.10.3	Supply and Transportation of control panel for three phase submersible motors above 5 HP up to 7.5 HP @ 415V 50Hz operating fitted with supply and fixing of Direct - on - Line LTLK /BCH/ SIEMENS / CROMPTON make, 0-500V Volt meter and 0-30A Ammeter, Indication lamps, selector switches, CTS, 32A TP MCB, Single phase preventor,suitable contactor to with stand low voltage pick up and high voltage resistant, with ISI marked capacitors assembled with ISI mark contactors and fitted with Legrand make ISI mark MCB etc., complete.	1	No	8400.00
1030	ELEC-5.10.4	Supply and Transportation of control panel for three phase submersible motors above 7.5 HP to 12.5 HP @ 415V 50Hz operating fitted with supply and fixing of Direct - on - Line LTLK /BCH/ SIEMENS / CROMPTON make, 0-500V Volt meter and 0-30A Ammeter, Indication lamps, selector switches, CTS, 32A TP MCB, Single phase preventor,suitable contactor to with stand low voltage pick up and high voltage resistant, with ISI marked capacitors assembled with ISI mark contactors and fitted with Legrand make ISI mark MCB etc., complete.	1	No	14934.00
		Note: If it is Out door panel add 10% extra on above.			
	5.11	UPVC PIPES AND FITTINGS			
	ELEC-5.11.1	Supply and delivery of UPVC Raising Column Pipes for submersible motors with both ends square threaded, with rubber 'O' rings with smooth inner surface which can take the minimum load of 2100 to 4000 Kgs weights. (Weight of the = Pump + Pipes + Water in Space) Makes : Ashirvad / Finolex / Waterflo / Apollo.			
1031	a	Nominal diameter of Standard 42 / 32mm UPVC pipe cable with standing upto 20 Kgs / CM2 upto 200 Mts	1	Mtr	132.00
1032	b	Nominal diameter of Standard 48 / 40mm UPVC pipe cable with standing upto 20 Kgs / CM2 upto 200 Mts	1	Mtr	160.00
1033	c	Nominal diameter of Standard 60/50 mm UPVC pipe cable with standing upto 20 Kgs / CM2 upto 200 Mts	1	Mtr	232.00
1034	d	Nominal diameter of Standard 75/65 mm UPVC pipe cable with standing upto 20 Kgs / CM2 upto 200 Mts	1	Mtr	312.00
1035	e	Nominal diameter of Standard 88/80 mm UPVC pipe cable with standing upto 20 Kgs / CM2 upto 200 Mts	1	Mtr	445.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-5.11.2	SUITABLE HEAVY DUTY COUPLINGS FOR STANDARD PIPES			
1036	a	Nominal diameter of heavy duty couplings 42/32 mm UPVC pipe (27 Kgs / CM 2) capable of with standing up to 27 Kgs / CM2 above 200 mts and upto 300 mts	1	Mtr	36.00
1037	b	Nominal diameter of heavy duty couplings 48/40 mm UPVC pipe (27 Kgs / CM 2) capable of with standing up to 27 Kgs / CM2 above 200 mts and upto 300 mts	1	Mtr	54.00
1038	c	Nominal diameter of heavy duty couplings 60/50 mm UPVC pipe (27 Kgs / CM 2) capable of with standing up to 27 Kgs / CM2 above 200 mts and upto 300 mts	1	Mtr	58.00
1039	d	Nominal diameter of heavy duty couplings 75/65 mm UPVC pipe (27 Kgs / CM 2) capable of with standing up to 27 Kgs / CM2 above 200 mts and upto 300 mts	1	Mtr	67.00
1040	e	Nominal diameter of heavy duty couplings 88/80 mm UPVC pipe (27 Kgs / CM 2) capable of with standing up to 27 Kgs / CM2 above 200 mts and upto 300 mts	1	Mtr	80.00
	ELEC-5.11.3	Supply and Delivery of CI Adopter Assembly Makes : Ashirvad / Finolex / Waterflo / Apollo.			
1041	a	1 1/2" (48/40mm)	1	No	578.00
1042	b	2" (60/50mm)	1	No	756.00
1043	c	2 1/2" (75/65 mm)	1	No	978.00
	ELEC-5.11.4	Supply and Delivery of pump guard assembly with 2Nos SS Powder coated flange and 2Nos SS Rods with nut and colter pin. Makes : Ashirvad / Finolex / Waterflo / Apollo.			
1044	a	1 1/2" (48/40mm)	1	No	356.00
1045	b	2" (60/50mm)	1	No	400.00
1046	c	2 1/2" (75/65 mm)	1	No	534.00
1047	d	(88/80 mm)	1	No	800.00
	5.12	REPAIRS TO MOTORS AND REWINDING, BEARINGS			
	ELEC-5.12.1	Bearing of approved make for electric motor single phase / 3 phase AC ----- of all types.			
1048	a	Upto 1 HP	1	No	187.00
1049	b	Upto 2 to 3 HP	1	No	242.00
1050	c	Upto 5 to 7.5 HP	1	No	319.00
1051	d	Upto 10 to 12.5 HP	1	No	333.00
1052	e	Upto 15 to 20 HP	1	No	509.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-5.12.2	Supply of -----for table / cabin / pedestal / ceiling / exhaust fan complete with alignment of shaft and tested.			
1053	a	Bearing	1	No	88.00
1054	b	Bush / rubber / ring washers	1	No	42.00
1055	c	Capacitor	1	No	40.00
1056	ELEC-5.12.3	EICHER model 11:10 with 100 H.P. direct injection 4 stroke engine with one spare wheel 3800 mm cabin high deck with jangla (full body) (4 wheeler) for generator	1	No	600053.00
	5.13	ACCESSORIES OF MOTORS			
	ELEC-5.13.1	Supply, Transportation and fixing of suitable pump guard set (2Nos SS), Flanges set (2 Nos) to protect and safe guard the pump and Motor from vibrations while starting and switching of the pumpset.			
1057	a	OD 42mm	1	No	377.00
1058	b	OD 48mm	1	No	446.00
1059	c	OD 60mm	1	No	645.00
1060	d	OD 75mm	1	No	773.00
1061	e	OD 80mm	1	No	991.00
	ELEC-5.13.2	Supply, Transportation and fixing of seamless cast iron adopter assembly (Two Nos at bottom of the pipe to coupling to the pump set and the other at top end of the pipes) for installing the pump set with pipes including cost and conveyance of all materials, taxes etc., complete.			
1062	a	OD 42mm	1	No	555.00
1063	b	OD 48mm	1	No	645.00
1064	c	OD 60mm	1	No	842.00
1065	d	OD 75mm	1	No	1090.00
1066	e	OD 80mm	1	No	1288.00
	ELEC-5.13.3	Supply, Transportation and fixing of -----90 degree bend with length of 20cm (Center to face) galvanised GI bends heavy duty with threaded at both ends for installing the pump set including cost and conveyance of all materials, taxes etc., complete.			
1067	a	50mm dia	1	No	183.00
1068	b	65mm dia	1	No	250.00
1069	c	80mm dia	1	No	313.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-5.13.4	Supply, Transportation and fixing of following MS threaded Flanges 2 Nos with nuts and bolts including cost and conveyance of all materials, taxes etc., complete.			
1070	a	50mm dia MS flanges set (2 Nos) 150mm dia OD, 12mm thick each flange with required dia bolts and nuts.	1	No	238.00
1071	b	65mm dia MS flanges set (2 Nos) 165mm dia OD, 12mm thick each flange with required dia bolts and nuts.	1	No	337.00
1072	c	80mm dia MS flanges set (2 Nos) 175mm dia OD, 12mm thick each flange with required dia bolts and nuts.	1	No	357.00
	ELEC-5.13.5	Supply, Transportation and fixing of -----with required nuts and bolts.			
1073	a	50mm dia, 450mm length, 12mm thickness and 75mm wide MS Clamp set	1	No	298.00
1074	b	65mm dia, 450mm length, 12mm thickness and 75mm wide MS Clamp set	1	No	313.00
1075	c	80mm dia, 450mm length, 12mm thickness and 75mm wide MS Clamp set	1	No	417.00
1076	d	150mm dia galvanised bore cover	1	No	158.00
1077	e	150mm dia stainless steel bore cover	1	No	313.00
		SECTION - 6			
		AIR CONDITIONERS			
	6.1	SPLIT Acs			
	ELEC-6.1.1	Supply of split AC unit with high wall mounted indoor unit and outdoor condensing unit Hermetically sealed compressor suitable for operation on 230V, 50Hz, 1Phase AC supply capable of performing cooling dehumidifying air circulating and filtering with cooling and condensing units with 3.5 mts of copper piping, insulation kit and 4 mts of 3 core copper flexible chord (Voltage range 160- 264 volts) and cordless remote control			
1078	a	1.5 TR 3 Star capable of delivering 18000 BTU/hr and above of makes Mitsubishi Heavy	1	No	38300.00
1079	b	1.5 TR 3 Star capable of delivering 18000 BTU/hr and above of makes Daikin / Thoshiba / O General	1	No	36400.00
1080	c	1.8 TR 2 Star capable of delivering 21600 BTU/hr and above of makes Daikin / Thoshiba / O General	1	No	44000.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	6.2	INVERTER SPLIT AC UNITS (COOLING ONLY)			
	ELEC-6.2.1	Supply of INVERTER Model Cool type split AC unit with high wall mounted Single Split indoor unit and outdoor condensing unit Hermetically sealed compressor suitable for operation on 230V, 50Hz, 1Phase AC supply capable of performing Heat cool dehumidifying air circulating and filtering with cooling and condensing units with 3.5 mts of copper piping, insulation kit and 4 mts of 4 core copper flexible chord (Voltage range 160- 264 volts) and cordless remote control			
1081	a	1.5 TR 3 Star capable of delivering 18000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : O General / Daikin / Toshiba	1	No	42000.00
1082	b	1.5 TR 4 Star capable of delivering 18000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : O General / Daikin / Toshiba	1	No	44200.00
1083	c	1.8 TR 3 Star capable of delivering 21600 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : O General / Daikin / Toshiba	1	No	54000.00
1084	d	1.8 TR 4 Star capable of delivering 21600 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : O General / Daikin / Toshiba	1	No	59600.00
	6.3	INVERTER CASSETTE TYPE AC UNITS			
	ELEC-6.3.1	Supply of Inverter Cassette type AC unit with ceiling mounted indoor unit and outdoor condensing unit Hermetically sealed compressor suitable for operation on AC supply capable of performing cooling dehumidifying air circulating and filtering with cooling and condensing units etc complete with Wireless remote controller, but without refrigerent piping and cable.			
1085	a	1.5 TR 4 Star capable of delivering 18000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : O General / Daikin / Toshiba	1	No	69500.00
1086	b	2.0 TR 4 Star capable of delivering 24000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : O General / Daikin / Toshiba	1	No	76700.00
1087	c	2.5 TR 4 Star capable of delivering 30000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : O General / Daikin / Toshiba	1	No	104500.00
1088	d	3.5 TR 4 Star Three Phase capable of delivering 42000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : O General / Daikin / Toshiba	1	No	135600.00
1089	e	4.0 TR 4 Star Three Phase capable of delivering 48000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : O General / Daikin / Toshiba	1	No	138000.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	6.4	TOWER MODEL TYPE AC UNITS			
	ELEC-6.4.1	Supply of Slim line / Tower Model/Verticool type split AC unit with indoor unit and floor mounted outdoor condensing unit Hermetically sealed Scroll compressor suitable for operation on AC supply capable of performing cooling dehumidifying air circulating and filtering with cooling and condensing units etc complete with cordless remote control			
1090	a	3.3 TR Three Phase capable of delivering 39600 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes: Daikin	1	No	87200.00
1091	b	3.8 TR Three Phase capable of delivering 45600 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes: Daikin	1	No	92300.00
1092	c	4.6 TR Three Phase capable of delivering 55200 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes: Daikin	1	No	97500.00
	6.5	REPAIRS TO AIR CONDITIONERS			
1093	ELEC-6.5.1	Supply, Fabrication of 1set MS bracket suitable for fixing out door unit of split AC unit.	1	Set	862.00
	ELEC-6.5.2	Providing 2 runs of Copper tubes for suction and liquid between indoor and outdoor unit for split/Casseete Air-Conditioner including foaming etc., complete.			
1094	a	1. 3/4" x 3/8" 2. 5/8" x 1/4" 3. 1/2" x 1/4" or equivalent sizes	1	Mtr	816.00
1095	b	7/8" x 1/2"	1	Mtr	1361.00
1096	c	1 1/8" x 5/8"	1	Mtr	1587.00
1097	ELEC-6.5.3	Supply of 1.0 / 1.5 Ton brand new Rotary type sealed compressor.	1	No	7390.00
1098	ELEC-6.5.4	Supply of 2.0 Ton brand new Rotary type sealed compressor.	1	No	8387.00
1099	ELEC-6.5.5	Multi speed Fan Motor suitable for 1.0 / 1.5 / 2.0 Ton Window A.C.Unit of makes Crompton / AU.	1	No	1442.00
1100	ELEC-6.5.6	Fan motor capacitor 6 mfd by new capacitor for A.C machine of 1.0 1.5 / Ton Capacity.	1	No	142.00
1101	ELEC-6.5.7	Thermostat switch suitable for 1.0 / 1.5 / 2.0 Ton A.C.Unit.	1	No	372.00
1102	ELEC-6.5.8	Starting capacitor of 80 to 120 mfd. by new approved make capacitor suitable for compressor motor of 1.0 / 1.5 Ton A.C. Unit.	1	No	182.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1103	ELEC-6.5.9	Running capacitor of 36 mfd by new approved make capacitor suitable for compressor motor of 1.0 / 1.5 Ton A.C.Unit.	1	No	220.00
1104	ELEC-6.5.10	Relay by approved make having pickup voltage 220 Volts and dropout voltage 120 Volts suitable for 1.0 / 1.50 Ton A.C. Unit.	1	No	204.00
1105	ELEC-6.5.11	Filter and capillary tube including welding etc., complete for 1.0 / 1.5 / 2.0 Ton A.C.Unit.	1	No	441.00
1106	ELEC-6.5.12	Air filter suitable for 1.50 Ton Window A.C.Unit P.V.C. / NYLON.	1	No	204.00
1107	ELEC-6.5.13	Air filter suitable for 1.50 Ton Split A.C.Unit P.V.C. / NYLON.	1	No	431.00
1108	ELEC-6.5.14	Rewiring the entire Window type 1.50 Ton A.C.unit with 2.5 Sq.mm Flexible copper cable and putting the same in working conditions.	1	No	295.00
1109	ELEC-6.5.15	Complete servicing of 1.0 - 2.0 TR AC unit with cleaning the condensor cooling Coil etc., by blower and oiling the Fan Motor and Cleaning all parts and putting the machine in working condition.	1	No	363.00
1110	ELEC-6.5.16	Fan blade for 1.0 / 1.5 Ton A.C.Machine.	1	No	508.00
1111	ELEC-6.5.17	Grill of 1.0 / 1.5 ton A.C. Machine (for assembled Units).	1	No	388.00
1112	ELEC-6.5.18	Grill of 1.0 / 1.5 ton A.C. Machine of branded units.	1	No	1542.00
1113	ELEC-6.5.19	Rotary / Selector switch for window AC.	1	No	105.00
1114	ELEC-6.5.20	Flushing the line, leak testing, leak stopping, vaccumming, dehydrating and charging the gas in the refrigeration system for 1.0 / 1.5 / 2.0 Ton Window A.C.Unit.	1	No	1530.00
1115	ELEC-6.5.21	Flushing the line, leak testing, leak stopping, vaccumming, dehydrating and charging the gas in the refrigeration system for 1.5 / 2.0 Ton Split A.C.Unit.	1	No	2142.00
1116	ELEC-6.5.22	Spray painting of Refrigerator using good quality paint after scraping the surface etc.	1	No	734.00
1117	ELEC-6.5.23	Sealed compressor of 1/8 HP suitable for 165 to 185 Ltrs. Capacity Refrigerator.	1	No	2811.00
1118	ELEC-6.5.24	Sealed compressor of 1/6 HP suitable for 285 / 310 Ltrs. Capacity Refrigerator.	1	No	3401.00
1119	ELEC-6.5.25	Supply of fan motor by new 1/10 to 1/12 H.P 1250 RPM fan motor for Water Cooler of 80-150 Ltrs.	1	No	1442.00
1120	ELEC-6.5.26	Gun metal Bush for fan motor.	1	No	114.00
1121	ELEC-6.5.27	Resistance type regulator for ceiling fans 900/1200/1400mm sweep complete erected on existing board.	1	No	37.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1122	ELEC-6.5.28	Installation of Split Air Conditioners.	1	No	1530.00
1123	ELEC-6.5.29	Removing of existing Split Air Conditioners without damaging to copper pipe.	1	No	408.00
1124	ELEC-6.5.30	Installation of Cassette type Split Air Conditioners.	1	No	3060.00
1125	ELEC-6.5.31	Installation of Tower type Split Air Conditioners.	1	No	2550.00
1126	ELEC-6.5.32	Supply, Fabrication of 1set MS bracket suitable for fixing out door unit of ductable AC unit.	1	Set	1632.00
	6.6	EVAPORATIVE AIR COOLING SYSTEM			
1127	ELEC-6.6.1	Supply of single phase evaporative air cooling unit with a capacity of 8000 CFM consisting cabinet and water tank made of polypropylene material, blower water pump of 40W, single phase 1.20 KW motor axial type fan with variable speed, 20 micron filtration, noise level less than 78 dBA with auto cleaning and water lack protection etc complete. Makes: Cool Breeze / Breeze Air	1	No	97800.00
1128	ELEC-6.6.2	Supply of single phase evaporative air cooling unit with a capacity of 11000 - 12000 CFM consisting cabinet and water tank made of polypropylene material, blower water pump of 40W, single phase 1.20 KW / 1.5 KW motor axial type fan with variable speed, 20 micron filtration, noise level less than 78 dBA with auto cleaning and water lack protection etc complete. Makes: Cool Breeze / Breeze Air	1	No	115550.00
1129	ELEC-6.6.3	Supply of three phase evaporative air cooling unit with a capacity of 17000 CFM consisting cabinet and water tank made of polypropylene material, blower water pump of 60W, three phase, 3.0 KW motor, axial type fan with 2 speed, 20 micron filtration, noise level less than 78 dBA with auto cleaning and water lack protection etc complete. Makes: Cool Breeze / Breeze Air	1	No	160000.00
1130	ELEC-6.6.4	Supply, Factory fabrication, Transportation and erection of 20 guage GI sheet rectangular ducting with sheet metal / Angle iron / C-cleats as required, G.I.fasteners, bolts, nuts and washers, guide vanes as required, supports shall be galvanised threaded rods etc complete. Makes : Tata / Zindal	1	Sqft	100.00
1131	ELEC-6.6.5	Supply, Factory fabrication, Transportation and erection of 22 guage GI sheet rectangular ducting with sheet metal / Angle iron / C-cleats as required, G.I.fasteners, bolts, nuts and washers, guide vanes as required, supports shall be galvanised threaded rods etc complete. Makes : Tata / Zindal	1	Sqft	88.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1132	ELEC-6.6.6	Supply, Factory fabrication, Transportation and erection of 24 gauge GI sheet rectangular ducting with sheet metal / Angle iron / C-cleats as required, G.I.fasteners, bolts, nuts and washers, guide vanes as required, supports shall be galvanised threaded rods etc complete. Makes : Tata / Zindal	1	Sqft	73.00
1133	ELEC-6.6.7	Supply and fixing of 40mm thick thermocole insulation of 16 kg density with GI mesh and 12mm thick cement mortor plastering for out door unit.	1	Sqft	68.00
1134	ELEC-6.6.8	Supply and fixing of 40mm thick glasswool of 24 kg density with alluminium foil insulation for indoor duct.	1	Sqft	55.00
1135	ELEC-6.6.9	Supply and fixing of alluminium powder coated grill with volume control dampers.	1	Sqft	612.00
1136	ELEC-6.6.10	Supply and fixing of alluminium powder coated supply air diffuser with volume control dampers.	1	Sqft	700.00
1137	ELEC-6.6.11	Supply and fixing of alluminium powder coated supply air diffuser without volume control dampers.	1	Sqft	600.00
1138	ELEC-6.6.12	Supply and fixing of angular iron frame with 2 coats of zincromat red oxide for installation of air cooling unit.	1	No	4352.00
1139	ELEC-6.6.13	Installation and commissioning charges for air cooling unit.	1	No	3627.00
	6.7	STABILIZERS			
	ELEC-6.7.1	Supply of ----- Stabilizer Makes : V-Guard / Real Guard / Uni Stab / ITL.			
1140	a	Supply of 0.5 KVA Stabilizer	1	No	880.00
1141	b	Supply of 1.0 KVA Stabilizer.	1	No	1445.00
1142	c	Supply of 3.0 KVA Stabilizer	1	No	1800.00
1143	d	Supply of 4.0 KVA Stabilizer	1	No	2400.00
1144	e	Supply of 5.0 KVA Stabilizer	1	No	2880.00
	ELEC-6.7.2	Supply of ----- Stabilizer Makes :Keeline / Soft Line / Capri.			
1145	a	Supply of 0.5 KVA Stabilizer	1	No	720.00
1146	b	Supply of 1.0 KVA Stabilizer.	1		1290.00
1147	c	Supply of 3.0 KVA Stabilizer	1	No	1660.00
1148	d	Supply of 4.0 KVA Stabilizer	1	No	2280.00
1149	e	Supply of 5.0 KVA Stabilizer	1	No	2740.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		SECTION - 7			
	7.1	SWAGED POLES / OCTOGONAL POLES, GARDEN POSTS AND ACCESSORIES			
		SWAGED POLES			
1150	ELEC-7.1.1	Fabrication, supply and transportation of all sizes swaged poles up to site confirming to IS 2713 / 1980 specifications. The pole should be painted with primary coat of red oxide and black bituminous paint up to ground level with base plate, including cost of all materials etc., complete.(Rate per K. G)	1	Kg	67.00
		M S POLES FOR GARDEN POSTS			
1151	ELEC-7.1.2	Fabrication and Supply of M.S. Poles for garden posts with 'B' class 60.25mm outer dia with base plate and suitable pole cap including cost and conveyance of all material including fixing of luminaire and labour charges etc., complete. (Rate per K. G)	1	Kg	61.00
1152	ELEC-7.1.3	Supply of different sizes of M. S. Pipe brackets (Rate per K.G)	1	Kg	61.00
	7.2	OCTOGONAL POLES			
	ELEC-7.2.1	Fabrication, Transportation and supply of hot-dip galvanized Octogonal Pole with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangement, including chain for anti theft mechanism, supply of suitable boards with bakelite sheet, din channel for MCB's as per IS specification suitable to withstand the wind speed of 180 KMPH for Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA			
1153	a	7.50 Mtrs height Pole having dimensions Bottom 130mm, Top 70mm with 3mm thick, base plate 220 x 220 x 12mm and 4 Nos of M20 x 700mm long 'J' bolts along with template.	1	No	11429.00
1154	b	9 Mtrs height Pole having dimensions Bottom 155mm, Top 70mm with 3mm thick, base plate 260 x 260 x 16mm and 4 Nos of M24 x 750mm long 'J' bolts along with template.	1	No	16876.00
1155	c	10 Mtrs height Pole having dimensions Bottom 175mm, Top 70mm with 3mm thick, base plate 275 x 275 x16mm and 4 Nos of M24 x 750mm long 'J' bolts along with template.	1	No	18247.00
1156	d	12 Mtrs height Pole having dimensions Bottom 200mm, Top 90mm with 4mm thick, base plate 320 x320 x20mm and 4 Nos of M24 x 850mm long 'J' bolts along with template.	1	No	26877.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	7.3	BRACKETS			
	ELEC-7.3.1	Fabrication, Transportation and supply of ----- standard Bracket made with MS galvanized 50mm dia Pipe.			
1157	a	1.0 Mtr Length Single Arm	1	No	1242.00
1158	b	1.0 Mtr length Double Arm	1	No	1534.00
1159	c	1.50 Mtr Length Single Arm	1	No	1640.00
1160	d	1.50 Mtr length Double Arm	1	No	2760.00
	ELEC-7.3.2	Fabrication, Transportation and supply of of -----complete with all accessories with MS galvanized 50mm dia Pipe.			
1161	a	1.0 Mtr sword type or any decorative Single arm bracket with dooms	1	No	3476.00
1162	b	1.0 Mtr sword type or any decorative double arm bracket with dooms.	1	No	4089.00
1163	c	1.5 Mtr sword type or any decorative Single arm bracket with dooms	1	No	3885.00
1164	d	1.5 Mtr sword type or any decorative double arm bracket with dooms.	1	No	5060.00
	ELEC-7.3.3	Fabrication, Transportation and supply of -----bracket with PU paint complete with all accessories with MS galvanized 50mm dia Pipe.			
1165	a	1.5 Mtr decorative galvanized Single arm	1	No	4600.00
1166	b	1.5 Mtr decorative galvanized double arm	1	No	8689.00
	7.4	HIGH MAST POLES			
1167	ELEC-7.4.1	Fabrication, transportation and supply of 12 Mtrs Polygon High Mast with single section of 3mm thick of Bottom 360mm and Top 150mm dia with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate, having a base plate of size 520mm dia 16mm thick with its accessories. Mast shall be in single section for 12 Mtrs and 2 sections for 16 and 20 Mtrs. Mast shall be hot dip galvanized and suitable for wind velocity of 180 KMPH as per IS 875 part 3 including head frame, 2 point suspension system with steel rope 6mm dia (7/19) construction double drum winch / power tool operating speed of 900 RPM, and necessary cable trailer connections and single speed motor with M 24 x 800 mm foundation bolts of required quantity, suitable for 6 luminaires with GLS type aviation twin lamp. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA	1	No	105652.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1168	ELEC-7.4.2	Fabrication, transportation and supply of 16 Mtrs Polygon High Mast with two sections of Bottom 4mm thick and Top section with 3mm thick with GLS type aviation lamp of Bottom 360mm and Top 150mm dia with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate, having a base plate of size 560mm dia 25mm thick with its accessories. Mast shall be in 2 sections and should be hot dip galvanized and suitable for wind velocity of 180 KMPH as per IS 875 part 3 including head frame, 2 point suspension system with steel rope 6mm dia (7/19) construction double drum winch / power tool operating speed of 900 RPM, and necessary cable trailer connections and single speed motor with M 24 x 800 mm foundation bolts of required quantity with GLS type aviation twin lamp Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA	1	No	137877.00
1169	ELEC-7.4.3	Fabrication, transportation and supply of 20 Mtrs Polygon High Mast with two sections of Bottom 4mm thick and Top section with 3mm thick of Bottom 410mm and Top 150mm dia with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate, having a base plate of size 570mm dia 25mm thick with its accessories. Mast shall be in 2 sections and should be hot dip galvanized and suitable for wind velocity of 180 KMPH as per IS 875 part 3 including head frame, 2 point suspension system with steel rope 6mm dia (7/19) construction double drum winch / power tool operating speed of 900 RPM, and necessary cable trailer connections and single speed motor with M 24 x 800 mm foundation bolts of required quantity with GLS type aviation twin lamp. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA	1	No	171995.00
	7.5	FEEDER PILLER BOX			
1170	ELEC-7.5.1	Supply and fixing of suitable out door feeder pillar box made with 14 SWG CRCA sheet including S & F of Legrand / Schnieder / Siemens / ABB / L&T make 40A TP MCB, 6 Nos SP MCB's, din channel, 6 Sqmm 3 core copper cable for individual light control, timer, contactor, connectors and provision for energy meter etc., complete for finished item of work including suitable angle iron stand.	1	No	28243.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-7.5.2	Supply and fixing of suitable out door feeder pillar box of size made with 14 SWG CRCA sheet with double door arrangement, making powder coating after processing of 7 Tank process, lock and key, hinges, rubber gasket, danger board,suitable angle iron stand for mounting the feeder pillar with cement concrete, including Supply and fixing of Legrand / Schnieder make ----- ----- as out goings, indication lamps, din channel, 6 Sqmm 3 core copper cable for invidual light control, connectors, gland plates and provision for 3 phase energy meter etc., complete for finished item of work and suitable wiring provision for connecting the nature switch with following.			
1171	a	40A 4 Pole Isolator as incomer, 6 Nos 6-32A SP MCBs	1	No	17659.00
1172	b	63A, 4 Pole isolator as incomer, 6 Nos 6-32A SP MCBs	1	No	17738.00
1173	c	63A, 4 Pole isolator as incomer, 9 Nos 6-32A SP MCBs	1	No	18357.00
1174	ELEC-7.5.3	Supply and fixing of suitable feeder pillar box made with 14 SWG CRCA sheet including S & F of Legrand / Schnieder / Siemens / ABB / L&T make 63A TP MCB, 8 Nos SP MCB's, din channel, 6 Sqmm 3 core copper cable for invidual light control, connectors and provision for energy meter etc., complete for finished item of work.	1	No	31286.00
	ELEC-7.5.4	Supply and fixing of suitable out door feeder pillar box of size made with 14 SWG CRCA sheet with double door arrangement, making powder coating after processing of 7 Tank process, lock and key, hinges, rubber gasket, danger board,suitable angle iron stand for mounting the feeder pillar with cement concrete, including Supply and fixing of Legrand / Schnieder make ----- ----- as out goings, indication lamps, din channel, 6 Sqmm 3 core copper cable for invidual light control, connectors, gland plates and provision for 3 phase energy meter etc., complete for finished item of work and suitable wiring provision for connecting the nature switch with following.			
1175	a	40A-63A, 4 Pole MCB as incomer, 6 Nos 6-32A SP MCBs	1	No	18774.00
1176	b	63A, 4 Pole MCB as incomer, 9 Nos 6-32A SP MCBs	1	No	19290.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	7.6	ERRECTION OF HIGH MAST POLES			
1177	ELEC-7.6.1	Earth work excavation with a approximate quantity of 4.0 Cum for erection of 12 Mtrs high mast and refilling with a quantity of 0.53 Cum of PCC 1:4:8, 1.50 Cum M 20 grade concrete and (80 Kgs) reinforced steel of 12mm / 10mm / 8mm, Soil bearing capacity of 10 T/Sqm, Anchor plate with cost and conveyance of all above materials including labour charges for erection of High Mast and Carraige etc complete.	1	No	28073.00
1178	ELEC-7.6.2	Earth work excavation with a approximate quantity of 6.0 Cum for erection of 16 Mtrs high mast and refilling with a quantity of 0.65 Cum of PCC 1:4:8, 2.60 Cum M 20 grade concrete and (110 Kgs) reinforced steel of 12mm / 10mm / 8mm, Soil bearing capacity of 10 T/Sqm, Anchor plate with cost and conveyance of all above materials including labour charges for erection of High Mast and Carraige etc complete.	1	No	35794.00
1179	ELEC-7.6.3	Earth work excavation with a approximate quantity of 7.0 Cum for erection of 20 Mtrs high mast and refilling with a quantity of 0.75 Cum of PCC 1:4:8, 3.60 Cum M 20 grade concrete and (140 Kgs) reinforced steel of 12mm / 10mm / 8mm, Soil bearing capacity of 10 T/Sqm, Anchor plate with cost and conveyance of all above materials including labour charges for erection of High Mast and Carraige etc complete.	1	No	45551.00
	7.7	CONICAL POLES			
1180	ELEC-7.7.1	Fabrication,transportation and supply of MS hot dip galvanized 9.0 Mtrs long Conical poles with 3mm thick HT steel plate with a bottom 173mm dia and top 75mm dia, base plate of size 275mmx275mmx16mm thick welded to bottom of pole, terminal box with door size of 500mm x 100mm with all accessories connector and fuse base and a fixing arrangements for advertisements holdings, foundation bolts with washers and nuts 4 sets. including S&F of 1.0 mtrs C type decorative single arm with painted bracket with dooms either sides complete with all accessories as per the requirements at site and as per the directions of field engineers during execution for finished item of work. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA	1	No	14256.00
1181	ELEC-7.7.2	Fabrication,transportation and supply of MS hot dip galvanized 10.0 Mtrs long Conical poles with 3mm thick HT steel plate with a bottom 184mm dia and top 75mm dia, base plate of size 275mmx275mmx16mm thick welded to bottom of pole, terminal box with door size of 500mm x 100mm with all accessories connector and fuse base and a fixing arrangements for advertisements holdings, foundation bolts with washers and nuts 4 sets. including S&F of 1.5 mtrs C type decorative Double arm with painted bracket with dooms either sides complete with all accessories as per the requirements at site and as per the directions of field engineers during execution for finished item of work. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA	1	No	16368.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	7.8	DECORATIVE DRAGON TYPE BRACKET WITH POLE			
	ELEC-7.8.1	Fabrication, Transportation and supply of hot-dip galvanized Octogonal Pole with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangement, including the supply of suitable boards with bakelite sheet and MCB's as per IS specification suitable to withstand the wind speed of 180 KMPH for 9 Mtrs Mounting height Pole having dimensions Bottom 185 mm,. Top 70mm with 3mm thick, base plate 275 x 275 x 20mm and 4 Nos of M24 x 1000 long 'J' bolts along with templates Including Supply of 1.5M Dragon type decorative ----- Makes: VALMONT / BAJAJ / TRANSRAIL			
1182	a	galvanised Double Arm with PU Painted bracket.	1	No	26556.00
1183	b	galvanised Single Arm with PU Painted bracket.	1	No	22795.00
1184	c	Double arm Galvanised finish bracket.	1	No	22760.00
1185	d	Single arm Galvanised finish bracket.	1	No	20357.00
	ELEC-7.8.2	Fabrication, Transportation and supply of hot-dip ----- Curved Octogonal Pole with BSEN - 10025 grade S 355 JO steel plate for shaft Including Supply of 0.2M long Single arm bracket, IS 2062 for base plate with door opening arrangement, including the supply of suitable boards with bakelite sheet and MCB's as per IS specification suitable to withstand the wind speed of 180 KMPH for 9 Mtrs Mounting height Curved Pole having dimensions Bottom 180mm,. Top 85mm with 3mm thick, base plate 400 x 400 x 20mm and 4 Nos of M24 x 750 long 'J' bolts along with templates. Makes: VALMONT / BAJAJ / TRANSRAIL			
1186	a	galvanized	1	No	22218.00
1187	b	galvanized PU Paint finish	1	No	30121.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	7.9	THERMO PLASTIC POLE BOXES			
	ELEC-7.9.1	Supply of following sizes thermo plastic pole boxes IP 65 protection. Make : Hensel / Sintex / Sadhrish			
1188	a	200X150X100			711.11
1189	b	250X200X120			888.89
1190	c	300X150X170			1030.22
1191	d	300X200X125			1111.11
1192	e	300X300X170			1478.22
1193	f	400X300X200			1600.00
1194	g	300X450X170			2014.22
1195	h	490X390X250			2222.22
1196	i	300X600X170			2390.22
	7.10	FOUNDATION AND ERRECTION CHARGES OF POLES			
1197	ELEC-7.10.1	Erection charges for 7.50 Mtrs long Octagonal pole on bridge kerb portion (R.C.C). with 4 Nos 8" Anchor bolts/ M20xsuitable "J" type bolts etc duly drilling holes to RCC slab and with V.C.C. M.15 concrete for base concreting up to a height of 8" with necessary Reinforcement work etc. including cost and conveyance of all material and all labour charges etc. complete as directed by the department officers.	1	No	3360.00
1198	ELEC-7.10.2	Foundation and erection charges with special T&P, for 7.50 Mtrs long Octagonal / Conical pole duly erecting on base plate duly providing 4 Nos foundation bolts with nuts with providing of 0.45Mtrx0.45Mtrsx1.20 Mtr size M20 cc work vibrated concreting mixing with necessary steel (10kgs) reinforcement as directed by the field engineers during execution including all labour charges and cost and conveyance of materials etc. complete.	1	No	4725.00
1199	ELEC-7.10.3	Foundation and erection charges with special T&P, for 9.00Mtrs / 10Mtrs long Octagonal / Conical pole duly erecting on base plate duly providing 4 Nos foundation bolts with nuts with providing of 0.60Mtrx0.60Mtrsx1.40 Mtr size M20 cc work vibrated concreting mixing with necessary steel (15kgs) reinforcement as directed by the field engineers during execution including all labour charges and cost and conveyance of materials etc. complete.	1	No	6300.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1200	ELEC-7.10.4	Foundation and erection charges with special T&P, for 12Mtrs long Octagonal / Conical pole duly erecting on base plate duly providing 4 Nos foundation bolts with nuts with providing of 0.67Mtrx0.67Mtrsx1.50 Mtr size M20 cc work vibrated concreting mixing with necessary steel (20kgs) reinforcement as directed by the field engineers during execution including all labour charges and cost and conveyance of materials etc. complete.	1	No	7875.00
	7.11	G R P POLES			
	ELEC-7.11.1	Supply and transportation of following glass reinforced polymer (GRP) composite type Conical pole with single arm bracket of length 1Mtr and internal junction box including labour charges etc., complete. Makes: Bajaj / Kemrock / Sumip.			
1201	a	3.00 Mtrs height, Bottom dia 143mm, Top 76mm, AV thickness 6mm and to withstand maximum wind velocity 155Km/Hr	1	No	9107.00
1202	b	4.00 Mtrs height, Bottom dia 143mm, Top 76mm, AV thickness 6mm and to withstand maximum wind velocity 155Km/Hr	1	No	11417.00
1203	c	6.00 Mtrs height, Bottom dia 143mm, Top 76mm, AV thickness 6mm and to withstand maximum wind velocity 155Km/Hr	1	No	14592.00
1204	d	8.00 Mtrs height, Bottom dia 193mm, Top 76mm, AV thickness 6mm and to withstand maximum wind velocity 155Km/Hr	1	No	19213.00
1205	e	10.00 Mtrs height, Bottom dia 227mm, Top 76mm, AV thickness 6mm and to withstand maximum wind velocity 155Km/Hr	1	No	27875.00
	ELEC-7.11.2	Supply and transportation of base bracket suitable for glass reinforced polymer (GRP) composite type pole including labour charges etc., complete. Makes : Bajaj / Kemrock / Sumip.			
1206	a	For 3.00 Mtrs Pole	1	No	1540.00
1207	b	For 4.00 Mtrs Pole	1	No	1540.00
1208	c	For 6.00 Mtrs Pole	1	No	1848.00
1209	d	For 8.00 Mtrs Pole	1	No	2157.00
1210	e	For 10.00 Mtrs Pole	1	No	5133.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	7.12	CONTROL PANEL BOARD			
	ELEC-7.12.1	Fabrication and erection of ----- sheet steel enclosure for power control cubicle panel / boxes etc., including cutting, bending drilling, welding and reveting etc., complete with cleaning with 7 tank process and painting with powder coating including cost and conveyance of all materials and labour charges.			
1211	a	14SWG CRCA	1	Sq Mtr	4169.00
1212	b	16 SWG CRCA	1	Sq Mtr	3941.00
1213	c	18SWG CRCA	1	Sq Mtr	3486.00
	7.13	METERING EQUIPMENT			
	ELEC-7.13.1	Supply and erection of 0-415V ----- on existing panel board including connections etc., complete. MAKES : CONZERVE / ELMEASURE / L&T / SEIMENS.			
1214	a	Volt Digital meter	1	No	2000.00
1215	b	Volt Analog meter	1	No	400.00
	ELEC-7.13.2	Supply and erection of 0-100 / 200 / 400 / 600 / 1000 ----- --of size 96x96mm on existing panel board including connections etc., complete. MAKES : CONZERVE / ELMEASURE / L&T / SEIMENS.			
1216	a	Digital Ammeter	1	No	2000.00
1217	b	Analog Ammeter	1	No	400.00
1218	ELEC-7.13.3	Supply and erection of Digital frequency meter on existing panel board including connections etc., complete. MAKES : CONZERVE / ELMEASURE / L&T / SEIMENS.	1	No	2500.00
1219	ELEC-7.13.4	Supply and erection of Digital power factor meter, 3 phase, 4 wire balanced or unbalanced load 5A, 415V of size 96x96mm on existing box / panel board including connections etc., complete. MAKES : CONZERVE / ELMEASURE / L&T / SEIMENS.	1	No	2500.00
	ELEC-7.13.5	Supply and erection of L.T. 3phase Digital multifunction ----- for measuring all the parameters (Voltage, Current, Frequency, Power factor, KW, KVA, KWH, KVA, KVAH, KVAR and THD Events) on existing box panel board including connections etc., complete. MAKES : CONZERVE / ELMEASURE / L&T / SEIMENS.			
1220	a	energy meter Class I with LED display	1	No	6480.00
1221	b	energy meter Class I RS 485 with LED display	1	No	7410.00
1222	c	energy meter Class 0.5 RS 485 with LED display	1	No	8800.00
1223	d	energy meter Class I with LCD display	1	No	7410.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1224	e	energy meter Class I RS 485 with LCD display	1	No	8335.00
1225	f	energy meter Class 0.5 RS 485 with LCD display	1	No	9725.00
1226	g	bidirectional import / export energy meter Class I with LED display	1	No	14350.00
1227	h	bidirectional import / export energy meter Class I RS 485 with LED display	1	No	15280.00
1228	i	bidirectional import / export energy meter Class I with LCD display	1	No	15280.00
1229	j	bidirectional import / export energy meter Class I RS 485 with LCD display	1	No	16200.00
	ELEC-7.13.6	Supply and erection of ----- Makes : L&T / C&S / SALZAR / HPL MAKE.			
1230	a	Selector switch for Voltmeter / Ammeter on the existing panel including connections etc., complete.	1	No	172.00
1231	b	LED indication lamps on the existing panel board.	1	No	132.00
1232	c	Push buttons on the existing panel board.	1	No	74.00
1233	ELEC-7.13.7	Supply and erection of LT current transformer with bar primary 100/5A to 1000 / 5A ratio in the existing panel including connections etc., complete. MAKE : KAPPA	1	No	440.00
	ELEC-7.13.8	Supply and fixing of----- Electronic energy Meter, 240V AC, 50 HZ as per IS13010 up to 40A range with 200% over load capacity complete with connections etc., complete on the existing board. Makes : CONZERVE / ELMEASURE / MECO / HPL / HAVELLS.			
1234	a	Single phase	1	No	981.00
1235	b	Three phase	1	No	2835.00
	ELEC-7.13.9	Supply and fixing of ----- APFC Relay with connection etc complete. Makes : L&T / Siemens / EPCOS / Schneider / Elmeasure			
1236	a	8 Stage	1	No	12331.00
1237	b	12 Stage	1	No	14000.00
1238	c	14 Stage	1	No	16525.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-7.13.10	Supply and fixing of ----- Rating capacitor duty contactor Makes : L&T / Siemens / EPCOS / Meher			
1239	a	3 KVAR	1	No	1400.00
1240	b	5 KVAR	1	No	1464.00
1241	c	8.5 KVAR	1	No	1690.00
1242	d	10 KVAR	1	No	1835.00
1243	e	12.5 KVAR	1	No	1960.00
1244	f	15.0 KVAR	1	No	2730.00
1245	g	20 KVAR	1	No	3160.00
1246	h	25.0 KVAR	1	No	3543.00
1247	i	50.0 KVAR	1	No	9800.00
	ELEC-7.13.11	Supply and fixing of detuned reactor 7% 3 phase 440V range ----- Makes : L&T / Siemens / EPCOS / Meher			
1248	a	5 KVAR	1	No	7420.00
1249	b	10 KVAR	1	No	11665.00
1250	c	12.5 KVAR	1	No	13000.00
1251	d	15 KVAR	1	No	14500.00
1252	e	20 KVAR	1	No	17000.00
1253	f	25 KVAR	1	No	18000.00
1254	g	50 KVAR	1	No	28600.00
1255	h	75 KVAR	1	No	42500.00
1256	i	100 KVAR	1	No	58000.00
	7.14	SUB STATION EQUIPMENT			
1257	ELEC-7.14.1	Carryout routine maintenance, servicing and testing of 630A to 1000A L.T.ACB by cleaning fixed contacts, moving contacts and arcchutes including servicing and putting the ACB in perfect working condition after detting all relay and ON, OFF mechanism etc done with only manufacturing companies	1	No	5000.00
1258	ELEC-7.14.2	Carryout routine maintenance and servicing of LT.Cubical pannel board having approximately 15 to 22 Nos of switches cleaning with power brower and servicing the contacts, tightning the connection of incoming and outgoing cables, and clicking the operating machanism for smooth functioning of switches and putting them in smooth working condition.	1	No	2625.00
1259	ELEC-7.14.3	Routine maintenance of transformer in operation covering insulation resistance oil, break down strength. Reconditioning / replacement of silicazel, cleaning of transformer and topping upto oil level if required (extra cost will be paid for oil).	1	No	4437.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1260	ELEC-7.14.4	Testing of Transformer oil for dielectric breakdown strength.	1	No	510.00
1261	ELEC-7.14.5	Insulating H.T. / LT copper / aluminium coils for Transformers.	1	No	306.00
	ELEC-7.14.6	Removing the existing transformer from the plinth / Pole and refixing the standby transformer of following capacity including connections etc., complete-----			
1262	a	Upto 315 KVA	1	No	2550.00
1263	b	500 / 1000 KVA	1	No	3570.00
	ELEC-7.14.7	Replacing old and unserviceable gasket of top cover plate of transformer having following capacity -----			
1264	a	Upto 315 KVA	1	No	765.00
1265	b	500 / 1000 KVA	1	No	1071.00
	ELEC-7.14.8	Replacing old and unserviceable gasket of bushing for the following Transformer capacity.			
1266	a	Upto 315 KVA H.T.	1	No	306.00
1267	b	Upto 500 / 1000 KVA H.T.	1	No	561.00
1268	c	Upto 315 KVA L.T.	1	No	714.00
1269	d	Upto 500 / 1000 KVA L.T.	1	No	1479.00
	ELEC-7.14.9	Replacement the H.T. / L.T. burntout winding coils of distribution transformer including rewinding, varnishing and vaccuming etc.,duly retaining the removed burnt winding coils by the Contractor / Firm ---- -----			
1270	a	For copper coils	1	Kg	602.00
1271	b	For aluminium coils	1	Kg	398.00
	ELEC-7.14.10	Painting with 2 coats Zinchromate red oxide duly scraping existing paint followed by 2 coats of hammerton grey paint etc., complete.---- -----			
1272	a	Upto 500 KVA	1	No	3060.00
1273	b	630 / 1000 KVA	1	No	4080.00
	ELEC-7.14.11	Replacing ----- for distribution Transformer by new one.			
1274	a	H.T bushing	1	No	357.00
1275	b	H.T bushing metal parts	1	No	388.00
1276	c	L.T bushing Upto 315 KVA	1	No	168.00
1277	d	L.T bushing for 500 / 1000 KVA	1	No	179.00
1278	e	L.T bushing metal parts 100 KVA	1	No	306.00
1279	f	L.T bushing metal parts 250 / 315 KVA	1	No	510.00
1280	g	L.T bushing metal parts 500 KVA	1	No	1326.00
1281	h	L.T bushing metal parts 1000 KVA	1	No	2040.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-7.14.12	Drying the repaired transformer with appropriate heat / air -----			
1282	a	Upto 315 KVA	1	No	3060.00
1283	b	500 / 1000KVA	1	No	4284.00
	ELEC-7.14.13	Loading and Unloadng of transformer from site to Workshop or vice verse-----			
1284	a	Upto 500 KVA	1	No	4590.00
1285	b	630 / 1000 KVA	1	No	6936.00
	ELEC-7.14.14	Filtration of transformer oil as per ISS specifications filters to die electric strength above 40 KV-----			
1286	a	At site	1	Ltr	10.00
1287	b	At workshop	1	Ltr	7.00
1288	ELEC-7.14.15	Transformer oild tested as per IS-335 - 1972 (per Ltr)	1	Ltr	122.00
	ELEC-7.14.16	Servicing of DBs duly opening the top cover checking the circuits, tighteting the screws, applying tape wherever required and making propoer dressing etc complete.			
1289	a	4 Way SPN DB	1	No	40.00
1290	b	8 Way SPN DB	1	No	80.00
1291	c	12 Way SPN DB	1	No	120.00
1292	d	4 Way TPN DB	1	No	120.00
1293	e	8 Way TPN DB	1	No	240.00
1294	f	12 Way TPN DB	1	No	360.00
1295	g	4 Way VTPN DB with MCCBs / MCB Circuits	1	No	200.00
1296	h	8 Way VTPN DB with MCCBs / MCB Circuits	1	No	300.00
1297	i	12 Way VTPN DB with MCCBs / MCB Circuits	1	No	400.00
	ELEC-7.14.17	Supply of MPP type heavy duty capacitor of operating voltage Makes:L&T/Siemens/Schneider/Epcos.			
1298	a	not less than 440V of cylyndrical type of 1 KVAR to 2 KVAR	1	KVAR	340.00
1299	b	not less than 480V of cylyndrical type more than 2 KVAR	1	KVAR	327.00
1300	c	not less than 440V of box type of 1 KVAR to 4 KVAR	1	KVAR	440.00
1301	d	not less than 480V of box type of 5 KVAR to 50 KVAR	1	KVAR	400.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
	7.15	TRANSFORMERS		
		Note: No Separate OH & CP allowed on these items		
	ELEC-7.15.1	Supply, Transportation, Testing and Commissioning of ----- KVA TRANSFORMER : The Transformer shall be designed and manufactured as per IS:1180 level-II with initial filling of oil as per IS 335-1993. The basic details of the Transformer are as under. Makes: Kirloskar / PETE / Esennar / Voltamp / Crompton / ABB / Schneider.		
		1. Quantity : 1 2. Rated KVA :KVA 3. Service & Location: Continuous Outdoor Distribution Transformer 4. Mounting : Plinth. 5. Wound : Copper Double wound 6. Type : Core type oil immersed 7. Cooling : ONAN 8. Temp Rise : 40°C in oil 45°C by resistance 9. Vector Group: Dyn 11 10. Primary Connection : Delta 11. Nominal Voltage / Current : _____ 12. Highest system Voltage: 12000V 13. Primary Frequency :50 HZ +/- 3% 14. Number of Phases : 3 15. Primary wires: 3 16. Secondary connection : Star 17. Secondary Volts / Current : 433V 18. Secondary phases : 3 19. Secondary wires: 4 20. Taps on primary winding for primary voltage variation : +5% to -10% in steps of 2.5% of 7 position (6 Steps)		
		21. Terminal arrangement. a. HV: HT terminal box as per the site condition. b. LV: Cable box suitable to receive -----Sq.mm XLPE cable 22. LV:One separate terminal for earthing. 23. Total Losses at 50% Loading [Watts] [Max] ----- 24. Total Losses at 100% Loading [Watts] [Max]----- 25. Percentage Impedance at 75 deg. C at ----- 26. No Load current: Less than 2% of full load current.		

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
		<u>27. Standrad Fittings & Accessories.</u> a. Rating and terminal marking plate: One b. Lifting Lugs:Two c. Off-circuit tap switch :One d. Earthing Terminals :Two e. Radiators (Attachable) :Adequate f. Explosion vent with Diaphragm :One g. Conservator with Drain plug:one h. Oil filling hole with cap :One i. Oil level indicator : One j. Dehydrating Silicagel Breather : One k. Terminal Arrangement: HV With Treminal Box l. Terminal Arrangement : LV Cable Box m. Separate Neutral Bushing : One n. Filter valve with blanking plate : One o. Drain cum filter valve with blanking plate : One p. Air release device : One q. Thermometer Pocket : One r. Four :Unidirectional flat rollers s. One :10Cm dial thermometer(Rigid stem type)		
1302	a	160 KVA Copper Wound Transformer		486000.00
1303	b	200 KVA Copper Wound Transformer		606000.00
1304	c	250 KVA Copper Wound Transformer		700000.00
1305	d	315 KVA Copper Wound Transformer		788000.00
1306	e	400 KVA Copper Wound Transformer		873000.00
1307	f	500 KVA Copper Wound Transformer		1007000.00
1308	g	630 KVA Copper Wound Transformer		1130000.00
1309	h	1000 KVA Copper Wound Transformer		1338000.00
	ELEC-7.15.2	Supply, transportation and delivery at site of 3 Phase, 50 Hz, Dry type, Indoor type copper wound Transformer designed and manufactured as per IS 2026-1977 and IS 11171-1985, connected delta on primary side and Star on secondary side with additional neutral brought out on load side, 11000V / (433V / 415V) with HV off load tap changing + 5% to -5% in steps of 2.5%, temperature rise by the resistance 90°C complete with the following standard mountings. Makes: Kirloskar / PETE / Esennar / Voltamp / Crompton / ABB.		
		1. Rated KVA :KVA (Cast Resin) 2. Service: Indoor 3. Mounting : Floor. 4. Copper wound : Double. 5. Type of cooling : ANAN. 6. Insulation Class : Class F 7. Temparature rise by resistance : 90°C 8. Vector Group: Dyn 11		

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		9. Primary Connection : Delta 10. Primary Volts : 11000 11. Primry Frequency : 50 12.Primary Phases : 3 13. Primary wires: 3 14. Secondary connection : Star 15. Secondary Volts : 433V / 415V 16. Secondary phases : 3 17. Secondary wires: 4 18. Taps on primary winding for primary voltage variation : +5.0% to - 10.0% in steps of 2.5% through links.			
		19. Terminal arrangement.			
		a. HV: Cable end box b. LV : Cable end box			
		20. No load losses (Watts): As per IS specifications			
		21. Load losses (Watts):As per IS specifications			
		22. Impedance(Z%) :As per IS specifications			
		23. Fittings & Accessories. a. Rating and terminal marking plate b. Earthing terminals c. Lifting Lugs d. Winding temporature Indicator e. Seperate neutral bushing f. Uni directional flat rollers.			
1310	a	250 KVA Copper Wound Cast Resin Transformer	1	No	620000.00
1311	b	315 KVA Copper Wound Cast Resin Transformer	1	No	710000.00
1312	c	400 KVA Copper Wound Cast Resin Transformer	1	No	790000.00
1313	d	500 KVA Copper Wound Cast Resin Transformer	1	No	855000.00
1314	e	630 KVA Copper Wound Cast Resin Transformer	1	No	1060000.00
1315	f	750 KVA Copper Wound Cast Resin Transformer	1	No	1240000.00
1316	g	1000 KVA Copper Wound Cast Resin Transformer	1	No	1575000.00
	7.16	L.T. LINE MATERIALS AND LIGHTENING PROTECTIVE SYSTEM			
1317	ELEC-7.16.1	Supply and erecting approved make 11KV, 5KA metal oxide lightning arrestors suitable for 11 KV supply with necessary materials on existing cross arm.	1	No	1400.00
	ELEC-7.16.2	Supply and erecting porcelain ----- insulator suitable for 11KV line with suitable hardware on existing cross arms.			
1318	a	Disc type	1	No	530.00
1319	b	Pin type	1	No	270.00
1320	c	Post type	1	No	600.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1321	ELEC-7.16.3	Supply and erecting porcelain pin/shackle type insulator suitable for L. T.	1	No	80.00
	ELEC-7.16.4	Approved made 11KV, ----- A.B switch with all standard accessories etc., complete with cost and conveyance of all materials.			
1322	a	400A	1	No	6500.00
1323	b	200A	1	No	5500.00
1324	ELEC-7.16.5	11KV, H.G fuse set including all standard accessories etc., complete with cost and conveyance of all materials.	1	No	3600.00
1325	ELEC-7.16.6	Supply of 7/3.15 AAA C all Aluminium annealed conductor Rabbit.	1	Km	24500.00
1326	ELEC-7.16.7	Supply of 7/2.50 AAA C all Aluminium annealed conductor Weasel.	1	Km	15000.00
1327	ELEC-7.16.8	Supply of 9.1 Mtr PSCC Pole 280 Kg Working load.	1	No	3200.00
1328	ELEC-7.16.9	Supply of 8.0 Mtr PSCC Pole 140 Kg Working load.	1	No	1700.00
1329	ELEC-7.16.10	Supply of 175 x 85 mm / 150 x 75 mm RS Joist.	1	Kg	50.00
1330	ELEC-7.16.11	Supply and installation of advanced lighting protection with 205 - 580mm height and 4.60 - 4.940 kgs, and having Rod length 760mm, weight 1.795 kgs with stainless steel rod, working on the principle of (ESE) Early Streamer Emission technology, having a coverage radius of 79 Mts under level 1 protection and 107 Mtrs radius under level 4 protection when mounted on 5 - 15 mts height of existing lattice tower giving level 1 protection and anticipation emission time of 60 - 72 micro seconds. The ESE should be manufactured according to standard NFC 17-102 : 2011 and CE certified including functional integrity etc Complete. Make : EARTHPLUS (THUNDER GUARD) / NIMBUS / KALRE / FOREND.	1	No	113778.00
1331	ELEC-7.16.12	Installation and commissioning of advanced lighting protection systems which includes 1. 50mm dia C class GI mast with base plate of length 5.0 Mtrs with FRP collar (Insulating bush). 2. Laying of CC Bed 3. Installation of Lighting Rod 4. Laying of Down conductor 5. Installation of Counter 6. Installation of Earth Electrodes 7. Interconnection between the Electrodes 8. Specialised supporting guy wire and all fitting accessories. 9. Termination of down conductor to earth bus etc complete	1	No	29120.00
1332	ELEC-7.16.13	Supply of electro-Mechanical counter Makes: EARTHPLUS (THUNDER GUARD) / NIMBUS / KALRE / FOREND.	1	Pt	14930.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1333	ELEC-7.16.14	Providing earth electrode of low carbon steel rod, UL listed of 17.2 mm dia, 3 Mtr long, coated with copper of 254 microns thickness, CPRI tested for short time current withstand test of 25 kA, coating thickness, environmental test (Salt Mist Test), Bend test, Tensile strength, Yield / tensile ratio, Electrical Resistivity test, complete with clamps and 2 bags of Earthplus ULTRA high grade earthing compound IEC 62561-7 complaint Eco-friendly, Maintenance free, anti corrosive, lead-free, super conductive, mineral based high-grade earthing compound, to enhance soil conductivity. With resistance <0.20 ohms-meter, should be leach proof & sulphur free complete with earth inspection chamber of dimensions : Width : 320 mm x 320 mm, Height : 192 mm, Weight : 30 Kgs, Load bearing capacity : 5000 Kgs	1	Pt	10223.00
		SECTION - 8			
	8.1	NET WORKING			
	ELEC-8.1.1	Supply of ----- telephone copper cable. Makes : Finolex / Delton / Surabi / Polycab			
1334	a	2 Pair, 0.5mm	100	Mtrs	910.00
1335	b	5 Pair	100	Mtrs	2540.00
1336	c	10 Pair	1	Mtr	36.00
1337	d	20 Pair	1	Mtr	70.00
1338	e	50 Pair	1	Mtr	175.00
	ELEC-8.1.2	Supply of ----- Telephone distribution box with back mount frame, krone connector, powder coated metal body with lock and key arrangement.			
1339	a	10 pair	1	No	580.00
1340	b	20 pair	1	No	880.00
1341	c	50 pair	1	No	1850.00
1342	d	200 pair	1	No	7000.00
	ELEC-8.1.3	Supply of LAN Cable cat - Makes : D Link / AMP / Molex / Legrand / Krone.			
1343	a	6 UTP cable.	100	Mtrs	2100.00
1344	b	6 STP cable.	100	Mtrs	4000.00
	ELEC-8.1.4	Supply of Cat 6 RJ-45 information outlets including ----- plate. Makes : D Link / AMP / Molex / Legrand / Krone.			
1345	a	Duel face plate.	1	No	305.00
1346	b	Single face plate.	1	No	230.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-8.1.5	Supply of ----- manageable switches Makes : CISCO / Net Gear / HP / D link.			
1347	a	48 Port	1	No	13870.00
1348	b	24 Port	1	No	6000.00
1349	c	8 Port	1	No	1100.00
	ELEC-8.1.6	Supply of access point. Makes : CISCO-WAP321 or its equivalent in Net Gear / HP / D link.	1	No	11100.00
	ELEC-8.1.7	Supply of ----- length moulded patch cord. Makes : D Link / AMP / Molex / Legrand / Krone.			
1350	a	7 feet	1	No	200.00
1351	b	3 feet	1	No	180.00
1352	ELEC-8.1.8	Supply of 24 port patch panels Makes : D Link / AMP / Molex / Legrand / Krone.	1	No	5800.00
1353	ELEC-8.1.9	Supply of 100 pair MDF loaded with 2/10 Modular Makes : Krone make or its equivalent.	1	No	3300.00
1354	ELEC-8.1.10	Supply of 100 Pair raiser cable for telephone Makes : Finolex / Delton / Surabi / Polycab.	1	Mtr	350.00
	ELEC-8.1.11	Supply of ----- Wall mounting net work rack with power spike including all accessories. Makes : HCL / Vall.			
1355	a	6U Wall	1	No	4200.00
1356	b	9U wall	1	No	5000.00
1357	c	12U wall	1	No	5800.00
1358	d	15U wall	1	No	6600.00
1359	e	17U wall	1	No	9000.00
1360	f	42U floor	1	No	32000.00
	ELEC-8.1.12	Supply of ----- (Indoor / Out door), Single mode armoured, Optic fibre cable. Makes : D Link / AMP / Molex / Legrand / Krone.			
1361	a	6 Core	1	Mtr	70.00
1362	b	12 Core	1	Mtr	95.00
	ELEC-8.1.13	Supply of ----- fibre distribution unit. (FDU / LIU) loaded with couplers etc complete. Makes : D Link / AMP / Molex / Legrand / Krone.			
1363	a	6 port	1	No	6700.00
1364	b	12 port	1	No	8500.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1365	ELEC-8.1.14	Supply of Subscriber connector (SC) to SC / LC patch card of 1 Mtr length. Makes : D Link / AMP / Molex / Legrand / Krone.	1	No	1800.00
1366	ELEC-8.1.15	Supply of Pigtails for fibre core connectivity. Makes : D Link / AMP / Molex / Legrand / Krone.	1	No	320.00
	8.2	RACEWAYS AND JUNCTION BOXES			
	ELEC-8.2.1	Supply of ----- G I Raceways of 2mm thick with top cover and required hard ware etc complete.			
1367	a	100mm x 38mm	1	Mtr	429.00
1368	b	150mm x 38mm	1	Mtr	565.00
1369	c	300mm x 38mm	1	Mtr	966.00
1370	d	100mm x 25mm	1	Mtr	406.00
1371	e	150mm x 25mm	1	Mtr	523.00
1372	f	300mm x 25mm	1	Mtr	943.00
	ELEC-8.2.2	Supply of 172mm x 52mm G.I. Junction box of 2mm thick for direct acces to cables at the inter section of Raceways.	1	No	318.00
1373	a	172mm x 52mm	1	No	318.00
1374	b	222mm x 52mm	1	No	402.00
1375	c	372mm x 52mm	1	No	775.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	8.3	EPABX SYSTEM			
		SMALL SYSTEM			
	ELEC-8.3.1	Supply, Installation, Testing and commissioning of IP Based digital Telephone (EPABX) system complied with following specifications: > IP @ Core, PCM/TDM, Non blocking, > Must Support PRI, E1, Analog Junctions > Must Support PC Console, > Must support Mobile SIP (Android and ios) > Must support Voice Mail > Must support Card based GSM > Inbuilt 8 Channel Auto Attendant > Inbuilt Call Details Software with search engine software > ----- > ----- > ----- > 6 Digital Extensions > 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires) > Expandable to 64 Analog Extensions or more Approved Brands: NEC / Alcatel / Karel / Unify			
1376	a	> 4 Analog Trunks > 32 Analog Extensions	1	Set	82680.00
1377	b	> 4 Analog Trunks > 48 Analog Extensions	1	Set	90753.33
1378	c	> 4 Analog Trunks > 1 PRI Trunk > 48 Analog Extensions	1	Set	100773.33
1379	d	> 4 Analog Trunks > 64 Analog Extensions	1	Set	103870.00
1380	e	> 4 Analog Trunks > 1 PRI Trunk > 64 Analog Extensions	1	Set	113900.00
1381	ELEC-8.3.2	Analog Extension Card (with Caller ID) 8 extensions.	1	No	13801.46
1382	ELEC-8.3.3	Analog Extension Card (with Caller ID) 16 extensions.	1	No	18009.22
1383	ELEC-8.3.4	Analog Trunk Card (with Caller ID) 4 trunks.	1	No	15316.25
1384	ELEC-8.3.5	Analog Trunk Card (with Caller ID) 8 trunks.	1	No	19187.39
1385	ELEC-8.3.6	Digital Extension Card for 8 digital extensions:	1	No	17840.91
1386	ELEC-8.3.7	Digital Extension Card for 16 digital extensions:	1	No	29454.33
1387	ELEC-8.3.8	E1 Trunk Card or PRI Card 30 ISDN PRI or R2 trunk channels.	1	No	44630.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
		LARGE SYSTEM		
	ELEC-8.3.9	Supply, Installation, Testing and Commissioning of IP Based digital Telephone (EPABX) system--complied with following specifications: > IP @ Core, PCM/TDM switching, Non blocking, > Must Support PRI, E1, Analog Junctions > Must Support PC Console, > Must support Mobile SIP (Android and IOs) > Must support Voice Mail > Must support Card based GSM > Inbuilt Call Details Software with search engine software >----- >----- >----- > 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires) Approved Brands: NEC/ Alcatel / Karel / Unify		
1388	a	> 8 Analog Trunks > 8 Digital Extensions > 96 Analog Extensions > Expandable to 220 Ports wired or more at extra cost		227300.00
1389	b	> 8 Analog Trunks > 1 PRI Trunk > 8 Digital Extensions > 128 Analog Extensions > Expandable to 220 Ports wired or more at extra cost		344700.00
1390	c	> 8 Analog Trunks > 1 PRI Trunk > 8 Digital Extensions > 160 Analog Extensions > Inbuilt hotstandby for CPU and PSU. > Flexible to run on DC -48v source. > Expandable to 220 Ports wired or more at extra cost		414500.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1391	d	> 8 Analog Trunks > 1 PRI Trunk > 16 Digital Extensions > 224 Analog Extensions > Inbuilt hotstandby for CPU and PSU. > Flexible to run on DC -48v source. > Expandable to 400 Ports wired or more at extra cost			577150.00
1392	e	> 8 Analog Trunks > 1 PRI Trunk > 16 Digital Extensions > 304 Analog Extensions > Inbuilt hotstandby for CPU and PSU. > Flexible to run on DC -48v source. > Expandable to 400 Ports wired or more at extra cost			669000.00
1393	ELEC-8.3.10	Analog Extension Card (with Caller ID) 16 extensions.	1	No	19900.00
1394	ELEC-8.3.11	Analog Trunk Card (with Caller ID) 8 trunks.	1	No	19900.00
1395	ELEC-8.3.12	Digital Extension Card for 8 digital extensions:	1	No	19900.00
1396	ELEC-8.3.13	Digital Extension Card for 16 digital extensions:	1	No	32700.00
1397	ELEC-8.3.14	E1 Trunk Card or PRI Card 30 ISDN PRI or R2 trunk channels.	1	No	49090.00
1398	ELEC-8.3.15	IP CPU card for redundancy purpose	1	No	35750.00
1399	ELEC-8.3.16	PSU card for redundancy purpose	1	No	21775.00
1400	ELEC-8.3.17	Digital Key Telephone with 2 line display, 10 programmable keys, handsfree dialing.	1	No	8350.00
1401	ELEC-8.3.18	Digital Key Telephone with 2 line display, 16 programmable keys, fully handsfree talk back.	1	No	14635.00
1402	ELEC-8.3.19	IP Gateway card for 8 channels	1	No	41470.00
1403	ELEC-8.3.20	IP Gateway card for 16 channels	1	No	59940.00
1404	ELEC-8.3.21	SIP extensions licenses pack (5 SIP extensions)	1	No	4250.00
1405	ELEC-8.3.22	SIP extensions licenses pack (10 SIP extensions)	1	No	7450.00
1406	ELEC-8.3.23	IP phone with POE.	1	No	16800.00
1407	ELEC-8.3.24	4 port GSM card	1	No	43720.00
1408	ELEC-8.3.25	Expansion cabinet for 220 more extensions	1	No	82230.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		SECTION - 9			
	9.1	MISSILLANEOUS ITEMS			
1409	ELEC-9.1.1	TW Seperators / Gutties	100	Nos	182.00
1410	ELEC-9.1.2	Rawl Plugs	100	Nos	31.00
1411	ELEC-9.1.3	PVC Grips	100	Nos	30.00
1412	ELEC-9.1.4	U Nails	100	Nos	30.00
1413	ELEC-9.1.5	Alluminium Link Clips	144	Nos	30.00
1414	ELEC-9.1.6	50 mm G.I.Nut and Bolts.	1	Set	15.00
1415	ELEC-9.1.7	63 to 100 mm G.I.Nut and Bolts.	1	Set	25.00
1416	ELEC-9.1.8	50 mm 0 Gauge Nails	1	Doz	44.00
1417	ELEC-9.1.9	63 to 100 mm 0 Gauge Nails	1	Doz	72.00
1418	ELEC-9.1.10	Hard Coke	1	Kg	20.00
1419	ELEC-9.1.11	Salt	1	Kg	15.00
1420	ELEC-9.1.12	PVC Cleats 2 Way	100	Nos	323.00
1421	ELEC-9.1.13	PVC Cleats 4 Way	100	Nos	431.00
1422	ELEC-9.1.14	Binding Wire	1	Kg	61.00
1423	ELEC-9.1.15	PVC / Cotton Insulation tape Role (10 Mtrs)	1	No	18.00
1424	ELEC-9.1.16	C.I.Knob	1	No	25.00
1425	ELEC-9.1.17	Stay tight set (Jum bracket 300 mm)	1	Pair	294.00
1426	ELEC-9.1.18	Stay clamp with bolts and Nuts)	1	Set	196.00
1427	ELEC-9.1.19	L.T.Guy insulator	1	No	74.00
1428	ELEC-9.1.20	12 / 15 MS plain rod fan hook	1	No	30.00
1429	ELEC-9.1.21	19 / 20 mm Steel tube fan down rod	1	Mtr	83.00
1430	ELEC-9.1.22	Consealed box PVC / MS with hook for fan	1	No	98.00
1431	ELEC-9.1.23	Supply and fixing of Anchor fastner with fan hook / Providing MS Fan hook with grouting and cement plastering.	1	No	80.00
1432	ELEC-9.1.24	Coil Earthing	1	No	74.00
1433	ELEC-9.1.25	Cable root Indicators of size 152mm round / 102mm x 102mm / 152mm x 152mm	1	No	88.00
1434	ELEC-9.1.26	40 mm x 40 mm x 6 mm angle iron with I bolt.	1	Set	245.00
1435	ELEC-9.1.27	Mild Steel Items	1	Kg	61.00
1436	ELEC-9.1.28	Acrylic Cover of size 4" x 7" for night lamps.	1	No	20.00
1437	ELEC-9.1.29	TW / PVC Round Blocks	1	No	8.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1438	ELEC-9.1.30	G.I.Funnel with Mesh 1/2" x 4"	1	No	81.00
1439	ELEC-9.1.31	Asbestos Sheet	1	Sqft	25.00
1440	ELEC-9.1.32	First Aid box 18" x 12" x 8"	1	No	1076.00
1441	ELEC-9.1.33	11 KV/22 KV Hand gloves	1	No	200.00
	9.2	LEGEND PLATES			
	ELEC-9.2.1	Danger Notice Plates of size -----, shall comply with IS:2551-1982.			
1442	a	250x200mm,	1	No	223.00
1443	b	200x150mm,	1	No	200.00
1444	c	150x100mm,	1	No	100.00
1445	ELEC-9.2.2	Bus bar chamber 100mm x 40mm			50.00
1446	ELEC-9.2.3	Cable Alley 100mm x 40mm			50.00
1447	ELEC-9.2.4	Earth 40mm x 20mm			50.00
1448	ELEC-9.2.5	Auto / Manual			50.00
1449	ELEC-9.2.6	Semi oval type aluminium anodized legend plates ON / OFF / Forward / Reverse / Start / Stop / UP / DOWN / R Phase / Y Phase / B Phase / Trip / Open / Close / Left / Right / Motor on / Motor off / Accept / Retract / Reset / Emergency / Running / Pump off / Emergency Stop / Emergency on / Slow.			25.00
1450	ELEC-9.2.7	Shock instruction chart in English / Hindi / Telugu duly framed with front glass.	1	No	450.00
	9.3	COPPER / ALLUMINIUM / G.I. ITEMS (PER KG)			
1451	ELEC-9.3.1	Copper Plate / Strip / SWG wire No.8 / 10 / 14	1	Kg	590.00
1452	ELEC-9.3.2	Copper winding wire	1	Kg	680.00
1453	ELEC-9.3.3	Copper winding wire with PVC Insulated of fine quality	1	Kg	700.00
1454	ELEC-9.3.4	Alluminium Bus bars / Strips / Accessories	1	Kg	230.00
1455	ELEC-9.3.5	Alluminium winding wire	1	Kg	300.00
1456	ELEC-9.3.6	G.I. Strip / Plate / Wire	1	Kg	65.00
	9.4	SMC TYPE SUPPORTS FOR THE BUSBARS			
	ELEC-9.4.1	Supply of type supports for the bus bars-----			
1457	a	50 x 70 x 14 mm	1	No	30.00
1458	b	60 x 70 x 14 mm	1	No	35.00
1459	c	70 x 70 x 14 mm	1	No	65.00
1460	d	300 x 50 x 10 mm	1	No	120.00
1461	e	350 x 52 x 10 mm	1	No	160.00
1462	f	420 x 60 x 12 mm	1	No	230.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1463	ELEC-9.4.2	DMC Earth Flat Supports 20 x3 mm / 20x 6mm / 25 x 6mm / 25 x 3mm / 32 x 3 mm / 32 x 6mm / 40 x 3 mm / 40 x 6mm	1	No	50.00
1464	ELEC-9.4.3	Heat shrinkable sleeves for the Bus bars up to 70 Sqmm	1	Mtr	15.00
1465	ELEC-9.4.4	Heat shrinkable sleeves for the Bus bars above 70 Sqmm	1	Mtr	25.00
1466	ELEC-9.4.5	6.2 Volt series bulb (25 Nos.)	25	Nos	60.00
1467	ELEC-9.4.6	6.2 Volt series bulb with navar plate(25 Nos.)	25	Nos	65.00
1468	ELEC-9.4.7	Supply of Rotating machine	1	No	12000.00
1469	ELEC-9.4.8	Supply and fixing of 6mm thick MS Chekered plate.	1	Kg	70.00
1470	ELEC-9.4.9	Supply and fixing of 6mm thick Alluminium Chekered plate.	1	Kg	250.00
1471	ELEC-9.4.10	Copper old winding Wire scrap for 1 Kg	1	Kg	150.00
1472	ELEC-9.4.11	Cement	1	Kg	8.00
1473	ELEC-9.4.12	Cost of Sand	1	Cum	600.00
1474	ELEC-9.4.13	Cost of Bricks	1000	Nos	4000.00
1475	ELEC-9.4.14	Hylam Sheet	1	Sq.in	1.00
	ELEC-9.4.15	Supply of Nominal-Bore ----- G.I.Pipe			
1476	a	25mm Heavy grade	1	Mtr	280.00
1477	b	25mm Medium grade	1	Mtr	243.00
1478	c	40mm Heavy grade	1	Mtr	420.00
1479	d	40mm Medium grade	1	Mtr	350.00
1480	ELEC-9.4.16	80mm Nominal Bore C.I.Earth Pipe of 3 Mtrs Length	1	No	3400.00
1481	ELEC-9.4.17	Earth work excacvation including all soils for trench, Pole Pit and Earth Pit.	1	Cum	250.00
1482	ELEC-9.4.18	Drilling of 16 Nos through holes of 12mm dia to G.I pipe	1	No	6.00
1483	ELEC-9.4.19	G.I Nuts, Bolts and Washers each set	1	Set	12.00
1484	ELEC-9.4.20	18" dia 2" thick hume pipe ring	1	No	250.00
1485	ELEC-9.4.21	18" dia 3" hume pipe ring	1	No	300.00
1486	ELEC-9.4.22	2" thick CC cover for hume pipe ring with handle.	1	No	130.00
	ELEC-9.4.23	Supply of Saddle / Clamps suitable for fixing -----			
1487	a	4 to 10 Sqmm 2 Core Cable.	100	Nos	230.00
1488	b	4 & 6 Sqmm 4 Core Cable.	100	Nos	230.00
1489	c	10 & 16 Sqmm 4 Core Cable.	100	Nos	300.00
1490	d	25 & 35 Sqmm 3.5 Core Cable.	100	Nos	350.00
1491	e	50 Sqmm 3.5 Core Cable.	100	Nos	500.00
1492	f	70 & 95 Sqmm 3.5 Core Cable.	100	Nos	550.00
1493	g	120 to 185 Sqmm 3.5 Core Cable.	100	Nos	700.00
1494	h	240 & 300 Sqmm 3.5 Core Cable.	100	Nos	850.00
1495	i	400 Sqmm 3.5 Core Cable.	100	Nos	1100.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-9.4.24	Supply and fixing of PVC synthetic elastomer electrically insulated mat conforming to IS: 15652-2006 with-----			
1496	a	Class A insulation having 2mm thickness upto 3.3KV	1	Sq Mtr	3800.00
1497	b	Class B insulation having 2.5mm thickness upto 11KV	1	Sq Mtr	3900.00
1498	c	Class C insulation having 3mm thickness upto 33KV	1	Sq Mtr	4000.00
1499	ELEC-9.4.25	Supply of round bottom G.I sheet bucket of 9 Ltrs. Capacity as per IS:2546 made out of 24 gauge GI sheet with extra handle at bottom duly painted inside and red out side with printed with FIRE Mark for stand and hook and filled with sand and arranged to existing stand or hook. (MR)	1	No	270.00
1500	ELEC-9.4.26	Providing floor mounting stand for keeping 4No of fire bucket 1500mm length, 900mm height made out of 40x40x6mm angle iron welded with 4 hooks and duly painted with one coat of red lead and two coats of enamel paint.	1	No	1100.00
		SECTION - 10			
	10.1	WIRELESS FIRE ALARAM SYSTEM			
1501	ELEC-10.1.1	Supply and fixing of wireless smoke detection control panel of 28 wireless zones, 2 Hard wired Zones, Tamper Alert, Pass code protected, RF jamming recognition, diagnostic feature for RF signal strength between panel and each detector, vent reporting using PSTN telephone line, dialing upto 4 telephone numbers, event reporting as per users choice, LCD screen display, two way voice interaction, battery backup stand by time up to 12 hrs Including transportation, all taxes and all labour charges etc complete. Makes : Cease Fire / Visonic / Honeywell	1	No	#VALUE!
1502	ELEC-10.1.2	Supply and fixing of Wireless Repeater.The wireless repeater extends the communication range of detection by relaying data between receiver and remote wireless transmitter Including transportation, all taxes and all labour charges etc complete. Makes : Cease Fire / Visonic / Honeywell	1	No	8356.00
1503	ELEC-10.1.3	Supply and fixing of Wireless Siren Strobe external wireless siren - a fully supervised power code outdoor (IP55) wireless Siren and strobe light. Designed for external installation. Wire - Free connection between control panel and siren. Convenient rapid no-mess installation. Separate fire alarm signals, 98db Piezo siren and high power strobe light. Weather resistant, IP55, 2-way communication for local and remote diagnostics. Plug-in power supply, NIMH rechargeable back-up power battery, transmits status, tamper, low- battery, supervisory and AC loss messages to the control panel, Tri- State tamper switch identifies screw manipulation removal of cover or playing from the wall Including transportation, all taxes and all labour charges etc complete. Makes : Cease Fire / Visonic / Honeywell	1	No	11734.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1504	ELEC-10.1.4	Supply and fixing of wireless Fully Supervised Smoke Detector, Photoelectric detection technology for superior detection sensitivity , sound and transmitted for smoke, tamper and low battery, works on power code protocol, easy programming and enrolling to the control panel, long life 9 volt alkaline or lithium battery Including transportation, all taxes and all labour charges etc complete. Makes : Cease Fire / Visonic / Honeywell	1	No	5778.00
	10.2	ADDRESSABLE - FIRE ALARM SYSTEM			
	ELEC-10.2.1	Supply, Installation, testing and commissioning of wall mounting----- ----- based analog addressable fire control panel expandable by minimum 2 additional loops with minimum 80 character LCD display 4 access levels 1000 events, historical logging, flash E-PROM, 240 volts A C Power supply, automatic battery charger, 24V SLA batteries suitable for operating the entire system including tack back units and the hooters/strobes for a minimum of 4 hours in battery condition the panel shall have suitable power amplifiers for hooter / strobes the panel shall be capable beeing integrated with the BMS system and shall include cost of supply, installation of any additional modules or interfaces required for the same. The panel shall be completed as per the specification and as required for fixing of above Micro processor based Fire Alarm control panel with zonal indications and battery back up as per detailed specifications. Makes: Notifier / Edwards			
1505	a	10 loop micro processor	1	No	551112.00
1506	b	8 loop micro processor	1	No	400000.00
1507	c	6 loop micro processor	1	No	368889.00
1508	d	4 loop micro processor	1	No	248889.00
1509	e	2 loop micro processor	1	No	208889.00
1510	f	1 loop micro processor	1	No	177778.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-10.2.2	Supply, Installation, testing and commissioning of UL listed and FM approved wall mounting----- based analog addressable fire control panel expandable by minimum 2 additional loops with minimum 80 character LCD display 4 access levels 1000 events, historical logging, flash E-PROM, 240 volts A C Power supply, automatic battery charger, 24V SLA batteries suitable for operating the entire system including tack back units and the hooters/strobes for a minimum of 4 hours in battery condition the panel shall have suitable power amplifiers for hooter / strobes the panel shall be capable being integrated with the BMS system and shall include cost of supply, installation of any additional modules or interfaces required for the same. The panel shall be completed as per the specification and as required for fixing of above Micro processor based Fire Alarm control panel with zonal indications and battery back up as per detailed specifications. Makes: Siemens / Morley / Bosch / Ravel			
1511	a	10 loop micro processor	1	No	515556.00
1512	b	8 loop micro processor	1	No	364445.00
1513	c	6 loop micro processor	1	No	328889.00
1514	d	4 loop micro processor	1	No	222223.00
1515	e	2 loop micro processor	1	No	186667.00
1516	f	1 loop micro processor	1	No	168889.00
1517	ELEC-10.2.3	Supply, Installation, testing and commissioning of intellegent analogue addressable Repeater panel including the cost of mounting accessories complete as per specification as required. Makes: Notifier / Edwards	1	No	105556.00
1518	ELEC-10.2.4	Supply and fixing of addressable wall mounting strobes cum hooters including the cost of mounting accessories complete as per specifications and as required including testing and commissioning. Makes: Notifier / Edwards	1	No	4616.00
1519	ELEC-10.2.5	Supply and installation of addressable analogue manual call point with resetable flexible element to initiate alaram including the cost of mounting accessories etc. complete. Makes: Notifier / Edwards	1	No	4458.00
1520	ELEC-10.2.6	Supply and instllation of intallegent analogue addressable photo electric smoke detector including cost of base plate etc., complete as per specification with required fittings and accessories. Makes: Notifier / Edwards	1	No	3609.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1521	ELEC-10.2.7	Supply and installation of intelligent analogue addressable rate of rise cum fixed temperature heat detectors including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required. Makes: Notifier / Edwards	1	No	3373.00
1522	ELEC-10.2.8	Supply and installation of intelligent analogue addressable multi criterion detectors below false ceiling/on ceiling including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required. Makes: Notifier / Edwards	1	No	3568.00
1523	ELEC-10.2.9	Supply and Installation of Intelligent analogue addressable Control Modules including the cost of mounting accessories complete as per specifications and as required. Makes: Notifier / Edwards	1	No	3948.00
1524	ELEC-10.2.10	Supply and Installation of Intelligent analogue addressable monitor modules including the cost of mounting accessories complete as per specifications and as required. Makes: Notifier / Edwards	1	No	3948.00
1525	ELEC-10.2.11	Supply and Installation of Intelligent analogue addressable fault isolator modules including the cost of mounting accessories complete as per specifications and complete as required. Makes: Notifier / Edwards	1	No	3800.00
1526	ELEC-10.2.12	Supply, Installation, testing and commissioning of intelligent analogue addressable Repeater panel including the cost of mounting accessories complete as per specification as required. Makes: Siemens / Morley / Bosch / Ravel	1	No	88900.00
1527	ELEC-10.2.13	Supply and fixing of addressable wall mounting strobes cum hooters including the cost of mounting accessories complete as per specifications and as required including testing and commissioning. Makes: Siemens / Morley / Bosch / Ravel	1	No	3969.00
1528	ELEC-10.2.14	Supply and installation of addressable analogue manual call point with resettable flexible element to initiate alarm including the cost of mounting accessories etc. complete. Makes: Siemens / Morley / Bosch / Ravel	1	No	4241.00
1529	ELEC-10.2.15	Supply and installation of intelligent analogue addressable photo electric smoke detector including cost of base plate etc., complete as per specification with required fittings and accessories. Makes: Siemens / Morley / Bosch / Ravel	1	No	3400.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1530	ELEC-10.2.16	Supply and installation of intallegent analogue addressable rate of rise cum fixed temperature heat detectors including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required. Makes: Siemens / Morley / Bosch / Ravel	1	No	3446.00
1531	ELEC-10.2.17	Supply and installation of intalligent analogue addressable multi criterion detectors below false ceiling/on ceiling including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required. Makes: Siemens / Morley / Bosch / Ravel	1	No	3706.00
1532	ELEC-10.2.18	Supply and Installation of Intalligent analogue addressable Control Modules including the cost of mounting accessories complete as per specifications and as required. Makes: Siemens / Morley / Bosch / Ravel	1	No	3724.00
1533	ELEC-10.2.19	Supply and Installation of Intalligent analogue addressable monitor modules including the cost of mounting accessories complete as per specifications and as required. Makes: Siemens / Morley / Bosch / Ravel	1	No	3517.00
1534	ELEC-10.2.20	Supply and Installation of Intalligent analogue addressable fault isolator modules including the cost of mounting accessories complete as per specifications and complete as required. Makes: Siemens / Morley / Bosch / Ravel	1	No	3400.00
	10.3	CONVENTIONAL - FIRE ALARM SYSTEM			
	ELEC-10.3.1	Supply, Installation, testing and commissioning of conventional Micro processor based Fire Alarm panel with ----- 12V SMF batteries etc., complete with all standard accessories. Makes: System Censor / Ravel / Pinnacle			
1535	a	2 zone	1	No	14000.00
1536	b	4 zone	1	No	14600.00
1537	c	6 zone	1	No	14800.00
1538	d	8 zone	1	No	15100.00
1539	e	10 zone	1	No	19750.00
1540	f	12 zone	1	No	22000.00
1541	g	14 zone	1	No	24000.00
1542	ELEC-10.3.2	Supply and installation of Repeater panel including the cost of mounting accessories complete as per specifications and as required. Makes: System Censor / Ravel / Pinnacle	1	No	12000.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1543	ELEC-10.3.3	Supply and installation of dual tone electronic hooter of 85dB including the cost of mounting accessories complete as per specifications and as required.	1	No	700.00
1544	ELEC-10.3.4	Supply and installation of dust and vermin proof manual call point to initiate audio visual alarm including the cost of mounting accessories complete as per specifications and as required.	1	No	580.00
1545	ELEC-10.3.5	Supply and installation of response indicators for above false ceiling detectors.	1	No	130.00
1546	ELEC-10.3.6	Supply and installation of plug - in type multi criterion detectors including the cost of base plate. 75mm dia M.S. outlet box for fixing of the detector base. Mounting accessories etc., complete as per specifications as required. Makes: System Censor / Ravel / Pinnacle	1	No	1500.00
1547	ELEC-10.3.7	Supply and installation of plug - in type photo electric smoke detectors including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base. Mounting accessories etc complete and as per specifications and as required. Makes: System Censor / Ravel / Pinnacle	1	No	1300.00
1548	ELEC-10.3.8	Supply and installation of plug - in type rate of rise cum fixed temperature heat detectors including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required. Makes: System Censor / Ravel / Pinnacle	1	No	1200.00
	10.4	POWDER BASED FIRE EXTINGUISHERS			
	ELEC-10.4.1	Supply and fixing of ABC stored pressure squeeze grip type fire extinguishers, 9 kg capacity , IS:15683 : 2006, filled with ABC Mono Ammonium Phosphate base powder-90 complete with discharge hose and wall mounting bracket, 2mm Mild Steel, EPDM Rubbers, Pressure Guage, which work effectively on all class of fires (A, B, C & Electrical fires) with 5 years warranty Including transportation, all taxes and all labour charges etc complete.			
1549	a	Makes : Cease Fire / Minimax	1	No	8160.00
1550	b	Makes : Safex / Kenex / Bharat / Reliance	1	No	5245.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-10.4.2	Supply and fixing of ABC Powder MAP 4 Kg Fire extinguisher Mono ammonium phosphate power 90, stored pressure type, IS 15683 : 2006, pressure gauge gross wt. 6.9 kg, empty wt. 2.9 kg, can Ht.440mm, Diameter 140mm, Discharge time less than 13 sec , controllable discharge mechanism, range min. 4 mts applicable on classes A,B, C & electrically started fires, A- rating 3A, B-rating 34B, can construction: Deep drawn Co2 mig welding, wall construction: Forging & Machining, internal coating of can: Epoxy power coating, External coating of Can:Epoxy polyster powder coating, sheet metal thickness:1.60mm, Helium leakage detection tested, ISI & CE approved with 5 years warranty Including transportation, all taxes and all labour charges etc complete.			
1551	a	Makes : Cease Fire / Minimax	1	No	5663.00
1552	b	Makes : Safex / Kenex / Bharat / Reliance	1	No	3645.00
	ELEC-10.4.3	Supply and fixing of ABC Powder MAP 2 Kg Fire extinguisher Mono ammonium phosphate power 90, stored pressure type, IS 15683 : 2006, pressure gauge gross wt. 3.6 kg, empty wt. 1.6 kg, can Ht.344mm, Diameter 108mm, Discharge time less than 8 sec , controllable discharge mechanism, range min. 2 mts applicable on classes A,B, C electrically started fires, A- rating 2A, B-rating 21B, can construction: Deep drawn Co2 mig welding, wall construction: Forging & Machining, internal coating of can: Epoxy power coating, External coating of Can:Epoxy polyster powder coating, sheet metal thickness:1.60mm, Helium leakage detection tested, insta - alert, ISI & CE approved with 5 years warranty Including transportation, all taxes and all labour charges etc complete.			
1553	a	Makes : Cease Fire / Minimax	1	No	4000.00
1554	b	Makes : Safex / Kenex / Bharat / Reliance	1	No	2578.00
	ELEC-10.4.4	Supply and fixing of Ceiling Mounted ABC MAP 90, 5 Kg stored pressure type, pressure gauge, Gross Wt. 7.7 kg, Empty Wt. 2.7 kg, Can Ht264mm , Dia 240mm, Discharge time : less than 8 sec , IS 15683 : 2006 Auto discharge mechanism on temperature rise, Applicable on A,B,C, & Electrically - started fires, Can Construction: Forging & Machining, Internal coating of Can: Epoxy Power coating, External Coating of Can: Epoxy Polyster powder coating, sheet metal thickness:1.60mm , Helium leakage detection tested, ISI approved with 5 years warranty (Cease Fire / Minimax make) Including transportation, all taxes and all labour charges etc complete.			
1555	a	Makes : Cease Fire / Minimax	1	No	6400.00
1556	b	Makes : Safex / Kenex / Bharat / Reliance	1	No	4978.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	10.5	CLEAN AGENT FIRE EXTINGUISHERS			
	ELEC-10.5.1	Supply and fixing of 2 Kg Fire extinguisher Clean Agent HCFC 123, Stored pressure type, IS 15683 : 2006 pressure gauge, gross weight 3.7 Kg empty weight 1.7 Kg, can height 344mm, Diameter 108mm, discharge time minimum 8 secs , controllable discharge mechanism, range minimum 2 meters, applicable on class A,B,C and electrically started Fire, A rating 1A, B rating 21B, can construction: Deep drawn & CO2 mig welded, Valve construction: Forging & Machining, Internal coating of Can: Epoxy powder coating, External coating of can: Epoxy polyester powder coating, sheet metal thickness: 1.60 mm, Helium leak detection tested, ISI & CE approved, 5 Years warranty.			
1557	a	Makes : Cease Fire / Minimax	1	No	11520.00
1558	b	Makes : Safex / Kenex / Bharat.	1	No	9778.00
	ELEC-10.5.2	Supply and fixing of 4 Kg Fire extinguisher Clean Agent HCFC 123, Stored pressure type, IS 15683 : 2006, pressure gauge, gross weight 6.9Kg empty weight 2.9 Kg, can height 440mm, Diameter 140mm, discharge time minimum 8 secs , controllable discharge mechanism, range minimum 2 meters, applicable on class A,B,C and electrically started Fire, A rating 1A, B rating 21B, can construction: Deep drawn & CO2 mig welded, Valve construction: Forging & Machining, Internal coating of Can: Epoxy powder coating, External coating of can: Epoxy polyester powder coating, sheet metal thickness: 1.60 mm, Helium leak detection tested, ISI & CE approved 5 Years warranty.			
1559	a	Makes : Cease Fire / Minimax	1	No	20880.00
1560	b	Makes : Safex / Kenex / Bharat.	1	No	18667.00
	ELEC-10.5.3	Supply & Fixing of 4.5Kg, CO2 Type Fire Extinguisher, Trolley Mounted, Easy Weight Management, Used Unused Mechanism, Squeeze Grip, Gross Weight 19.1 Kg, Empty Weight 14.6 Kg, Can Height 860MM, Diameter 140MM, Discharge time minimum 13 Secs , Controllable discharge mechanism, Range minimum 2 Meters, Applicable on Class B,C & electrically started Fire, B Rating 13B, Can Construction : Hot Spinning / Forging, Valve Construction : Forging & Machining, Internal Coating of Can : Not Applicable, External Coating of Can : Spray Painting, Sheet metal thickness : 4.5MM, ISI & CE Approved, 2 Year Warranty Including transportation, all taxes and all labour charges etc complete.			
1561	a	Makes : Cease Fire / Minimax	1	No	9689.00
1562	b	Makes : Safex / Kenex / Bharat / Reliance	1	No	7289.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1563	ELEC-10.5.4	Supply and fixing of Escape signage boards in Rigid Photo luminescent based glow in Dark rigid sheet with high intensity luminous properties with specificaiton of Cease Fire or its equivalent make Model-1ES01	1	No	1156.00
1564	ELEC-10.5.5	Supply and fixing of Cease fire or its equivalent Escape gear Mild Steel box size 425mmx360mmx140mm Epoxy powder coated to protect it from Weathering , smoke hood tested to Eupropean Standard EN 403 1993-S known to reduce Carbon Monoxide, propend(acrloein), hydrogen chloride, hydrogen Cyanide and Solid and liquid toxic particles to manageable level for atleast 15 minutes shall with stand tempeartures upto 80 degrees single use only Fire Blanket size 1.2m x1.8m used to cover any vessel containing used to Extinguish a clothing fire wrap blanket around the victim.	1	No	13343.00
1565	ELEC-10.5.6	Supply and fixing of 4Nos of 9 Ltrs capacity round bottom bucket with sand, duly painted with enamel white inside & red out side and letter FIRE with black colour.	1	Set	1067.00
1566	ELEC-10.5.7	Supply anmd fixing of Fire bucket stand fabricated by M.S. angles to install for two numbers of buckets as per local fire officers standards.	1	Set	889.00
	10.6	WATER MIST FIRE EXTINGUISHERS			
1567	ELEC-10.6.1	Supply & Fixing of Water Mist 9 Ltr. Fire Extinguisher : Gross Weight – 23.9 kg., Weight of the empty firefighting system without compressed air bottle and bottle valve - 14.9 kg., Can Height – 560 MM, Diameter – 204MM, Weight of the gun- 1.9kg, Nominal charge - 9 Ltr., Recoil – approx. 10N, Extinguishing Media Flow – 0.23 L/ sec, Water Discharge Hose – 13 MM, Discharge time minimum 25 Secs, Range minimum 10 Meters, Compressed Air to Gun – 10 MM, Applicable on Class A, B, C & Electrically started Fires, ARating-27A, BRating-233B, Compressed air bottle (volume/pressure) - 2L / 300bar, Operating pressure(dynamic)-approx 5.0 bar, Lancing distance of the extinguishing agent-in spray Approx. 7.0 m, in jet mode Approx, 12.0 m. Operation time- approx 40 sec, Extinguishing enhancement agent- Foam Additive, CE and ERDA approved, Sheet Metal Thickness – 1.5MM, 1 Year Warranty. Makes: Cease Fire or Equivalent	1	No	162845.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	10.7	FIRE HYDRANT AND SPRINKLER SYSTEM			
1568	ELEC-10.7.1	Supplying, installation, testing and commissioning of electric driven main fire pump suitable for automatic operation and consisting of following complete in all respect as required	1	Set	314667.00
		a) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of 1620 lpm at 56 Mtr. head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Pumps: Kirloskar / Mather&Platt.			
		Makes of Motors: Siemens/ ABB/ Kirloskar			
1569	ELEC-10.7.2	Supplying , installation , testing and commissioning of electric driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	346667.00
		a) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of 2280 lpm at 70 Mtr. head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Pumps: Kirloskar / Mather&Platt.			
		Makes of Motors: Siemens/ ABB/ Kirloskar			

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1570	ELEC-10.7.3	Supplying , installation , testing and commissioning of electric driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required.	1	Set	396800.00
		a) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of 2850 lpm at 70 Mtr. head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Pumps: Kirloskar / Mather&Platt.			
		Makes of Motors: Siemens/ ABB/ Kirloskar			
1571	ELEC-10.7.4	Supplying , installation, Testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	416000.00
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of 1620 lpm at 56 Mtr head conforming to IS 1520			
		b) Suitable HP, 1500 RPM water cooled with radiator, diesel engine conforming to relevant BS & IS standard complete with auto starting mechanism, 12 Volts / 24 Volts electric starting equipment, Diesel Tank, exhaust pipe extended upto 1 m. outside pump house duly insulated with 50mm thick glass wool with 1.0mm thick aluminium sheet cladding, residential silencer, instruments and protection as per specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc as required.			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Engines : Kirloskar / Cummins.			
		Makes of Pumps : Kirloskar / Mather&Platt			

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1572	ELEC-10.7.5	Supplying , installation, Testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	602667.00
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of 2280 lpm at 70 Mtr head conforming to IS 1520			
		b) Suitable HP, 1500 RPM water cooled with radiator, diesel engine conforming to relevant BS & IS standard complete with auto starting mechanism, 12 Volts / 24 Volts electric starting equipment, Diesel Tank, exhaust pipe extended upto 1 m. outside pump house duly insulated with 50mm thick glass wool with 1.0mm thick alluminium sheet cladding, residential silencer, instruments and protection as per specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc as required.			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Engines : Kirloskar / Cummins.			
		Makes of Pumps : Kirloskar / Mather&Platt			
1573	ELEC-10.7.6	Supplying , installation, Testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	677334.00
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of 2850 lpm at 70 Mtr head conforming to IS 1520			
		b) Suitable HP, 1500 RPM water cooled with radiator, diesel engine conforming to relevant BS & IS standard complete with auto starting mechanism, 12 Volts / 24 Volts electric starting equipment, Diesel Tank, exhaust pipe extended upto 1 m. outside pump house duly insulated with 50mm thick glass wool with 1.0mm thick alluminium sheet cladding, residential silencer, instruments and protection as per specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc as required.			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Engines : Kirloskar / Cummins.			
		Makes of Pumps : Kirloskar / Mather&Platt			

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1574	ELEC-10.7.7	Supplying , installation , testing and commissioning of electric driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	238889.00
		a) End suction back pull out centrifugal pump, Std fitted with BRONZE IMPELLER & gland packing ,capacity 171 Cum/hr (2850 LPM) at total head 70 M at operating speed 2900 rpm. Pump duty as per TAC			
		b) 55 KW / 75 HP, 3000 srpm, TEFC (IP55) horizontal foot mounted, squirrel cage induction motor, suitable for 415 volts +/- 10%, 3 Ph, 50 Hz +/-5%, a.c.supply. Class 'F' insulated and suitable for ambient temperature up to 50 deg C. Motor in frame SC 250 M frame for driving above pump.			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Pumps: Kirloskar / Mather&Platt.			
		Makes of Motors: Siemens/ ABB/ Kirloskar			
1575	ELEC-10.7.8	Supplying , installation, Testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	494445.00
		a) End suction back pull out pump, Std fitted with BRONZE Impeller & gland packing, capable of delivering 171 Cum/hr(2850 LPM) at a total head of 70 M when operated at 1800 rpm and pump duty as per TAC			
		b) Liquid cooled, 85 BHP at 1800 rpm, diesel engine (Radiator cooled) 12 Volts starting system with standard accessories			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Engines : Kirloskar / Cummins.			
		Makes of Pumps : Kirloskar / Mather&Platt			

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1576	ELEC-10.7.9	Supplying , installation , testing and commissioning of electric driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	194445.00
		a) End suction back pull out centrifugal pump, Std fitted with BRONZE IMPELLER & gland packing ,capacity 137 Cum/hr (2280 LPM) at total head 70 mwc at operating speed 2900 rpm. Pump duty as per TAC			
		b) 45 KW / 60 HP, 3000 srpm, TEFC (IP55) Horizontal foot mounted, squirrel cage induction motor, suitable for 415 volts +/- 10%, 3 Ph, 50 Hz +/-5%, a.c.supply. Class 'F' insulated and suitable for ambient temperature up to 50 deg C. Motor in frame SC 225 M frame			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Pumps: Kirloskar / Mather&Platt.			
		Makes of Motors: Siemens/ ABB/ Kirloskar			
1577	ELEC-10.7.10	Supplying, installation, Testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	394445.00
		a) End suction back pull out pump, Std fitted with BRONZE Impeller & gland packing, capable of delivering 137 Cum/hr(2280 LPM) at a total head of 70 M when operated at 2150 rpm and pump duty as per TAC			
		b) Liquid cooled, 68 BHP at 1800 rpm, Diesel engine (Radiator cooled) 12 Volts starting system with standard accessories			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Engines : Kirloskar / Cummins.			
		Makes of Pumps : Kirloskar / Mather&Platt			

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1578	ELEC-10.7.11	Supplying, installation, Testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	143334.00
		a) End suction back pull out centrifugal pump, Std fitted with BRONZE IMPELLER & gland packing ,capacity 97 Cum/hr (1620 LPM) at total head 56 mwc at operating speed 2900 rpm. Pump duty as per TAC			
		b) 30 KW / 40 HP, 3000 srpm, TEFC (IP55) horizontal foot mounted, squirrel cage induction motor, suitable for 415 volts +/- 10%, 3 Ph, 50 Hz +/-5%, a.c.supply. Class 'F' insulated and suitable for ambient temperature up to 50 deg C. Motor in frame SC 250 M frame for driving above pump.			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Pumps: Kirloskar / Mather&Platt.			
		Makes of Motors: Siemens/ ABB/ Kirloskar			
1579	ELEC-10.7.12	Supplying , installation, Testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	344445.00
		a) End suction back pull out pump, Std fitted with BRONZE Impeller & gland packing, capable of delivering 97 Cum/hr(1620 LPM) at a total head of 56 M when operated at 2150 rpm and pump duty as per TAC			
		b) Liquid cooled, 50 BHP at 1800 rpm, Diesel engine (Radiator cooled) 12 Volts starting system with standard accessories			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Engines : Kirloskar / Cummins.			
		Makes of Pumps : Kirloskar / Mather&Platt			

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1580	ELEC-10.7.13	Supplying , installation , testing and commissioning of electric driven pressurisation / Jockey pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	48889.00
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal and flow of 180 lpm at 56 Mtr head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor TEFC type suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Pumps : Kirloskar / Mather&Platt.			
		Makes of Motors : Siemens/ ABB/ Kirloskar			
1581	ELEC-10.7.14	Supplying , installation , testing and commissioning of electric driven pressurisation / Jockey pump suitable for automatic operation and consisting of following : complete in all respect as required	1	Set	69209.00
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal and flow of 180 lpm at 70 Mtr head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor TEFC type suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Pumps : Kirloskar / Mather&Platt.			
		Makes of Motors : Siemens/ ABB/ Kirloskar			

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1582	ELEC-10.7.15	Supplying , installation , testing and commissioning of electric driven Terrace / Booster pump suitable for automatic operation and consisting of following : complete in all respect as required.	1	Set	55512.00
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal and flow of 900 lpm at 45 Mtr head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor TEFC type suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes of Pumps : Kirloskar / Mather&Platt.			
		Makes of Motors : Siemens / ABB / Kirloskar			
1583	ELEC-10.7.16	Supplying , installation , testing and commissioning of electric driven Terrace / Mono Bloc Booster pump suitable for automatic operation and consisting of following : complete in all respect as required.	1	Set	43023.00
		a) Horizontal type, centrifugal End Suction pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal and flow of 900 lpm at 45 Mtr head conforming to IS 1520			
		b) Three Phase High Speed Centrifugal Pump. Pump with CI Impeller and Gland Packing with 9.3 KW / 12.5HP, 2 pole, TEFC, 415 V, 3ph motor			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes : Kirloskar			

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1584	ELEC-10.7.17	Supplying , installation , testing and commissioning of electric driven Terrace / Mono Bloc Booster pump suitable for automatic operation and consisting of following : complete in all respect as required.	1	Set	41107.00
		a) Horizontal type, centrifugal End Suction pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal and flow of 750 lpm at 35 Mtr head conforming to IS 1520			
		b) Three Phase High Speed Centrifugal Pump. Pump with CI Impeller and Gland Packing with 7.5 KW / 10 HP, 2 pole, TEFC, 415 V, 3ph motor			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes : Kirloskar			
1585	ELEC-10.7.18	Supplying , installation , testing and commissioning of electric driven Terrace / Mono Bloc Booster pump suitable for automatic operation and consisting of following : complete in all respect as required.	1	Set	37816.00
		a) Horizontal type, centrifugal End Suction pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal and flow of 450 lpm at 35 Mtr head conforming to IS 1520			
		b) Three Phase High Speed Centrifugal Pump. Pump with CI Impeller and Gland Packing with 5 KW / 7.5 HP, 2 pole, TEFC, 415 V, 3ph motor			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		Makes : Kirloskar			

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-10.7.19	Providing, laying, testing & Commissioning of following classes MS pipes conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., complete. Makes : Jindal / Hissar / Tata pipes			
		C' CLASS			
1586	a	250 mm dia 'C' Class	1	Mtr	3500.00
1587	b	200 mm dia 'C' Class	1	Mtr	2997.00
1588	c	150 mm dia 'C' Class	1	Mtr	2241.00
1589	d	100 mm dia 'C' Class	1	Mtr	1414.00
1590	e	80 mm dia 'C' Class	1	Mtr	933.00
1591	f	65 mm dia 'C' Class	1	Mtr	700.00
1592	g	50 mm dia 'C' Class	1	Mtr	561.00
1593	h	40 mm dia 'C' Class	1	Mtr	479.00
1594	i	32 mm dia 'C' Class	1	Mtr	374.00
1595		25 mm dia 'C' Class	1	Mtr	280.00
		B' CLASS			
1596	j	250 mm dia 'B' Class	1	Mtr	3029.00
1597	k	200 mm dia 'B' Class	1	Mtr	2613.00
1598	l	150 mm dia 'B' Class	1	Mtr	1802.00
1599	m	100 mm dia 'B' Class	1	Mtr	1191.00
1600	n	80 mm dia 'B' Class	1	Mtr	836.00
1601	o	65 mm dia 'B' Class	1	Mtr	630.00
1602	p	50 mm dia 'B' Class	1	Mtr	496.00
1603	q	40 mm dia 'B' Class	1	Mtr	370.00
1604	r	32 mm dia 'B' Class	1	Mtr	309.00
1605	s	25 mm dia 'B' Class	1	Mtr	252.00
1606	ELEC-10.7.20	Supplying and fixing single headed Internal / External hydrant valve with instantaneous Gun metal couplings of 63mm dia with Cast iron wheel ISI marked conforming to IS 5290 (Type -A) with blank Gun Metal cap and chain as required. Make: Mini Max / Safex / Newage / Winco / Padmini.	1	No	7223.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-10.7.21	Supplying, fixing, testing and commissioning of butterfly valve PN 1.6, with Bronze / Gun metal seat duly ISI marked complete with Nuts, Bolts, Washers, gaskets, conforming to IS 13095 of following sizes as required. Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervale.			
1607	a	250 mm . dia	1	No	11691.00
1608	b	200 mm . dia	1	No	4948.00
1609	c	150 mm dia	1	No	4060.00
1610	d	100 mm dia	1	No	3174.00
1611	e	80 mm dia	1	No	2894.00
	ELEC-10.7.22	Providing, installation, testing and commissioning of dual plate non - return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervale.			
1612	a	200 mm dia	1	No	4667.00
1613	b	150 mm dia	1	No	3734.00
1614	c	100 mm dia	1	No	3478.00
1615	d	80 mm dia	1	No	3268.00
1616	e	50 mm dia	1	No	1609.00
	ELEC-10.7.23	Manufacture, Supply and delivery of CI Wafer Lug type Butterfly Valves conforming to IS 13095/1991 (Reaffirmed 1998) excluding transportation, CED and taxes etc., complete. Operation done with worm actuator ISI marked Rate at Ex-Factory Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervale.			
1617	a	250 mm . dia	1	No	15874.00
1618	b	200 mm . dia	1	No	11060.00
1619	c	150 mm dia	1	No	7123.00
1620	d	100 mm dia	1	No	4749.00
1621	e	80 mm dia	1	No	3558.00
1622	f	50 mm dia	1	No	2863.00
	ELEC-10.7.24	Providing, installation, testing and commissioning of gun metal valves of following sizes as required. Make: Newage / Winco / Padmini / Safex.			
1623	a	50 mm dia	1	No	1634.00
1624	b	40 mm dia	1	No	1307.00
1625	c	32 mm dia	1	No	1168.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1626	ELEC-10.7.25	Supplying and fixing 63mm dia, 15 mtr long RRL hose pipe with 63mm dia Male and Female Gun metal / SS couplings duly binded with GI wire, rivets etc conforming to IS 636 (Type -A) as required. Make: Mini Max / Safex / Newage / Winco / Padmini.	1	No	5360.00
1627	ELEC-10.7.26	Supplying and fixing 63mm dia, 15 mtr long CP hose pipe with 63mm dia Male and Female Gun metal / SS couplings duly binded with GI wire, rivets etc conforming to IS 636 (Type -A) as required. Make: Mini Max / Safex / Newage / Winco / Padmini.	1	No	4800.00
1628	ELEC-10.7.27	Supplying and fixing First -Aid Hose Reel with MS construction spray painted in Post office Red, Conforming to Is 884 with upto date amendments, complete with the following as required.	1	No	6667.00
		a) 36.6 Mtr Long 20mm (Nominal internal) dia water hose Thermoplastic / Textile reinforced / Rubber braided / Polypropylene Type - 2 as per IS:12585 Make: Eversafe/ Reliance/ Newage/ SRI			
		b) 20mm (Nominal internal) dia gun metal globe valve and nozzle. Make: Newage / Winco / Padmini / Safex.			
		c) Drum and brackets for fixing the equipments on wall.			
		d) Connections from riser with 25mm dia stop valve (gun metal) & MS pipe.			
1629	ELEC-10.7.28	Supplying and fixing of hose cabinet of size 750mm X 600mm x 250mm made of No 16 gauge SWG CRCA sheet with 6mm thick glazed glass door including necessary locking arrangement suitable to accommodate 2 Nos 15 mtr long Hose pipe, 1 No branch pipe, mounted on wall OR raised brick platform and duly painted with Post office red externally and white internally with synthetic enamel paint complete in all respect, for external hydrant as required. Make: Mini Max / Safex / Newage / Winco / Padmini.	1	No	2850.00
1630	ELEC-10.7.29	Supply and fixing 63mm dia Gun metal branch pipe with 20mm (Nominal internal diameter) size Gun metal / SS nozzle conforming to IS 903, suitable for instantaneous connection to interconnect hose pipe coupling as required. Make: Mini Max / Safex / Newage / Winco / Padmini.	1	No	2200.00
1631	ELEC-10.7.30	Supply and fixing 4 way fire brigade connection of cast iron body with 4 Nos Gun metal Male instantaneous inlet couplings complete with cap and chain as required for 150mm dia MS pipe connection, conforming to IS 904 as required. Make: Mini Max / Safex / Newage / Winco / Padmini.	1	No	8000.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1632	ELEC-10.7.31	Supply and fixing 2 way fire brigade connection of cast iron body with 2 Nos Gun metal Male instantaneous inlet couplings complete with cap and chain as required for 100mm dia MS pipe connection, conforming to IS 904 as required. Make: Mini Max / Safex / Newage / Winco / Padmini.	1	No	6000.00
1633	ELEC-10.7.32	Supply and fixing air vessel made of 250 mm dia, 8 mm thick MS sheet, 1200mm in height with air release valve on top and flanged connection to riser, drain arrangement with 25mm dia Gun metal wheel valve, with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required.	1	No	14223.00
1634	ELEC-10.7.33	Supply, fixing, testing and commissioning of 15mm size quartzoid bulb type sprinklers of rating 68°C. pendent / side wall with required accessories. Makes: SAFEX / HD / TYCO / VIKING / NEWAGE / SHARP	1	No	436.00
1635	ELEC-10.7.34	Supply, fixing, testing and commissioning of UL approved flexible dropper of 1.5 Mtrs length with required accessories. Makes: SAFEX / HD / TYCO / VIKING / NEWAGE / SHARP	1	No	1067.00
1636	ELEC-10.7.35	Supply and fixing of Pressure Switch in the MS pipe Line including connection etc as required. Make : Danfoss / Indfoss / Approved makes	1	No	2223.00
1637	ELEC-10.7.36	Supply and fixing Flow Switches in 100mm dia MS pipe. Makes : System Sensor / Switzer / Approved makes	1	No	4778.00
1638	ELEC-10.7.37	Supply and fixing Flow Switches in 150 mm dia MS pipe. Makes : System Sensor / Switzer / Approved makes	1	No	6667.00
1639	ELEC-10.7.38	Supply, installation, testing and commissioning of Bourden type, stainless steel dial type pressure gauge with isolation valve and pipe having calibration of 0-16 kg/cm ² . Makes : HGURU / FIEBIG and Approved makes	1	No	600.00
1640	ELEC-10.7.39	Supply, installation, testing and commissioning of 25mm dia Gate valve Makes : Zoloto / Leader / Approved makes	1	No	1045.00
1641	ELEC-10.7.40	Supply, installation, testing and commissioning of 25mm dia Ball valve Makes : Zoloto / Leader / Approved makes	1	No	578.00
1642	ELEC-10.7.41	Supply, installation, testing and commissioning of 25 / 20mm dia Air Release Valve	1	No	1112.00
	ELEC-10.7.42	Supply, installation, testing and commissioning of Flexible Sprinkler hose of size -----			
1643	a	750mm to 800mm	1	No	889.00
1644	b	1000mm to 1200mm	1	No	1067.00
1645	c	1.50 Mtr	1	No	1245.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
1646	ELEC-10.7.43	Providing, fixing, testing, commissioning of installation control valve of Cast iron body and brass / Bronze working parts comprising of water, motor alarm, bronze seat clapper, and clapper arm, hydraulically driven mechanical gong bell to sound continuous alarm when the Wet riser / Sprinkler system activates, pressure gauges, emergency releases, strainer, pressure switch, cock valve complete with drain valve and bypass , test control box, ball valves, Ms pipe of required size, flanges, orifice plate, gasket etc of size 150mm dia as required. Makes : HD / TYCO / NEWAGE	1	No	8445.00
	ELEC-10.7.44	Supplying, installing, testing and commissioning approved make CI body Foot Valve with brass strainer with necessary flanges, nuts and bolts etc., complete on to the suction line.Rate as per the lowest quotation of Bharat Fire Safety Engineers. Makes:Normex & approved makes			
1647	a	200mm nominal dia	1	No	22036.00
1648	b	150mm nominal dia	1	No	11805.00
1649	c	100mm nominal dia	1	No	6623.00
1650	d	80mm nominal dia	1	No	4534.00
1651	ELEC-10.7.45	Supply and laying of 300mm dia NP2 RCC Hume pipe with Collars for Road crossings	AS per Civil SSR		
	ELEC-10.7.46	Supplying and wrapping the anticorrosive material for buried pipes with coating of Primer and wrapping with 4 mm thick polymer corrosion resistant tape as per IS : 10221 with 15 mm overlap as per specificatios.			
1652	a	150mm nominal dia	1	Mtr	45.00
1653	b	100mm nominal dia	1	Mtr	40.00
1654	c	80mm nominal dia	1	Mtr	30.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
		SECTION - 11		
	11.1	GENERATORS SPECIFICATION		
		Note: No Separate OH & CP allowed on these items		
	ELEC-11.1.1	Supply, Transportation, erection and commissioning (Excluding Foundation) of 3 Phase, 415, 50Hz, water cooled multi cylinder diesel generator set with alternator of - - - KVA/ - - - - KW out put continuous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with standard control panel having IP-52 protection, Acoustic Enclosure as per CPCB norms , sound absorbing material, t to restrict sound level up to 75 dB up to 1 mtr distance and as per CPCB norms etc as per following specifications mentioned below.		
		A. Alternator : Kirloskar / Stamford / Crompton Greaves / Leroy Somer make. The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self excited, self regulated, and shall confirm to IS: 13364 of 1992 with regulation of +5% from no load to full load. degree of protections shall be IP23.		
		B.Diesel Engine : Kirloskar / Cummins / Mahindra & Mahindra / Greaves Cotton Diesel Engine start, developing suitable ----- BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give - - - -KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs of continuous running at full load. The engine with 1st filling of oil and Diesel etc. 01. Exhaust pipe of required size and length with insulation as per the site condition with alluminium clading. 02. Diesel tank suitable for 8 to 12 Hours running capacity. 03. Residential Silencer. 04. SMF Batteries with leads as per the Manufacturer standards		
1655	a	15 KVA, 3 Phase, 415, 50 Hz, 19 BHP, water cooled multy cylinder diesel generator set with alternator of 15 KVA output continious rating at 0.8 p.f. Batteries.		343000.00
1656	b	30 KVA, 3 Phase, 415, 50 Hz, 40 to 42 BHP, water cooled multy cylinder diesel generator set with alternator of 30 KVA output continious rating at 0.8 p.f. Batteries.		441000.00
1657	c	40 KVA, 3 Phase, 415, 50 Hz, 56 BHP, water cooled multy cylinder diesel generator set with alternator of 40 KVA output continious rating at 0.8 p.f. Batteries.		548800.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
		DG SET WITH AMF PANEL		
	ELEC-11.1.2	Supply, Transportation, erection and commissioning (Excluding Foundation) of 3 Phase, 415, 50Hz, water cooled multi cylinder diesel generator set with alternator of - - - KVA/ - - - - - KW out put continuous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with AMF panel having IP-52 protection, Acoustic Enclosure as per CPCB norms , sound absorbing material, to restrict sound level up to 75 dB up to 1 mtr distance and as per CPCB norms etc as per following specifications mentioned below.		
		A. Alternator : Kirloskar / Stamford / Crompton Greaves / Leroy Somer make. The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self excited, self regulated, and shall confirm to IS: 13364 of 1992 with regulation of +5% from no load to full load. degree of protections shall be IP21.		
		B. Diesel Engine : Kirloskar / Cummins / Mahindra & Mahindra / Greaves Cotton Diesel Engine start, developing suitable ----- BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give - - - - -KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs of continuous running at full load. The engine with 1st filling of oil and Diesel etc. 01. Exhaust pipe of required size and length with insulation or clading. 02. Diesel tank suitable for 8 to 12 Hours running capacity. 03. Residential Silencer. 04. SMF Batteries with leads as per the Manufacturer standards		
		C. AMF Control Panel:- AMF control panel shall be fabricated with 16SWG CRCA sheet shall be totally enclosed with dust and Vermin proof, floor mounted / wall mounted type and shall be comprising the following. 01. Voltmeter with selector switch. 02. 4 Pole MCCB incomer of -----A rating of Schenieder / L&T make for EB and DG . 03. Ammeter with selector switch with CTs. 04. PF Meter and frequency Meter. 05. Indicator lamps (set Run, Load ON) with fuses. 06. KWH Meter of required rating. 07. Set of control fuses and current transformer. 08. Input Terminal board and output Terminal Board. 09. Battery charger with transformer rectifier unit. 10. Alternator supply air break contactor of L&T make. 11. Main supply air break contactor of L&T make. 12. Audio Visual annunciation . 13. Main supply voltage set of control relays and timers with one mode selector switch, set of push buttons. 14. Control cable up to 15 Mtrs 2.5Sqmm 6 Core		

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
1658	a	62.5 KVA, 3 Phase, 415, 50 Hz, 78 to 83 BHP, water cooled multy cylinder diesel generator set with alternator of 63 KVA output continious rating at 0.8 p.f. Batteries.		720000.00
1659	b	125 KVA, 3 Phase, 415, 50 Hz, 154 BHP, water cooled multy cylinder diesel generator set with alternator of 125 KVA output continious rating at 0.8 p.f. Batteries.		977000.00
1660	c	160 KVA, 3 Phase, 415, 50 Hz, not less than 200 BHP, water cooled multy cylinder diesel generator set with alternator of 160 KVA output continious rating at 0.8 p.f. Batteries.		1274000.00
1661	d	250 KVA, 3 Phase, 415, 50 Hz, not less than 310 BHP, water cooled multy cylinder diesel generator set with alternator of 250 KVA output continious rating at 0.8 p.f. Batteries.		1960000.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
	ELEC-11.1.3	Supply, Transportation, erection and commissioning (Excluding Foundation) of 3 Phase, 415, 50Hz, water cooled multi cylinder diesel generator set with alternator of - - - KVA/ - - - - KW out put contineous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with AMF panel having IP-52 protection, Acoustic Enclosure as per CPCB norms , sound absorbing material, t to restrict sound level up to 75 dB up to 1 mtr distance and as per CPCB norms etc as per following specifications mentioned below.		
		A. Alternator : Kirloskar / Stamford / Crompton Greaves / Leroy Somer make. The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self excited, self regulated, and shall confirm to IS: 13364 of 1992 or latest version with regulation of +5% from no load to full load. degree of protections shall be IP23.		
		B. Diesel Engine : Kirloskar / Cummins / Catterpillar Diesel Engine start, developing suitable ----- BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give - - - - -KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs of continuous running at full load. The engine with 1st filling of oil and Diesel etc. 01. Exhaust pipe of required size and length with insulation as per the site condition with alluminium clading. 02. Diesel tank suitable for 8 to 12 Hours running capacity. 03. Residential Silencer. 04. SMF Batteries with leads as per the Manufacturer standards		
		C. AMF Control Panel:- AMF control panel shall be fabricated with 16SWG CRCA sheet shall be totally enclosed with dust and Vermin proof, floor mounted / wall mounted type and shall be comprising the following. 01. Voltmeter with selector switch. 02. 4 Pole MCCB incomer of -----A rating of Schenieder / L&T make for EB and DG . 03. Ammeter with selector switch with CTs. 04. PF Meter and frequency Meter. 05. Indicator lamps (set Run, Load ON) with fuses. 06. KWH Meter of required rating. 07. Set of control fuses and current transformer. 08. Input Terminal board and output Terminal Board. 09. Battery charger with transformer rectifier unit. 10. Alternator supply air break contactor of L&T make. 11. Main supply air break contactor of L&T make. 12. Audio Visual annunciation . 13. Main supply voltage set of control relays and timers with one mode selector switch, set of push buttons. 14. Control cable up to 15 Mtrs 2.5Sqmm 6 Core		

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
1662	a	320 KVA, 3 Phase, 415, 50 Hz, not less than 380 BHP, water cooled multy cylinder diesel generator set with alternator of 320 KVA output continious rating at 0.8 p.f. Batteries.		2548000.00
1663	b	500 KVA, 3 Phase, 415, 50 Hz, not less than 580 BHP, water cooled multy cylinder diesel generator set with alternator of 500 KVA output continious rating at 0.8 p.f. Batteries.		3580000.00
		DG SET WITH STANDARD CONTROL PANEL		
	ELEC-11.1.4	Supply, Transportation, erection and commissioning (Excluding Foundation) of 3 Phase, 415, 50Hz, water cooled multi cylinder diesel generator set with alternator of - - - KVA/ - - - - KW out put contineous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with AMF panel having IP-52 protection, Acoustic Enclosure as per CPCB norms , sound absorbing material, to restrict sound level up to 75 dB up to 1 mtr distance and as per CPCB norms etc as per following specifications mentioned below.		
		A. Alternator : Kirloskar / Stamford / Crompton Greaves / Leroy Somer make. The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self excited, self regulated, and shall confirm to IS: 13364 of 1992 with regulation of +5% from no load to full load. degree of protections shall be IP21.		
		B.Diesel Engine : Kirloskar / Cummins / Mahindra & Mahindra / Greaves Cotton Diesel Engine start, developing suitable ----- BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give - - - -KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs of continuous running at full load. The engine with 1st filling of oil and Diesel etc.with standard control panel. 01. Exhaust pipe of required size and length with insulation as per the site condition with alluminium clading. 02. Diesel tank suitable for 8 to 12 Hours running capacity. 03. Residential Silencer. 04. SMF Batteries with leads as per the Manufacturer standards		
1664	a	62.5 KVA, 3 Phase, 415, 50 Hz, 78 to 83 BHP, water cooled multy cylinder diesel generator set with alternator of 63 KVA output continious rating at 0.8 p.f. Batteries.		635000.00
1665	b	125 KVA, 3 Phase, 415, 50 Hz, 154 BHP, water cooled multy cylinder diesel generator set with alternator of 125 KVA output continious rating at 0.8 p.f. Batteries.		830000.00
1666	c	160 KVA, 3 Phase, 415, 50 Hz, not less than 200 BHP, water cooled multy cylinder diesel generator set with alternator of 160 KVA output continious rating at 0.8 p.f. Batteries.		1080000.00
1667	d	250 KVA, 3 Phase, 415, 50 Hz, not less than 310 BHP, water cooled multy cylinder diesel generator set with alternator of 250 KVA output continious rating at 0.8 p.f. Batteries.		1460000.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
	ELEC-11.1.5	Supply, Transportation, erection and commissioning (Excluding Foundation) of 3 Phase, 415, 50Hz, water cooled multi cylinder diesel generator set with alternator of - - - KVA/ - - - - KW out put contineous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with AMF panel having IP-52 protection, Acoustic Enclosure as per CPCB norms , sound absorbing material, t to restrict sound level up to 75 dB up to 1 mtr distance and as per CPCB norms etc as per following specifications mentioned below.		
		A. Alternator : Kirloskar / Stamford / Crompton Greaves / Leroy Somer make. The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self excited, self regulated, and shall confirm to IS: 13364 of 1992 or latest version with regulation of +5% from no load to full load. degree of protections shall be IP23.		
		B. Diesel Engine : Kirloskar / Cummins / Catterpillar Diesel Engine start, developing suitable ----- BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give - - - -KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs of continuous running at full load. The engine with 1st filling of oil and Diesel etc with standard control panel. 01. Exhaust pipe of required size and length with insulation as per the site condition with alluminium clading. 02. Diesel tank suitable for 8 to 12 Hours running capacity. 03. Residential Silencer. 04. SMF Batteries with leads as per the Manufacturer standards		
1668	a	320 KVA, 3 Phase, 415, 50 Hz, not less than 380 BHP, water cooled multy cylinder diesel generator set with alternator of 320 KVA output continious rating at 0.8 p.f. Batteries.		2270000.00
1669	b	500 KVA, 3 Phase, 415, 50 Hz, not less than 580 BHP, water cooled multy cylinder diesel generator set with alternator of 500 KVA output continious rating at 0.8 p.f. Batteries.		3150000.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
		SECTION - 12			
	12.1	UPS SYSTEMS			
	ELEC-12.1.1	Supply and installation of ----- home UPS system pure sine wave out put, single phase input / Single phase output. Makes: Servomax / Top Power / Amar Raja / Samhitha / Microtech / Excide / Sucom.			
1670	a	800VA, 12VDC	1	No	8500.00
1671	b	1400VA, 24VDC	1	No	12000.00
1672	c	2000VA, 36VDC	1	No	17000.00
	ELEC-12.1.2	Supply and installation of -----true on line UPS system IGBT technology pure sine wave out put, double conversion with auto and manual static by pass switch single phase input / Single phase output. Makes: Power one / Numeric / Emerson.			
1673	a	2.0KVA	1	No	26000.00
1674	b	3.0KVA, 72VDC	1	No	35000.00
1675	c	5.0KVA, 180/192VDC	1	No	60700.00
1676	d	7.5KVA, 180/192VDC	1	No	84000.00
1677	e	10KVA, 180/192VDC	1	No	98000.00
	ELEC-12.1.3	Supply and installation of ----- on line UPS system IGBT based rectifier with input power factor correction 32 bit microprocessor based with isolation transformers double conversion, SNMP controls, LCD display, Pure sine wave out put, with auto static switch three phase input / Three phase output and modular structure for better thermal technology / cooling facility, with warranty up to three years. Makes: APC / Numeric / Emerson.			
1678	a	10KVA / 312V DC	1	No	131000.00
1679	b	15KVA / 312V DC	1	No	151000.00
	12.2	UPS BATTERY RACKS AND WIRE LEADS			
	ELEC-12.2.1	Supply and providing of UPS cum battery rack -----			
1680	a	Up to 4 batteries	1	No	1350.00
1681	b	5 to 10 batteries	1	No	2500.00
1682	c	11 to 20 batteries	1	No	4600.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit		SOR 2018-19
	ELEC-12.2.2	Supply and fixing of ----- SMF battery including wire leads. Makes : Quanta / Racket / Exide.			
1683	a	12V 26 AH	1	No	3400.00
1684	b	12V 42 AH	1	No	5700.00
1685	c	12V 65 AH	1	No	7000.00
1686	d	12V 100 AH	1	No	8800.00
1687	e	12V 120 AH	1	No	9500.00
	ELEC-12.2.3	Supply and fixing of -----MF battery including wire leads. Makes : Amar Raja (Power Zone) or Equivalent model of Exide / Panasonic / Gotech.			
1688	a	12V, 120 AH	1	No	8900.00
1689	b	12V, 150 AH	1	No	11500.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
OLD MATERIAL RATES				
S.No		Dismantled item :		Rate
1		PVC insulated alluminium cables and wires		11.00
2		PVC insulated copper cables and wires		50.00
3		Alluminium Maters		62.00
4		MS / Iron poles, angle etc		25.00
5		Copper/Brass materials		140.00
6		PVC pipe/PVC materials.		5.00
7		IC switches/DBs/Feeder pillers.		13.00
8		All types of Ammeter/Voltmeter / any meter		25.00
9		All types of ACBs/OCBs/VCBs LT		1300.00
10		All types of ceiling fans/cabin fans/Bracket fans and pedastal fans etc.		150.00
11		All type Tube light fittings/MV/SV/MH fittings.		21.00
12		All types of accessories such as bells/holders/ceiling roses/MCBs/Tube light starters.		11.00
13		All types of Air circulators/Pedastal Type Air Circulators		500.00
14		All types chokes/condensers/Motor starters		17.00
15		Lift ropes/belt types		20.00
16		All types of electric Motors		340.00
17		All types of water pumpsets		340.00
18		All types of compressors		500.00
19		All Types of AC units (window)		1800.00
20		All Types of AC units (Split ACs) ODU		2310.00
21		All Types of Indoor units of Split Acs		800.00
22		Copper piping of Acs		135.00
23		water cooler instant type		900.00
24		Water cooler storage type		40.00
25		Refrigerator upto 165 Ltr		1452.00
26		Refrigerator above 165 Ltr		2000.00
27		Exhaust fans 9"		150.00
28		Exhaust fans 12"		200.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
29		Exhaust fan 15"		330.00
30		Exhaust fan 18"		400.00
31		Exhaust Fan 24"		500.00
32		Air cooler of any size without fan		500.00
33		Air cooler of any size with fan		800.00
34		Transformer Oil		5.00
35		DG Set		1000.00
36		Transformer		400.00
37		EPABX system		1100.00
38		Telephone instrument		50.00
39		Water Purifier		80.00
40		Invertor/UPS		500.00
41		Voltage stabilizer		500.00
42		Amplifier small		400.00
43		Amplifier Big		450.00
44		Mikes		70.00
		Note: Rates of items which are not covered under above List should be calculated on the basis of materials / equipments considering its site condition and prevailing market rates and approval should be taken from the concerned Superintending Engineer(Electrical)		
1		Dismantling the existing ceiling fan / exhaust fan / cabin fan for clearing the site.		16.00
2		Dismantling the existing steel pole / RS joist pole / Girder with bracket clamps, insulators or stay from the cement concrete foundation clearing the site, refilling the pit etc.		350.00
3		Dismantling the existing tubelight / SV lamp / MV lamp and making the site clear.		16.00
4		Dismantling the existing geyser and making the site clear.		50.00
5		Dismantling Light / Fan / Separate socket wiring with casing / conduit / batten complete with all accessories and clearing the site duly removing the gutties and refilling the holes with cement mortar and painting with match colour of wall and ceiling.		20.00

SL. NO.	ITEM CODE	DESCRIPTION OF ITEM	Unit	SOR 2018-19
6		Dismantling Light / Fan / Separate socket wiring with casing / conduit / batten complete with all accessories and clearing the site.		10.00
7		Dismantling the existing armoured / unarmoured cable, single / multi core cable of sub main, main circuit of any system of wiring including coiling.		7.00
8		Dismantling the existing armoured / unarmoured under ground cable.		14.00
9		Dismantling the DBs and TPN switches		20.00
		Note: As per old IS No 5424-1969 superseded by IS No.15652:2006, hence the use of rubber matting should be discontinued in future.		

PART - IV

PUBLIC HEALTH

WORKS

PUBLIC HEALTH ITEMS			
Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
1	RATES OF LABOUR		
	1. Caulkar	Per Day	As per Labour rates of SoR
	2. Plumber 1st Class	Per Day	
	3. Plumber 2nd Class	Per Day	
	4. Sewer Cleaner	Per Day	
	5. Well Sinker	Per Day	
	6. Pipe line Fitter 1st Class	Per Day	
	7. Pipe line Fitter 2nd Class	Per Day	
	8. Pump Operator	Per Day	
	9. Bore Mechanic	Per Day	
	10. Light Vehicle Driver	Per Day	
	Note: The rate at relevant item in common SoR is applicable for occasional employment.		
2	RATES FOR EARTH WORK :		
a.	Earth work excavation in all types soils for pipe lines, for drainage and water supply, where the depth is more than 1.5 times the width.		To follow the relevant items of Irrigation work items as per Standard data
b.	Earth work excavation in all types soils for pipe lines, for drainage and water supply, where the depth is less than 1.5 times the width.		
c.	Earth work excavation in all types soils for open trenches, for valve pits, inspection chambers, etc.		
3. a.	Excavation of pipe line trenches for drainage and water supply in rock requiring blasting with initial lead and lift including cost of blasting materials where the depth is more than 1.5 times the width, in places where there is no habitation.		
b.	Excavation of pipe line trenches for drainage and water supply in rock requiring blasting with initial lead and lift including cost of blasting materials where the depth is less than 1.5 times the width, in places where there is no habitation.		
c.	Cutting rock for pipe line trenches by hammers, nuckles and chisels including stacking where the depth is 1.5 times or more than the width.		
d.	Cutting rock for pipe line trenches by hammers, nuckles and chisels including stacking where the depth is less than 1.5 times the width.		
e.	Cutting rock for works other than pipe lines trenches by hammers, nuckles and chisels including stacking.		
f.	For controlled blasting at restricted places		
	NOTE :- Rock should be measured in solids. In case it is not possible, stacks should be made in which case 40% for voids to be deducted from the stack measurements.		
4	Loading or unloading materials such as C.I. Pipes, PVC Pipes, AC Pressure Pipes, DI Pipes, SW Pipes, PVC Pipes, A.C/Specials upto 600mm dia upto 4 m in length including stacking.		
a.	C.I. Pipes/D.I. Pipes and fittings	Per Tonne	To follow as per Standard Data
b.	A.C. Pipes & Specials	Per Tonne	
c.	Stoneware pipes & Specials	Per Tonne	
d.	P.V.C. Pipes and fittings	Per Tonne	
5	DELETED		
6	Loading or unloading materials such as C.I. Pipes, DI pipes, PVC pipes, AC pipes up to 600 mm dia, above 4 m in length including stacking.		
a.	C.I. Pipes/D.I. Pipes and fittings	Per Tonne	To follow as per Standard Data
b.	A.C. Pipes & Specials	Per Tonne	
c.	P.V.C. Pipes and fittings	Per Tonne	
7	DELETED		
	Note:- For loading and unloading Railwagons, the rates may be adopted based on the competitive quotations or the hammalae charges if prevailing.		
8. a.	Lowering C.I. / D.I. Pipes (all classes) and specials (fittings) with s/s ends carefully into trenches and laying them true to alignment and gradient including all sundries but excluding cost and conveyance of pipes from source of supply (Ref to specifications. BIS No.3114/1994)		
	Diameter of Pipe/Fittings in mm :		
	80mm to 1000mm dia	Per Metre	
8. b.	Lowering C.I. / D.I. Pipes (all classes) and specials (fittings) with flanged ends carefully into trench and laying them true to alignment and gradient including all sundries but excluding cost and conveyance of pipes from source of supply. (Reference to specifications. BIS No.3114/1994).		
	Diameter of Pipe/Fittings in mm :		

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
	80mm to 750mm dia	To follow as per Standard data	
	800mm dia	Per Metre	585
	900mm dia	Per Metre	759
	1000mm dia	Per Metre	987
	1100mm dia	Per Metre	1216
	1200mm dia	Per Metre	1446
9. a.	Jointing CI /DI pipes & fittings with S/S ends including cost of pig lead, Spun yarn and sundries such as cost of fuel for melting lead, filling with water with lead up to 500m and testing to required pressure complete. (Reference to specifications. BIS No.3114/94/12288:1997).		
	Diameter of Pipe/Fittings in mm :		
	80mm to 800mm	To follow as per Standard data	
	900mm dia	Each Joint	13178
	1000mm dia	Each Joint	14758
	1100mm dia	Each Joint	16315
	1200mm dia	Each Joint	17851
9. b.	Jointing C.I/ D.I. pipes and fittings with rubber gasket (push-on-joint), excluding the cost of the gasket but including all sundries filling with water, with a water lead up to 500m and testing to required pressure, etc. complete (Reference to specifications IS 3114/1994/12888/1997)		
	Diameter of Pipe/Fittings in mm :		
	80mm to 1000mm dia	Each Joint	
10	Jointing CI/DI pipes, fittings and valves with flanged ends including cost of jointing materials such as bolts, rubber insertion, white lead including filling with water, with lead up to 500 meters and testing to required pressure complete. (Reference to specifications. BIS No.3114/1994.)		
	Diameter of pipe/Fittings/ valve in mm :		
	80mm to 750mm dia	Each Joint	To follow as per Standard data
	800mm dia	Each Joint	5645
	900mm dia	Each Joint	6698
	1000mm dia	Each Joint	7754
	1100mm dia	Each Joint	8834
	1200mm dia	Each Joint	9945
11a	Lowering the RCC plain ended pipes carefully into the trench laying them true to alignment and gradient, jointing RCC pipes with cement joints including curing, the cost of jointing materials i.e., Cement Mortar (1:1.5), hemp yarn etc., and testing including filling with water with a water lead upto 500 metres as per BIS No.783/85.		
	per every 25 mm dia.	Per Metre	23.00
11b	Lowering the RCC S/S pipes carefully into the ready made trenches laying them true to alignment and gradient, jointing with rubber rings and testing including filling with water lead upto 500 meters excluding cost of rubber rings as per BIS No. 783/1985.		
	per every 25 mm dia.		
	80mm to 600mm	Per Metre	
	700mm dia	Per Metre	372
	800mm dia	Per Metre	446
	900mm dia	Per Metre	534
	1000mm dia	Per Metre	639
12	Lowering and Jointing G.I. pipes and specials / fittings including excavation of trench of 0.5m width and 0.50 m depth in all soils except rock requiring blasting and refilling trenches after laying and jointing pipes and also including cost of jointing materials but excluding the cost of pipes. Reference to specifications. BIS No.783/85		
a	G.I. Pipes :Dia in mm		
	15mm to 150mm	Per Metre	

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
12b	Lowering, Laying, jointing of PVC/HDPE/MDPE pipes as per BIS No.7634 part-III/75 for PVC and BIS No.7634 part-II/75 for HDPE pipes including earth work excavation and testing to hydraulic test pressure including cost of water with a water lead of 500m etc., complete.		
	Dia (OD) in mm		
	20mm dia	Per Metre	36
	25mm dia	Per Metre	37
	32mm dia	Per Metre	42
	40mm dia	Per Metre	42
	50mm dia	Per Metre	42
	Note:(i) The above rates are applicable for the works in District only.		
	(ii) If the depth of excavation is more than 0.6 m separate rates to be worked out.The above rates are excluding road cutting if any.		
13	Lowering and laying in ready made trench true to alignment and gradient, jointing, and testing of <u>Stone ware pipes</u> including cost of jointing material such as cement mortar (1:1) proportion and hemp yarn but excluding cost and conveyance of pipe. (Reference to specifications BIS No. 6530/72)		
	Dia of Pipes in mm .		
	100mm to 450mm	Per Metre	
14	Lowering, laying, jointing and testing to hydraulic test pressure including cost of water with minimum water lead of 500m for <u>UPVC pressure pipes</u> in ready made trenches true to alignment and gradient including all sundries but excluding cost & conveyance of pipes from source of supply and jointing materials as per BIS No. 7634 - Part III - 1975.		
	Dia of Pipes in mm .		
	63mm to 315mm	Per Metre	
15	Laying and jointing of HDPE pipes in ready made trench by butt fusion welding as per IS:7634 – part-II/1975 as amended from time to time to the alignment and gradient and testing the pipeline to the required pressure.		
	Outer Dia of pipes in MM		
	63mm dia OD	Per Metre	39
	75mm dia OD	Per Metre	43
	90mm dia OD	Per Metre	48
	110mm dia OD	Per Metre	59
	125mm dia OD	Per Metre	70
	140mm dia OD	Per Metre	74
	160mm dia OD	Per Metre	80
	180mm dia OD	Per Metre	88
	200mm dia OD	Per Metre	96
	225mm dia OD	Per Metre	106
	250mm dia OD	Per Metre	112
	280mm dia OD	Per Metre	124
	315mm dia OD	Per Metre	192
	355mm dia OD	Per Metre	214
	400mm dia OD	Per Metre	238
	450mm dia OD	Per Metre	265
16	Lowering, keeping in position and fixing C.I. sluice valves (with cap / with hand wheel & Reflex valves) excluding cost of bolts, nuts, rubber insertion, sluice valve and tail pieces		To follow as per Standard data
	Dia of Valve in mm.		
	80mm to 600mm	Each	
17	Labour charges for fixing Air valves including boring the mains and threading the bore <u>fixing nipple etc., complete.</u>		
	Dia of Air valve in mm.		
	25mm dia	Each	
	40mm dia	Each	
	50mm dia	Each	200
	80mm dia	Each	214
18	Labour charges for fixing Kinetic Air Valves with isolating Sluice valves, Double Air valves/ Air Cushion valve excluding cost of jointing materials such as bolts, nuts and rubber insertions etc., complete.		
	Dia of Air valve in mm.		
	80mm dia (Double Air valves)	Each	267
	100mm dia (Double Air valves)	Each	311
	125mm dia (Double Air valves)	Each	462
	150mm dia (Double Air valves)	Each	506
	200mm dia (Double Air valves)	Each	550
19	Uprooting C.I./ DI Pipes by melting the lead, loosening the joints, scraping the pipes, hoisting and keeping within a lead of 10 m but excluding earth work excavation and refilling.		

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
	80mm to 600mm	Per Metre	To follow as per Standard data
20	Uprooting of RCC pipes including breaking the collars, loosening the joint, seperating the pipes, hoisting and keeping within a lead of 10 m but excluding earthwork excavation and refilling.	Per Metre	
	100mm to 300mm		
21	Removing old G.I.pipes and specials / fittings and cleaning, scraping the pipes, hoisting and keeping with in 50m lead but excluding earth work excavation of trenches and refilling.		
	Dia of Pipes in mm		
	15mm to 50mm	Per Metre	To follow as per Standard data
22	<u>Cutting C.I./ DI Pipes without water in mains.</u>		
	Dia of Pipes in mm		
	80mm to 600mm	Each cut	To follow as per Standard data
	700mm dia	Each cut	576
	750mm dia	Each cut	621
	800mm dia	Each cut	660
	900mm dia	Each cut	741
	1000mm dia	Each cut	824
	1100mm dia	Each cut	909
	1200mm dia	Each cut	991
23	<u>Cutting A.C. Pipes without water in mains.</u>		
	Dia of Pipes in mm		
	80mm dia	Each cut	35
	100mm dia	Each cut	35
	125mm dia	Each cut	35
	150mm dia	Each cut	35
	200mm dia	Each cut	37
	250mm dia	Each cut	59
	300mm dia	Each cut	59
	350mm dia	Each cut	74
	400mm dia	Each cut	81
	450mm dia	Each cut	102
	500mm dia	Each cut	113
	600mm dia	Each cut	124
24	Drilling and tapping CI/ DI / GI Main and fixing brass screw down ferrule and plug.		
	10 mm to 20mm	Each Tapping	To follow as per Standard data
	25 mm to 40mm	Each Tapping	
25	Cutting road surface including stacking of excavated materials for pipe line trench work.		
	a) Cutting B.T.Road surface	1 Cum	1042
	b) Cutting C.C.Road Surface	1 Cum	2169
	c) Cutting Water Bound Macadam/Wet Mix Macadam Road.	1 Cum	267
26	Bailing out water		
	a) Bailing out water from the pipe line trenches with oil engine driven pumpsets, including hire charges, fuel charges and wages for Driver and Helper.	HP-Hour	To follow as per I&CAD SoR
	b) Bailing out water from the pipe line trenches with Electric Driven pumpset including hire charges, current charges and wages for Driver and Helper.	HP-Hour	
27	Shoring and strutting of trenches for water and sewer main.		
	a) Single Staging from (0 to 2.5 Mts.)	1 Sqm of Shoring area	To follow as per Standard data
	b) Double staging from (2.5 m to 4.5 Mts.)	1 Sqm of Shoring area	
28	Barricading, hoarding, lighting and watching etc., for water supply and sewerage works for trenches.	1 RMT	To follow as per Standard data
29	Excavation of trenches for infiltration galleries, syphon lines and connecting mains in all soils under water including all leads, lifts, shoring, strutting, bailing out water and removal of shoring and strutting materials, after completion of pipe line work.		
	a) 0 to 1 m deep under water.	10 Cum	12868
	b) 1 to 2 m deep under water.	10 Cum	18431
	c) 2 to 5 m deep under water.	10 Cum	27664

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
	d) Beyond 5 m deep under water for every additional 1 m depth over item 'c'	10 Cum	5286
	NOTE:- The above rates do not include rock requiring blasting or chiselling.		
30	Laying and jointing perforated RCC pipes inclusive of bailing out water and jointing with cement fillets and all other incidental charges for infiltration gallery inclusive of bailing out water by pumping to keep the trench reasonably dry to facilitate the work excluding cost of perforated pipes and collars. per every 25 mm dia/mtr.	Per Metre	46
31	Centring and scaffolding charges for RCC members including all materials and labour charges for forming and dismantling.		
a)	for R C C Elevated Service Reservoir of staging up to 15 metre below L W L.		
	1) Slabs for thickness (150 mm to 300 mm)	One Sqm of Centering area	3953
	2) Slabs for thickness above 300 mm, extra for every 50 mm thickness.		473
	3) Side walls curved surfaces including both sides of wall per Sqm of member area.		2986
	4) Side wall straight surfaces including both sides of wall per Sqm of member area.		2659
	5) Top dome		1628
	6) Bottom Dome.		3238
	7) Roof Slab.		893
	8) Columns, braces and beams		1332
	9) Circular braces, ring beams & circular column.		1463
	10) Conical Slab 150 mm to 300 mm thickness		4141
	11) Conical Slab for above 300 mm thickness, extra for every 50mm thickness		525
	Note:- For RCC ELSR of staging above 15 m, the % increase in these rates shall be as follows. above 15- up to 18 m --- 9% above 18-up to 21m --- 15% above 21- up to 24 m --- 21% above 24- up to 27m ---27% above 27m --- 30%		
b)	For Ground level works/ Below the ground level works :-		
	1) Slabs	1 Sqm	To follow as per R&B SoR
	2) Beams & Lintels	1 Cum	
	3) Sun shades	1 Sqm	
	4) RCC vertical walls of plane surface including both sides of wall per Sqm of member area	1 Sqm of centering area	1063
	5) RCC vertical walls of circular faces including both sides of wall per Sqm of member area.		1352
	6) Dome		1488
	NOTE: The above centering charges are applicable for water retaining structures only.		
32	Lift or delift of materials :		
	a) Lifting of cement concrete for RCC Elevated/Ground reservoir. For every 3m height or part thereof over the initial lift of 3 m. Rate /1 Cum.	1 Cum	162
	b) Delifting the materials such as stones, concrete etc., for concrete below ground level for construction of ground level reservoirs, inspection wells, test wells and sump wells etc., for every 1 m depth or part thereof beyond the initial depth of 4 meters from ground level. Rate / 1 cum.	1 Cum	49
33	Labour charges for fixing ventilating shafts complete with all accessories.	Each	To follow as per Standard data
34	Labour charges for fixing water closets including fixing of foot rests (for all sizes).	Each	Relevant Building SoR items
35	Labour charges for fixing of flushing cistern including fixing of flush pipes, lead pipe, jointing etc., complete	Each	
36	Labour charges for fixing wash hand basin including fixing of inlet and waste pipe connections etc., complete	Each	
37	Fixing urinal with inlet and waste pipe connections etc., complete.	Each	
38	Refilling the trench for pipe line with excavated earth including watering and tamping etc., complete	10 Cum	
39(a)	Extra allowance for isolated scattered works viz., valve pits, public fountains, meter pits and manholes, etc., complete for maintenance works including cost of material.	Each	50% extra over the basic cost of Work.
(b)	Repairs to the existing mains, interconnections, replacement of valves/specials etc., including the cutting, jointing, bailing out of water, drying, earth work excavation etc., complete, but excluding cost of pipes, valves and specials.		150% extra over the basic cost of work
40	Removal of wet silt and sludge from sullage drains, with aid of baskets and vessels, etc with initial lift of 3 m and lead of 50 m.	1 Cum	317

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
41	Well sinking in sandy and other loose soils under water either by manual labour, divers, or dredgers, weighting the top of staining to assist sinking etc., including dewatering and other incidental charges such as hire charges for mechanical equipment etc.,		
	Upto 2 m below GL/m	Per metre	To adopt as per Standard data
	From 2 to 4 m below GL/m	Per metre	
	From 4 to 6 m below GL/m	Per metre	
	From 6 to 8 m below GL/m	Per metre	
	From 8 to 10 m below GL/m	Per metre	
	Note:-Below 10 m for every metre depth or part thereof add Rs.250/- per m. For higher dia, observed data is to be prepared and got approved.		
42	Sinking in Hard strata other than rock but in soils like limestone, gravel, clay under water including, pumping dewatering, hire charges for mechanical equipment etc., complete.		Observed Data
43	Rates for OHSRs/ELSRs including fixtures with a staging of 15 m, with seismic analysis Zone -II and excluding Seigniorage chrges.		
a	500 Kilo litres	Per litre	17.50
b	1000 Kilo litres	Per litre	14.23
c	1500 Kilo litres	Per litre	13.14
d	2000 Kilo litres	Per litre	12.42
e	2500 Kilo litres	Per litre	11.77
	1) The above rates are arrived with base rate of Cement Rs.4750/- per MT & Steel for Rs.47000/- per MT (Fe-500/500D/550D from Primary Producers) for the month of May-2018		
	2) All concrete components shall be designed with minimum of M30 Design Mix.		
	3) For intermediate capacities proportional rates shall be adopted.		
	4) The foundations shall be designed for Annular Raft Footings. The above rates are applicable for Elevated Level Services Reservoirs / OHSRs for SBC of 15 T/Sqm.		
	a) For every decrease of 2.50 T/Sqm of SBC, the rate shall be increased by 2.5% on basic rate .		
	b) For every increase of 2.5 T/Sqm of SBC, the rate shall be decreased by 1.0% on basic rate up to 20 T/Sqm.		
	c) For SBC below 10T/sqm , solid raft shall be provided and for solid raft the rate shall be increased by 10% on basic rates		
	5) For staging less than 15 m, the rate shall be decreased by Rs.0.05 paise on basic rate per litre per every metre decrease in staging.		
	6) For staging above 15 m, the rate shall be increased by Rs.0.10 paise on basic rate per litre per every metre additional staging.		
	7) The above rates shall be increased / decreased due to increase/decrease in the cost of cement by Basic rate x (Rc-4750)/4750 x 0.069 Rc = Rate of Cement (Rs per MT) at the time of preparation of estimate.		
	8) The above rates shall be increased / decreased due to increase/decrease in the cost of Steel by Basic rate x (Rs-47000)/47000 x 0.135 Rs = Rate of Steel (Rs.per MT) (Fe-500/500D/550D from Primary Producers) at the time of preparation of estimate.		
	The above formula applicable only for preparation of estimate. The price adjustment shall be adopted on the actual consumption of Steel and Cement.		
	9 a) Rate inclusive of three coats of epoxy paint Food Grade of best quality to inner surface of the Reservoir including roof.		
	b) Rate inclusive of 2 coats of weather proof emulsion painting for external surfaces over one coat of primer of approved make, lettering, all required fixtures, Pipes,Pipe specials, valves of DI material, Valve chambers etc., for pipe connections including cost of pipes,specials and valves as per departmental directions and drawings.		
	10) The above rates adopted for a wind pressure upto "250 kg/sq m". For every 50 kg/sqm decrease in wind pressure, the rate shall be decreased by 2.5%		
	11. a)The Basic rate is adopted by considering the design for Seismic forces for Zone-II only of seismic zones.		
	b) The basic rates shall be increased by 15 % for Zone-III of seismic zones.		
	12. The ELSR/OHSR shall be designed with minimum of two rows of columns for capacities from 500 KL & upto 1000KL.		
	13. The ELSR/OHSR shall be designed with minimum of three rows of columns for capacities above 1000KL.		
	14) The basic rate is inclusive of following fixtures		

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
	i) Pipe connections & Specials with D.I materials		
	a) All pipe connections for Inlet, Out let (2 Nos), Over Flow, Scour pipes shall be provided with D/F DI material. b) The Valves for above pipe connections also shall be of DI material of PN 16 c) All specials such as Bends, Tees, Puddle pipes, Reducers, Duckfoot Bends, Bell mouths etc. shall be of DI material.		
	II) The sizes of the verticals for ELSR/OHSR shall be:		
	a) For 500 KL to 750 KI ELSRs Inlet Pipe - 300mm dia. Out let Pipe - 350mm dia and DI Valves 02 Nos Over Flow pipe - 350m dia Scour Pipe - 200mm dia		
	b) For 800 KL to 1500 KI ELSRs Inlet Pipe - 400mm dia. Out let Pipe - 450mm dia and DI Valves 02 Nos Over Flow pipe - 450m dia Scour Pipe - 200mm dia		
	c) For above 1500 KL to 2500 KI ELSRs Inlet Pipe - 400mm dia. Out let Pipe - 500mm dia and DI Valves 02 Nos Over Flow pipe - 500m dia Scour Pipe - 200mm dia		
	iii) Manhole Frames & Covers		
	a) All man hole Frames & Covers shall be made of CI/DI materials with min. size of 0.60mX0.60m - For Roof & Valve Chambers.		
	iv) CI/D.I Double Swan neck ventilators (min. of 150mm dia) shall be provided in top dome and slab with mosquito/fly proof nets - 8Nos minimum.		
	v) RCC phenial ventilator with fly/bird protection with Copper or Stainless Steel mesh - 1 No.		
	vi) RCC precast ladders of 0.60 m width - 2 Nos.		
	vii) RCC dog legged stair case of 1.00 m flight width and 1.20 m landing width hand railing of 1.2 m height by using Stainless Steel pipe of grade 304, with top railing of 40mm dia pipe, middle railing of 25mm dia and verticals with 40mm dia at an interval not more than 1.00m c/c. - 1 No		
	viii) The staircase shall be enclosed with brick masonry walls on three side and collapsible MS gate on front side up to 1 st brace level, to prevent unauthorized entry.		
	ix) Construction of R.C.C valve chambers as per Standard Drawings with RCC cover slab fixed with CI/DI manhole Frame & Cover with lock and Key arrangement. The Mix shall not be less than VRCC M 20 grade with 150mm thick side walls, 150mm thick top slab, 150mm thick base slab over base course of 100mm thick (1:4:8) prop.		
	x) Balcony of 1.00 m width at floor slab level / middle ring beam level by using Stainless Steel pipe of grade 304 hand railing up to 1.20 m height, with top railing of 40mm dia pipe, middle railing of 25mm dia and verticals with 40mm dia at an interval not more than 1.00m c/c.		
	xi) Water Level Indicator of reputed make - Digital type (1 No) and Conventional type (1 No)		
	xii) Lightning Arrestor with all its accessories complete including earthing, with relevant IS Codes - 1 No.		
44	Rates for OHSRs/ELSRs including fixtures with a staging of 12 m for Zone-II Seismic and excluding Seigniorage charges.		
a	Upto 10,000 Litres capacity	Per litre	81.17
b	20,000 Litres capacity	Per litre	48.27
c	40,000 Litres capacity	Per litre	38.86
d	60,000 Litres capacity	Per litre	28.51
e	1,00,000 Litres capacity	Per litre	25.20
f	1,20,000 Litres capacity	Per litre	22.02
g	1,50,000 Litres capacity	Per litre	20.02
h	2,00,000 Litres capacity	Per litre	18.88
i	2,50,000 Litres capacity	Per litre	18.30
j	3,00,000 Litres capacity	Per litre	17.72
k	4,00,000 Litres capacity	Per litre	15.49
l	4,50,000 Litres capacity	Per litre	13.80
	NOTE: -1) For intermediate ranges proportional rates may be adopted. All VRCC minimum of M30 grade design mix.		

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
	2)The above rates are applicable for Elevated Level Services Reservoirs / OHSRs with RAFT FOUNDATION and a rate of Rs.4750/- per tonne for cement and Rs.47000/- per tonne for steel.		
	3) For every metre of staging less than 12 m, the rate shall be reduced by Rs.0.05 paise per litre per every metre of difference in staging.		
	4) For every metre of staging above 12 m, the rate shall be increase by Rs.0.10 paise per litre per every metre of additional in staging.		
	5)The above rates shall be increased / decreased due to increase / decrease in the cost of cement by Basic Rate x (Rc-4750)/4750 x 0.069 Rc = Rate of cement (Rs per MT) at the time of preparation of estimate		
	6)The above rates shall be increased / decreased due to increase / decrease in the cost of steel by Basic Rate x (Rs-47000)/47000 x 0.135 Rs = Rate of steel (Rs per MT) (Fe-500/500D/550D from Primary Producers)at the time of preparation of estimate.		
	The above formula applicable only for preparation of estimate. The price adjustment shall be adopted on the actual consumption of Steel and Cement.		
	7) Rate inclusive of three coates of food grade epoxy paint to inner surface of the reservoir including roof dome.		
	8) The above rates be adopted for estimate purposes for construction of ELSR for a finished work including 2 coats of wheather proof emulsion painting for external surfaces over one coat of primer of approved make, lettering, all required fixtures, pipes, bends, valves etc., for pipe connections but excluding cost of pipes,bends and valves as per departmental designs and drawings.		
	9) The above rates are applicable for wind pressures upto 250 kg / sq m. For decrease in wind presure the rate has to be decreased by 2.5% per every 50 kg/sqm. If the ELSR / OHSR is to be designed for seismic forces also, cost shall be arrived by working out detailed quantities based on the designs.		
	10) For Tribal/Agency area, the above rates shall be increased by 5%.		
	11)If the ELSR is to be designed for seismic forces a) The above rates are applied upto Zone-II earth quake. b) for Zone-III earth quake the above rates are to be increased by 15%.		
	12) Fixtures include :		
	a) RCC or Aluminium ladder inside 0.60 m wide.		
	b) spiral staircase on the outside shall be provided upto 200KL ELSR. Above 200KL ELSR Capacity dog legged staircase shall be provided with staircase flight width of 1.0mts and landing width of 1.20m. S.S railing to stair case upto 1.2m height.		
	c) Lightening arrestor, including conductor and earthing etc with relevant IS codes.		
	d) RCC ventilators with copper or stainless steel fly proof mesh.		
	e) D.I Manholes frame and cover 0.60x0.60 m as per IS specifications (light duty) - 2 Nos.		
	f) Water level indicator of good quality with ebonite/ copper float approved pattern - 1 No.		
	g) The ladder shall be with Aluminium and Verticals with HDPE of 10kg/Sqcm shall be provided for single column OHSRs only.		
	h) The increase in staging shall be at 1.0mt interval.		
	i)The railing provided to the gallery and stair case shall be with stainless steel of grade 304 for a height of 1.20m.		
	j)The dog legged staircase shall be enclosed with brick/CRS wall on three sides and front side with PVC door of standard make up to 1st brace level from ground level to prevent unauthorized entry.		
	k) D.I swan neck ventilators shall be provided in top dome and slab-4Nos minimum.		
	l) The above rates are exclusive of all inlet, outlet connections, valves and bolts & nuts but including labour charges for hoisting, jointing with rubber insertion, nuts and bolts. All valves near inlet, outlet and for scour of ELSRs shall be D.I valves.		
45	Construction of Rapid Gravity Filtration Plant including all civil, mechanical and electrical works using sand as filter media, duly following relavant IS codes in the design of plant components including trial running for 90 days etc., complete and excluding Seigniorage chrges.		
	1) 2.0 Mld	Per litre	4.81
	2) 5.0 Mld	Per litre	3.85
	3) 10.0 Mld	Per litre	3.30
	4) 20.0 Mld	Per litre	2.82
	5) 30.00 mld and above.	Per litre	2.49
	NOTE :-		
	a) For intermediate capacities proportional rates may be adopted		

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
	b) The above rates are applicable with cement @ rate of Rs.4750/-MT and steel of Rs. 47000/MT (Fe-500/500D/550D from Primary Producers)		
	c)The above rates shall be increased / decreased due to increase / decrease in the cost of cement by Basic Rate x (Rc-4750)/4750 x 0.069 Rc = Rate of cement (Rs per MT) at the time of preparation of estimate only		
	d)The above rates shall be increased / decreased due to increase / decrease in the cost of steel by Basic Rate x (Rs-47000)/47000 x 0.135 Rs = Rate of steel (Rs per MT) (Fe-500/500D/550D from Primary Producers) at the time of preparation of estimate.		
	The above formula applicable only for preparation of estimate. The price adjustment shall be adopted on the actual consumption of Steel and Cement.		
	The components of the filtration plant will include the following		
	A) Civil Works (All works of VRCC minimum of M30 design mix)		
	1) Stilling Chamber including Aeration cascade		
	2) Pre-Settling tank shall be provided for 30 MLD and above capacities of WTP for a minimum of 1 hour capacity.		
	3)Raw water channel with Stainless Steel Weir of SS304L Grade material and also with digital flow meters.		
	4) Flash Mixer chamber with Flash mixing arrangements including SS shaft & SS Blades with gear wheel arrangements etc, Using 304L Grade Steel.		
	5) Clarifluculator / Flocculation tanks with the components of central driven circular clarifier with scrapper & bridge arrangements made with Stainless Steel Grade 304 L tubes /angulars for durability & chemical resistant with wheel arrangements etc,.		
	6) Filter house, Chemical house, Alum store, Laboratory room , Chlorination plant room, toilet etc. (All structures shall be provided with RCC roof only).Chemical house & Chlorinator rooms are to be isolated.		
	7) Wash water tank of suitable capacity shall be constructed independently		
	8) All the Doors and Windows shall be of UPVC.The entrance door shall be minimum size of 2.40 X 2.40 mts.		
	9) All pipes and valves in Plant shall be of D.I. materials. All the Connecting pipes of the plant components such as from Flash mixer to Clarifloculator/ Clarifier/Flocculation tank, to Filter beds, sludge disposal pipes shall be of D.I. material. The size of sludge disposal pipe shall be minimum of 450 mm dia with D.I D/F pipe.		
	10) The Pipe gallery way for Clear water/ Back wash water/ pipe connections shall be sufficiently spaced for easy operation,maintenance and inspection .		
	11) The bottom level of the wash water control chamber must be above G.L so as to dispose the wash water and sludge from Clarifloculator by gravity to disposal point.		
	Additional specificaions		
	12) Railing for all the components (Clarifloculator, Filter House, Staircase etc.) shall be provided with Stainless Steel of grade 304 for a height of 1.00m, with 40mm dia pipe for top horizontals,25mm dia for middle row and 40mm dia verticals spaced at interval of not more than 1.00m c/c.		
	13) Inspection / Path ways in filter beds : Middle pathway: Minimum of 1.50m,Side pathway: Minimum of 1.20m.		
	14) Flooring in the buildings (Filter house, Chemical House, Chlorinator Room, Laboratory) shall be provided with Non-skid tiles of approved make & quality , as per standard specifications.Dadoing shall be provided upto 1.80mts from floor level in chemical room and Chlorination room.		
	15) The basement of the Filtration plant building shall be minimum of 0.75m above the existing nearby Road top level.		
	16) Minimum head room of 2.00m shall be provided , at the alum mixing chambers in alum store for inspection & maintenance.		
	17) The minimum width of entrance hall for the Filter House shall be 4.50m , and Laboratory of min size .of 3.30 X 4.50m .		
	18) High efficient Air Blowers of standardised make shall be installed to the design requirement with low noise pollution , environmental pollution as per PCB guide lines & Testing of blowers as per I.S norms at site.		
	19) UPVC pipes shall be provided for water drain.Filter pipe manifolds shall be assembled with HDPE pipes.		
	20) Alum storage capacity shall be designed for minimum period of 90 days. Consumables shall be provided for 2115 Running Hours of WTP.		

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
	<p>21A) Chlorinator : Vaccum type chlorinator shall be provided with following specifications:</p> <p>a) Vaccum operated solution feed type Vaccum Regulator, Rotometer, Rate setting Valve, built-in NRV, Gas Overflow out let by manifolding to mount the system with the unit.</p> <p>b) The unit shall consists of Ejector with necessary accessories such as Check Valve, Drain Valve and Vacum relief Valves - for control of chlorinator dosage.</p> <p>c) The Accessories and manifolds shall be chlorine resistant and made of carbon steel seamless pipes, copper tube with brass fittings of suitable size & dimensions, with dianhram sealed chlorine pressure gauge arrangements</p>		
	<p>d) Water Booster Pump of pumping capacity ranging from 2 cum/hr to 12 cum/hr, with Head ranging from 16 to 35 MWC</p> <p>e) The water & solution carrying pipes shall be made of UPVC material of suitable size incl.all specials such as Tee's , Bends, couplings & NRVs and also Pressure Gauges of suitable range.</p> <p>f) Chlorine Gas detector with alarm indicator.</p> <p>The installation includes all necessary accesories, civil and mechanical works, manifold header installations, injector fixing, connection with UPVC pipes, solution pipings, fixing of motors as per standard specifications and commissioning of Chlorination plant to the required demand, with a defect liability period of 1 year.</p> <p>The chlorinator may be of any reputed make or any make of Metito/Toshocow-Jesco/Industrial devices.</p>		
	g) Life breathing operators.		
	h) Chlorine escape BA Set.		
	i) 2 to 10 MLD Plants - 1Kg/hr Chlorinator Rate .073 paisa on basic rate of WTP-for Post Chlorination		
	ii) 10 MLD to 20 MLD Plants - 2 Kg/hr Chlorinator Rate .033 paisa on basic rate of WTP-for Post Chlorination		
	iii) 20 MLD to 50 MLD Plants - 5 Kg/hr Chlorinator Rate .015 paisa on basic rate of WTP-for Post Chlorination		
	B) Mechanical Equipment		
	1) Alum dosing equipment with SS 304 material made stirrers & paddles for chemical resistance. (Alam tanks must be bound with corrosion resistant material (HDPE Lining, Bitumen Coating, tiles etc)		
	2) Flash mixer equipment with SS 304 material made stirrers & paddles for chemical resistance.		
	3) Filtration plant equipment instrumentation and piping.		
	4) Clariflocculation equipment (with stainless steel blades) with rotating bridge arrangement etc.,The equipment consists of following components		
	a) Flocculator Drive Mechanisms These will consist of suitable H.P geared electric motor mounted on M S Frame work on bridge platform.		
	b) Flocculating Mechanisms and raking in the flocculation compartment . These will consist of vertical shafts and arms, paddles, guides, bearings etc with stainless steel bush bearing for the shafts at the bottom.		
	c) Mechanism for raking in clarifier compartment		
	d) Revolving Bridge This will be made of suitable sections with torsion proof fabrication of required length and width of 1.22 m. The Bridge will have an outer travelling trolley. The walk way will be 1.22 m wide and shall have chequered plates. The web of the bridge structure shall perform the function of hand railing on both the sides also. The scarping plates will be fitted with the scrapper frame work with hinges and stainless steel pins and will be fitted 12 mm thick rubber ledging . The scrapers will be so adjusted as to ensure smooth and even scarping of the floor.		
	e) Bridge Drive The Bridge will be driven by an electrically operated geared motor with suitable H.P.		
	f) Bridge Drive Mechanisms This will consist of two nos of steel wheels driven by electric geared motor. The wheels will be fitted on the trolley with necessary bearings, pedestals etc . These wheels travel along the periphery of the clariflocculator tank on rails.		
	g) Electrical Arrangements These will consist of electrical cables PVC insulated with copper wires run from the main switch board provided in the chemical store and run under the tank and along the central column. The cable will be connected to the central slip arrangements. The electric geared motors will be controlled from the control panel fitted on the bridge with necessary weather proof housing cabinet with necessary cables, wires, starters ,		
	5) Stainless steel wheel shall be provided for the bridge clariflocculator.		
	6) Wash water tank fittings and pumpsets with 100% stand by.		

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
	7) Air blower with motor 100% stand by and pipe connections. Air Scouring type with twin lobe rotary having required capacity and pressure as per hydraulic design having following components: Blower, Base Frame for blower and motor, Foundation Bolts, Nuts and Washers, Slide Rail and Motor Bolts, V Belts, Pulley, Guard, Suction Silencer, Discharge Silencer, Safety Relief Valve and Non Return Valve, Companion Flange, Interconnection Pipe, Flexible Bellow, Safety Valve and T Connection, First Fill of Lubricants, Anti vibration Pads, Acoustic Enclosure and Motor : CGL/KEC/ABB make.		
	A) Materials of Construction : a) Housing : C.I IS 201 FG 260 b) Rotor Shaft : S G IRON c) Shaft : EN 19 forged and heat treated d) Timing Gears : Cast Alloy steel (20 microns) forged and heat treated . e) Pulley , Gear side , plates and covers : C.I IS 210 FG 260 f) V Belts : Reinforced rubber g) Base plate : MS Enamel Painted h) Belt Guard : MS Enamel Painted		
	8) Spares & Tools and the same shall be handed over after 2 years defect liability period.		
	9) Gaseous Chlorination with cylinders has to be provided with protection measures.		
	C) Electrical Equipment		
	1) Necessary power supply wiring to motors and switches bus bar connections as per IE Rules.		
	2) Internal wiring and illumination and fittings and fixtures for internal and external lighting exhaust fans, ceiling fans etc.		
	3) Erecting mechanical and electrical equipment, trial run for 90 days 23.50 hours per day testing the treated water for efficient standards and maintenance of records and imparting training to staff.		
	4) Supply of 6 - Sets of completion plans and maintenance manual and brochures.		
	5) All cables shall be with of copper material, Cable ducts shall be covered with MS / Aluminum chequed plate.		
	6) Yard lighting shall be provided at 6 locations with required fixtures..		
	D) Equipment for Flow measurements		
	1) Equipment for Flow of Conductivity, Turbidity, Ph value, Residual Chlorine with recording & data storage facility (Computer based) & Alarm by SMS or other methods.		
	2) Off - Site Supervisory and Data Acquisition (OSSADA) system for Raw water & Clear water flows by installing Digital Flow meters to measure the flows at Raw water Channel and at each filter bed individually and combined for measuring the quantities of water treated with a facility to record and store the readings & also to send messages to the assigned designatories about the variations/ deficiencies in the flow including alerts for back wash requirements of filter beds, and recovery of data for the past 360 days. All the Digital Flow Meters & Pressure Gauges shall be provided of standard approved make.		
	Hardware:		
	i) Wall mounted Sensor House for measuring Raw water & Clear water flow from Filter bed out lets with accessories.		
	ii) Electrode Type: General type, Scraper type or replaceable type Electrode made with material of SS external Ultra Touch Sensors as per requirement.		
	iii) Customised Application Requirement : Sensors with Interface logic control board with serial interfaces, On - sensor Board Buffer, Timer, RS485 Communication, Analog to Digital Sensing Sensor Circuit, 32 Sensors Sensing Tags, Interval Power Supply System , LCD 16c/2L, Filter Bed Working Status Indication LED, Filter Bed Wash Indication Button and memory of Data Storage for 30Days , status of Filter Bed Level indicator, Rating, Reading on LCD Display, Menu Driven Data for sending to Onsite Big Display, operated with Battery Power of any reputed make or any equivalent make.		
	iv) Customised Application Requirement: Power Sensors Interface logic control board with support 8 Power Sensing tags, Central System Interfacing Communication, On - board analog to Digit Convert Integrate Circuit of any reputed make or any equivalent make.		

Sl. No.	Description	Unit	SoR for 2018-19 (Rs.)
1	2	3	4
	v) Customised Application Requirement: Centralized System with two serial interfaces, 3 Nos of Add-On ports, One external DC Power Socket, On - Board Buffer, On - Board Timer, On - Board RS485 Communication, On - Board RS 232 Communication, On - Board GPRS/GSM Module, On - Board Voice Chip, On - Board Power Sensing Module, LCD 16c/2L, Filter Bed Wash Precaution Indication with Stop Button, Memory of Data Storage for 30 Days, Total Bed Rating, Reading display on LCD Display, Menu Driven, Menu Navigate Keypad, sending data to the Web Server, Communication with GPRS , operated with Battery Power of any reputed make or any equivalent make.		
	Software:		
	The software shall be designed with Web Domain with Data Base Server and Web Name as per the directions of the Departmental Authorities		
	The application of Software for Web design & Desktop shall meet the following requirements:		
	Onsite Display: Letters with size of 1.5' Seven Sigmoid LED Display with Interface for each Filter Bed, for Onsite Display, by displaying the Bed Levels, Ratings, Readings in 3 Columns , for each bed of the plant in successive rows and cumulative results at the bottom of the screen.		
	Off Site Display: Letters with size of 1.5' seven Sigmoid LED Display with Interface GPRS/GSM Modules Offsite Display, with Display of Bed Total Rating, Total Cumulative Reading as specified on On-site Display Features.		
	The system shall have also the features of Onsite Bed Wash Voice Precautions for Bed Levels, Readings, Ratings, Bed Capacity Readings and Ratings and Bed Low Level Triggering, before & after Bed wash.		
	The software shall also have the features of sending messages to the mobiles of the Departmental designatories indicating Bed Low Levels, Power Supply timings, Bed Wash timings and its status, Power Supply timings and its status Grid View Table, Motor Working time and its status Grid View Table, all trigger events and schedule information and including all Snap View Reports, all Daily, Monthly, Yearly Reports, all Power Working Reports, all Power Events Information etc.,		

1. S o R FOR R.C.C. PLAIN ENDED PIPES

Sl. No.	Description				
1	Manufacture, Supply and Delivery of R.C.C. Spun / Vibrated Cast (Reinforced) Plain ended pipes conforming to B.I.S 458/2003, Ex-factory, Excluding transportation & taxes.				
	Size	Unit	SoR For 2018-19		
			NP - 2 Class	NP - 3 Class	NP - 4 Class
	80 mm dia	Metre	152		
	100 mm dia	Metre	176		
	150 mm dia	Metre	210		
	200 mm dia	Metre	251		
	225 mm dia	Metre	271		
	250 mm dia	Metre	290		
	300 mm dia	Metre	415	935	961
	350 mm dia	Metre	519	1170	1192
	400 mm dia	Metre	597	1293	1321
	450 mm dia	Metre	730	1479	1495
	500 mm dia	Metre	803	1611	1847
	600 mm dia	Metre	1190	2414	2863
	700 mm dia	Metre	1523	3002	3832
	800 mm dia	Metre	1872	3962	5009
	900 mm dia	Metre	2354	4978	6235
	1000 mm dia	Metre	2856	6179	8512
	1100 mm dia	Metre	3400	7287	9865
	1200 mm dia	Metre	4048	8583	11535
	1400 mm dia	Metre	5507	11099	15966
	1600 mm dia	Metre	6394	14399	19256
	1800 mm dia	Metre	8369	19081	25819
	2000mm dia	Metre		23763	32382
	2200mm dia	Metre		28445	38945
	2400mm dia	Metre		33127	45508

Note : All the prices are ex-works. Taxes extra as applicable at the time of supply.

The above rates of RCC Plain ended pipes are based on the following raw materials cost.

Cement Rs.4750/- per MT (excluding all taxes but including freight).

Steel (M.S. Rods) - Rs.45000/- per MT. (excluding all taxes but including freight).

The revised cost of RCC pipes due to increase / decrease in the cost of raw materials shall be as per the following formula.

Revised Cost = Cost as per the above table + R1 + R2

R1 = Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of M.S.

Rods = $(S2 - S1) / 1000 \times Ws$.

R2 = Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of Cement

= $(C2 - C1) / 1000 \times Wc$.

S1 = Rs.45000/-, S2 = Cost of M S Rods (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs.4750/- C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

Ws = Weight of MS Rods required (Kg.) per metre of pipe as per IS:458/2003.

Wc = Weight of Cement required (Kg.) per metre of pipe.

2. S o R FOR R.C.C. COLLARS

Sl.No.	Description				
1	2				
1	Manufacture, Supply and Delivery of R.C.C. Collars conforming to B.I.S. 458/2003 (rate per each collar) suitable for R.C.C. Plain ended pipes including transportation but excluding taxes.				
	Size	Unit	SoR For 2018-19		
			NP - 2 Class	NP - 3 Class	NP - 4 Class
	80 mm dia	Each	47		
	100 mm dia	Each	47		
	150 mm dia	Each	50		
	200 mm dia	Each	68		
	225 mm dia	Each	69		
	250 mm dia	Each	78		
	300 mm dia	Each	104	148	148
	350 mm dia	Each	126	182	182
	400 mm dia	Each	140	209	209
	450 mm dia	Each	219	276	276
	500 mm dia	Each	250	330	330
	600 mm dia	Each	339	432	432
	700 mm dia	Each	440	582	582
	800 mm dia	Each	621	737	737
	900 mm dia	Each	741	859	859
	1000 mm dia	Each	866	1076	1076
	1100 mm dia	Each	1062	1362	1362
	1200 mm dia	Each	1289	1704	1704
	1400 mm dia	Each	1663	2158	2158
	1600 mm dia	Each	2123	2767	2767
	1800 mm dia	Each	2216	3567	3567

Note: Taxes extra as applicable at the time of supply.

The above rates of RCC Collars suitable to plain ended pipes are based on the following raw materials cost.

Cement. Rs.4750/- per MT (excluding all taxes but including freight).

Steel (M.S. Rods) - Rs.45000/- per MT. (excluding all taxes but including freight).

The revised cost of RCC collars due to increase / decrease in the cost of raw materials shall be as per the following formula.

Revised Cost = Cost as per the above table + R1 + R2

R1 = Variation (increase / decrease) in cost (Rs. per each) due to change in the cost of M.S.

Rods = $(S2 - S1) / 1000 \times Ws$. R2 = Variation (increase / decrease) in cost (Rs. per each) due to change in the cost of Cement = $(C2 - C1) / 1000 \times Wc$.

S1 = Rs. 45000/-, S2 = Cost of M S Rods (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs. 4750/-, C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Ws = Weight of MS Rods required (Kg.) per each collar.

Wc = Weight of Cement required (Kg.) per each collar.

3. S o R FOR R.C.C. S/S PIPES (Non - Pressure)

Sl. No.	Description				
1	2				
1	Manufacture, Supply and Delivery of R.C.C. Spun / Vibrated Cast (Reinforced) Socket and Spigot pipes conforming to B.I.S. 458/2003 at ex-factory (rate per meter of effective length) Excluding transportation & taxes.				
	Size	Unit	SoR For 2018-19		
			NP - 2 Class	NP - 3 Class	NP - 4 Class
	80 mm dia	Metre	189		
	100 mm dia	Metre	214		
	150 mm dia	Metre	251		
	200 mm dia	Metre	304		
	225 mm dia	Metre	333		
	250 mm dia	Metre	356		
	300 mm dia	Metre	498	1187	1263
	350 mm dia	Metre	640	1531	1557
	400 mm dia	Metre	707	1698	1726
	450 mm dia	Metre	880	1872	1887
	500 mm dia	Metre	1013	2140	2324
	600 mm dia	Metre	1429	3002	3098
	700 mm dia	Metre	1854	3827	4026
	800 mm dia	Metre	2372	5063	5262
	900 mm dia	Metre	2994	6362	6607
	1000 mm dia	Metre	3628	7212	7907
	1100 mm dia	Metre	4272	8507	9132
	1200 mm dia	Metre	4848	10035	10686
	1400 mm dia	Metre	6877	13291	15144
	1600 mm dia	Metre	8504	17246	18286
	1800 mm dia	Metre	9598	22847	24518
	2000mm dia	Metre		28289	30493
	2200mm dia	Metre		33857	36670
	2400mm dia	Metre		39425	42847

Note: All the prices are ex-works, Taxes extra as applicable at the time of supply. The above rates of RCC S/S Non-Pressure pipes are based on the following raw materials cost. Cement. Rs.4750/- per MT (excluding all taxes but including freight). Steel (M.S. Rods) - Rs.45000/- per MT. (excluding all taxes but including freight). The revised cost of RCC pipes due to increase / decrease in the cost of raw materials shall be as per the following formula. Revised Cost = Cost as per the above table +R1+R2
R1= Variation (increase / decrease) in cost (Rs. per metre)due to change in the cost of M.S. Rods =(S2-S1)/1000 X Ws.
R2= Variation (increase / decrease) in cost (Rs. per metre)due to change in the cost of Cement =(C2-C1)/1000 X Wc.
S1 = Rs. 45000/- , S2 = Cost of M S Rods (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.
C1 = Rs.4750/- , C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate
Ws=Weight of MS Rods required (Kg.) per metre of pipe as per IS:458/2003.
Wc= Weight of Cement required (Kg.) per metre of pipe.

4. S o R FOR R.C.C. S/S PIPES (Pressure)

Sl.No.	Description				
1	2				
1	Manufacture, Supply and Delivery of R.C.C. Socket and Spigot pipes conforming to B.I.S. 458/2003 Ex-factory (rate per meter of effective length) Excluding transportation, taxes & duties.				
	Size	Unit	SoR For 2018-19		
			P1 - Class	P2 - Class	P3 - Class
	80 mm dia	Metre	244	278	314
	100 mm dia	Metre	278	330	382
	150 mm dia	Metre	382	494	611
	200 mm dia	Metre	446	637	841
	225 mm dia	Metre	501	725	939
	250 mm dia	Metre	548	778	990
	300 mm dia	Metre	740	1124	1400
	350 mm dia	Metre	923	1555	2020
	400 mm dia	Metre	1096	2055	2659
	450 mm dia	Metre	1179	2437	3286
	500 mm dia	Metre	1558	2660	3746
	600 mm dia	Metre	2133	3963	5220
	700 mm dia	Metre	2836	5239	6655
	800 mm dia	Metre	3551	6267	8080
	900 mm dia	Metre	4292	7400	
	1000 mm dia	Metre	5391	8526	
	1100 mm dia	Metre	6464		
	1200 mm dia	Metre	7604		

Note: All the prices are ex-works, Taxes extra as applicable at the time of supply.
The above rates of RCC S/S Pressure pipes are based on the following raw materials cost.

Cement. Rs.4750/- per MT (excluding all taxes but including freight).

Steel (M.S. Rods) - Rs.45000/- per MT. (excluding all taxes but including freight).

The revised cost of RCC pipes due to increase / decrease in the cost of raw materials shall be as per the following formula.

Revised Cost = Cost as per the above table + R1 + R2

R1 = Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of M.S. Rods = $(S2 - S1) / 1000 \times Ws$.

R2 = Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of Cement = $(C2 - C1) / 1000 \times Wc$.

S1 = Rs. 45000/-

S2 = Cost of M S Rods (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs. 4750/-, C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Ws = Weight of MS Rods required (Kg) per metre of pipe as per IS: 458 / 2003.

Wc = Weight of Cement required (Kg) per metre of pipe.

5. S o R FOR RUBBER RINGS TO SUIT R.C.C. S/S PIPES

Sl. No.	Description				
1	2				
1	Manufacture, Supply and Delivery of Rubber rings to suit R.C.C. Spun / Vibrated Cast (Reinforced) Socket and Spigot pipes conforming to B.I.S 5382/ 1985 (rate per each rubber ring) including transportation but excluding taxes. the Rubber Rings shall be tested at the factory premises confirming to B.I.S. 5382/1985.				
	Size	Unit	SoR For 2018-19		
			NP - 2 Class	NP - 3 Class	NP - 4 Class
	80 mm dia	Each	28		
	100 mm dia	Each	36		
	150 mm dia	Each	63		
	200 mm dia	Each	74		
	225 mm dia	Each	82		
	250 mm dia	Each	91		
	300 mm dia	Each	111	144	144
	350 mm dia	Each	129	171	171
	400 mm dia	Each	142	194	194
	450 mm dia	Each	161	221	221
	500 mm dia	Each	211	252	252
	600 mm dia	Each	277	368	368
	700 mm dia	Each	376	439	439
	800 mm dia	Each	478	532	532
	900 mm dia	Each	597	720	720
	1000 mm dia	Each	699	868	868
	1100 mm dia	Each	840	1112	1112
	1200 mm dia	Each	1345	1398	1398
	1400 mm dia	Each	1479	1538	1538
	1600 mm dia	Each	1843	1877	1877
	1800 mm dia	Each	2294	2398	2398
	2000mm dia	Each		2737	2737
	2200mm dia	Each		3076	3076
	2400mm dia	Each		3415	3415
2	Manufacture, Supply and Delivery of Rubber rings to suit R.C.C. Socket and Spigot pipes conforming to B.I.S 5382/ 1985 (rate per each rubber ring) including transportation but excluding taxes. The Rubber Rings shall be tested at the factory premises confirming to B.I.S. 5382/1985.				
	Size		P1 - Class	P2 - Class	P3 - Class
	80 mm dia	Each	28	28	28
	100 mm dia	Each	36	38	38
	150 mm dia	Each	63	63	63
	200 mm dia	Each	74	74	74
	225 mm dia	Each	82	83	85
	250 mm dia	Each	91	93	96

	300 mm dia	Each	111	118	123
	350 mm dia	Each	129	148	161
	400 mm dia	Each	142	194	198
	Size		P1 - Class	P2 - Class	P3 – Class
	450 mm dia	Each	161	223	228
	500 mm dia	Each	211	252	264
	600 mm dia	Each	277	312	317
	700 mm dia	Each	376	413	439
	800 mm dia	Each	478	528	528
	900 mm dia	Each	597	666	
	1000 mm dia	Each	699	803	
	1100 mm dia	Each	840		
	1200 mm dia	Each	1048		

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

6. S o R FOR CONVEYANCE OF R.C.C. PLAIN ENDED PIPES

Sl.No.	Description	Rate upto 5 Kms Lead including Loading, unloading and stacking	Rate for every additional 1 KM lead or part thereof.	Rate upto 5 Kms Lead including Loading, unloading and stacking	Rate for every additional 1 KM lead or part thereof.
1	2	3	4	5	6
1	Conveyance of R.C.C Spun / Vibrated Cast (Reinforced) Plain ended pipes on all weathered roads including loading, unloading and stacking (per metre) SoR for 2018-19				
		NP - 2 Class		NP - 3 Class & NP - 4 Class	
	80 mm dia	3.61	0.15		
	100 mm dia	4.74	0.15		
	150 mm dia	7.11	0.31		
	200 mm dia	9.48	0.31		
	225 mm dia	10.71	0.47		
	250 mm dia	11.95	0.47		
	300 mm dia	16.69	0.63	46.35	1.28
	350 mm dia	23.79	1.43	49.96	1.43
	400 mm dia	26.16	1.58	59.53	1.91
	450 mm dia	34.51	1.91	64.27	2.21
	500 mm dia	36.87	2.21	70.14	2.21
	600 mm dia	53.56	3.48	105.88	4.91
	700 mm dia	67.77	4.91	117.73	5.71
	800 mm dia	79.72	4.91	141.52	5.71
	900 mm dia	91.57	4.91	185.61	10.77
	1000 mm dia	135.65	10.12	223.61	10.77
	1100 mm dia	148.73	10.12	242.67	11.72
	1200 mm dia	168.92	10.77	271.20	11.72
	1400 mm dia	203.43	10.77	368.84	12.20
	1600 mm dia	235.56	10.77	442.59	12.20
	1800 mm dia	271.20	10.77	590.09	17.11
	2000 mm dia				
	2200 mm dia				
	2400 mm dia				

7. S o R FOR CONVEYANCE OF R.C.C. S/S PIPES

Sl. No.	Description	Rate upto 5 Kms Lead including Loading, unloading & stacking	Rate for every additional 1 KM lead or part thereof.	Rate upto 5 Kms Lead including Loading, unloading and stacking	Rate for every additional 1 KM lead or part thereof.
1	Conveyance of R.C.C. Spun / Vibrated Cast (Reinforced) Socket and Spigot pipes on all weather roads including loading, unloading and stacking (per metre of effective length).				
	Size	NP - 2 & P1 Class		NP - 3 & NP - 4 Class	
	80 mm dia	4.74	0.14		
	100 mm dia	4.74	0.28		
	150 mm dia	8.34	0.28		
	200 mm dia	10.71	0.58		
	225 mm dia	11.95	0.58		
	250 mm dia	13.08	1.30		
	300 mm dia	21.42	1.44	54.69	1.73
	350 mm dia	25.03	1.58	59.53	2.01
	400 mm dia	25.03	1.87	73.75	3.75
	450 mm dia	35.74	2.01	80.86	3.75
	500 mm dia	39.24	2.16	89.20	4.04
	600 mm dia	51.19	3.75	120.20	5.76
	700 mm dia	63.04	4.04	161.81	11.38
	800 mm dia	86.83	6.19	191.58	11.38
	900 mm dia	129.68	11.08	221.24	11.38
	1000 mm dia	147.50	11.08	233.19	11.38
	1100 mm dia	166.55	11.38	249.88	11.38
	1200 mm dia	185.61	11.38	279.54	11.66
	1400 mm dia	230.82	11.38	374.71	11.66
	1600 mm dia	273.67	11.66	442.59	12.52
	1800 mm dia	339.08	11.66	590.09	17.13
	2000 mm dia				
	2200 mm dia				
	2400 mm dia				
		P2 - Class		P3 - Class	
	80 mm dia	4.74	0.14	4.74	0.14
	100 mm dia	4.74	0.28	4.74	0.28
	150 mm dia	8.34	0.28	8.34	0.28
	200 mm dia	10.71	0.58	14.32	1.30
	225 mm dia	14.32	1.30	16.69	1.44
	250 mm dia	15.45	1.44	20.19	1.58
	300 mm dia	29.77	1.73	34.51	1.87
	350 mm dia	36.87	2.01	47.59	2.16
	400 mm dia	43.98	2.16	63.04	3.75
	450 mm dia	55.93	3.61	78.49	3.75
	500 mm dia	63.04	3.75	95.17	5.61
	600 mm dia	83.33	3.75	138.02	7.20
	700 mm dia	124.94	7.62	201.06	11.38
	800 mm dia	165.32	10.80	256.99	11.38
	900 mm dia	201.06	11.38		
	1000 mm dia	247.41	11.66		

8. S o R FOR A.C. PIPES

The PH & ME department banned the usage of RCC & AC pipes for water supply works vide Memo no 146/T2/SoR/2014-15/2014 dated 30.06.2014. However ENC (RWS) requested in the SoR meeting on 06.05.2015 to incorporate A.C pipes rates in SoR for carrying out O&M works, accordingly the following rates are adopted.

Sl.No	Description					
1	Manufacture, Supply of A.C*. Pressure pipes (mazza process) as per BIS No: 1592/2003 as amended from time to time duly marked with BIS mark, including cost of material, incidental handling, loading and packing charges but are exclusive of transportation, unloading, stacking at departmental stores, and excluding taxes. The pipes shall be tested at factory premises confirming to is code 1592/2003.					
	Size	Unit	SoR For 2018-19			
			Class - 15	Class - 20	Class - 25	
	80 mm dia	Rate/Metre	203	223	277	
	100 mm dia	Rate/Metre	267	339	416	
	125 mm dia	Rate/Metre	347	431	543	
	150 mm dia	Rate/Metre	488	609	765	
	200 mm dia	Rate/Metre	808	1035	1314	
	250 mm dia	Rate/Metre	1024	1329	1664	
	300 mm dia	Rate/Metre	1433	1868	2386	
	350 mm dia	Rate/Metre	1744	2269	2863	
	400 mm dia	Rate/Metre	2268	2969	3685	
	450 mm dia	Rate/Metre	2697	3581	4483	
	500 mm dia	Rate/Metre	3326	4377	5495	
	600 mm dia	Rate/Metre	4730	6180	7875	
	700 mm dia	Rate/Metre	6229	8448	10924	
	750 mm dia	Rate/Metre	7098	9753	12500	
	800 mm dia	Rate/Metre	8120	11050	14181	
	850 mm dia	Rate/Metre	9111	12430	15969	
	900 mm dia	Rate/Metre	10156	13888	17862	
	1000 mm dia	Rate/Metre	12537	17049	21965	
2	Lowering, laying and jointing of AC pressure pipes with ac couplings or CID joints complete with Rubber rings in readymade trenches true to alignment and gradient including filling with water lead upto 500 mts and testing to required pressure including all sundries but excluding cost of jointing materials and conveyance from source of supply as per BIS No. 6530/1972					
	80 mm dia	Rate/Metre	40	40	40	
	100 mm dia	Rate/Metre	59	59	59	
	125 mm dia	Rate/Metre	64	64	64	
	150 mm dia	Rate/Metre	76	76	76	
	200 mm dia	Rate/Metre	100	100	100	
	250 mm dia	Rate/Metre	120	120	120	
	300 mm dia	Rate/Metre	149	149	149	
	350 mm dia	Rate/Metre	251	251	251	
	400 mm dia	Rate/Metre	378	378	378	
	450 mm dia	Rate/Metre	459	459	459	

	500 mm dia	Rate/Metre		584	584	584
	600 mm dia	Rate/Metre		628	628	628
	700 mm dia	Rate/Metre		701	701	701
	750 mm dia	Rate/Metre		780	780	780
	800 mm dia	Rate/Metre		821	821	821
	850 mm dia	Rate/Metre		875	875	875
	900 mm dia	Rate/Metre		956	956	956
	1000 mm dia	Rate/Metre		983	983	983
	<p>1. The above rates of AC Pipes are based on the Cement cost of RS 4750/- per MT (excluding all taxes but including frieght).</p> <p>2. The above rates of AC pipes are based on the Fiber cost of Rs 78,500/- per M.T (excluding all taxes but including frieght)</p> <p>For any Increase/ Decrease in the rate of cement, the price of AC pipe per Rmt shall be increased/decreased as under.</p> <p>$W \times 0.85 \times IC$ Where W = Weight of pipe in Kg's/Rmt IC = Increase/Decrease in cost of cement/Kg</p> <p>For any increase/decrease in the rate of fiber, the price of AC pipe per Rmt shall be increased/Decreased as under :</p> <p>$W \times 0.15 \times IF$ Where : W=: Weight of pipe in Kg's/Rmt IF = Increase /Decrease in cost of fiber/Kg</p>					
Note:	<p>1) The Fiber rates are to be obtained from A.C. Pipe manufacturer of "Mazza" process.</p> <p>2) The cement rate shall be communicated by the sub-committee of Board of Chief engineers.</p> <p>3)The taxes as applicable shall be added as per rules at the time of preparation of estimate</p>					
2	Transportation of AC pressure pipes at site of work anywhere in Telangana State on motor able roads for full truck loads including transit insurance, unloading, and stacking at site of work etc. Complete (AC Couplings and Rubber rings are to be supplied free of transportation charges).				5% on the basic cost of corresponding AC Pressure pipes.	

*Under any Circumstances the A.C. pipes shall not be procured for laying new water lines, except O&M works.

9. S o R FOR A.C. COUPLINGS

The PH & ME department banned the usage of RCC & AC pipes for water supply works vide Memo no 146/T2/SoR/2014-15/2014 dated 30.06.2014. However ENC (RWS) requested in the SoR meeting on 06.05.2015 to incorporate A.C pipes rates in SoR for carrying out O&M works, accordingly the following rates are adopted.

Sl.No	Description					
1	2					
1	Manufacture, Supply of A.C* Couplings suitable to A.C*.Pressure pipes (mazza process) as per BIS: 1592/2003 excluding cost of rubber rings to suit AC* pressure pipes including cost of material, incidental handling, packing, transportation and unloading at site transit risk, but excluding taxes and testing of joints as per IS Code.					
	Size	Unit	SoR For 2018-19			
0			Class - 15	Class - 20	Class – 25	
	80 mm dia	Rate/Each	96	102	118	
	100 mm dia	Rate/Each	123	134	159	
	125 mm dia	Rate/Each	155	169	205	
	150 mm dia	Rate/Each	180	226	278	
	200 mm dia	Rate/Each	331	365	463	
	250 mm dia	Rate/Each	387	489	620	
	300 mm dia	Rate/Each	505	655	843	
	350 mm dia	Rate/Each	653	844	1078	
	400 mm dia	Rate/Each	1008	1315	1681	
	450 mm dia	Rate/Each	1207	1590	2041	
	500 mm dia	Rate/Each	1438	1922	2453	
	600 mm dia	Rate/Each	1774	2228	2851	
	700 mm dia	Rate/Each	2332	3142	4085	
	750 mm dia	Rate/Each	2632	3597	4643	
	800 mm dia	Rate/Each	2986	4048	5239	
	850 mm dia	Rate/Each	3326	4528	5873	
	900 mm dia	Rate/Each	3680	5034	6536	
	1000 mm dia	Rate/Each	4492	6120	7977	

1. The above rates of AC Coupling are based on the Cement cost of RS.4750/- per MT (Excluding all taxes and freight).

2. The above rates of AC Coupling are based on the Fiber cost of Rs 78,500/- per M.T (Excluding all taxes & Frieght)

For any Increase/ Decrease in the rate of cement, the price of AC Coupling per Each shall be increased/decreased as under.

$W \times 0.85 \times IC$ Where W = Weight of Coupling in Kgs/Each, IC = Increase/Decrease in cost of cement/kg.For any increase/decrease in the rate of fiber, the price of AC Coupling per Each shall be increased/Decreased as under :

$W \times 0.15 \times IF$ Where : W=: Weight of Coupling in Kgs/Each,IF = Increase /Decrease in cost of fiber/kg.The Fiber rates are to be obtained from A.C. Pipe manufacturer of “Mazza” process.The cement rate shall be communicated by the sub-committee of Board of Chief engineers.Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

10. S o R FOR RUBBER RINGS TO SUIT A.C. COUPLINGS

The PH & ME department banned the usage of RCC & AC pipes for water supply works vide Memo no 146/T2/SoR/2014-15/2014 dated 30.06.2014. However ENC (RWS) requested in the SoR meeting on 06.05.2015 to incorporate A.C pipes rates in SoR for carrying out O&M works, accordingly the following rates are adopted.

Sl. No.	Description					
1	2					
1	Schedule of rate for supply of Rubber rings manufactured as per BIS: 5382/1988 with BIS Mark embossed per each set suitable for A.C*. Couplings including cost of material, incidental, handling, packing, transportation and unloading at site transit risk etc., but excluding taxes. The Rubber Rings shall be tested at the factory premises confirming to B.I.S 5382/1988					
	Size	Unit	SoR For 2018-19			
			Class - 15	Class - 20	Class - 25	
	80 mm dia	Each Set	76	76	76	
	100 mm dia	Each Set	93	93	93	
	125 mm dia	Each Set	121	121	121	
	150 mm dia	Each Set	153	153	153	
	200 mm dia	Each Set	159	159	159	
	250 mm dia	Each Set	184	184	184	
	300 mm dia	Each Set	184	184	184	
	350 mm dia	Each Set	209	209	209	
	400 mm dia	Each Set	256	256	256	
	450 mm dia	Each Set	300	300	300	
	500 mm dia	Each Set	347	347	347	
	600 mm dia	Each Set	394	394	394	
	700 mm dia	Each Set	816	816	816	
	750 mm dia	Each Set	849	849	849	
	800 mm dia	Each Set	912	912	912	
	850 mm dia	Each Set	1015	1015	1015	
	900 mm dia	Each Set	1068	1068	1068	
	1000 mm dia	Each Set	1183	1183	1183	

Note: The taxes as applicable shall be added as per rules at the time of preparation of estimate.

11. S o R FOR PRE-STRESSED (NON-CYLINDER) CONCRETE PIPES FOR THE YEAR 2018-19

Sl.No.	Description							
1	Manufacture, Supply, Delivery of Pre-stressed (Non-cylinder) concrete pipes conforming to IS 784/2001 ex-factory excluding transportation & taxes, for the following field test pressures.(the manufacture shall design the pipes as per the IS Code 784-2001)							
	Size	Unit	SoR For 2018-19.					
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
			6 Kg/cm2	8 Kg/cm2	10 Kg/cm2	12 Kg/cm2	14 Kg/cm2	16 Kg/cm2
	350 mm dia	Metre	2942	2952	2964	2978	3038	3145
	400 mm dia	Metre	3160	3184	3217	3258	3318	3367
	450 mm dia	Metre	3348	3363	3401	3466	3554	3632
	500 mm dia	Metre	3624	3638	3666	3743	3821	3934
	600 mm dia	Metre	4162	4190	4232	4361	4501	4639
	700 mm dia	Metre	4881	4948	5065	5206	5357	5563
	800 mm dia	Metre	5921	6051	6191	6376	6568	6869
	900 mm dia	Metre	6790	6964	7145	7448	7684	8241
	1000 mm dia	Metre	8004	8231	8468	8706	8997	9639
	1100 mm dia	Metre	8967	9227	9518	9808	10107	10904
	1200 mm dia	Metre	10071	10415	10739	10969	11484	12559
	1300 mm dia	Metre	11407	11795	12183	12573	13705	14188
	1400 mm dia	Metre	13218	13672	14136	14902	15809	16506
	1500 mm dia	Metre	14922	15461	15968	17335	17896	20022
	1600 mm dia	Metre	16792	17374	17958	19585	20238	22294
	1700 mm dia	Metre	18021	18700	19368	21081	23390	24383
	1800 mm dia	Metre	19909	21185	22328	24214	25117	27786
	1900 mm dia	Metre	21275	22449	24413	25820	28077	30187
	2000 mm dia	Metre	23379	24844	26133	28523	31474	32675
2	Cost of laying jointing, testing to hydrostatic field test pressure including cost of rubber rings, cost of transportation of water and emptying pipe line after completion of field testing etc.							
	350 mm dia	Metre	240	240	240	240	240	240
	400 mm dia	Metre	259	259	259	259	259	259
	450 mm dia	Metre	299	299	299	299	299	299
	500 mm dia	Metre	318	318	318	318	318	318

5	Cost of M.S Flanges including cost of bolts, nuts, rubber packing etc., complete and flange thickness confirming to IS:7322-1985 and flange dimensions confirming to IS:1538-1993 excluding cost of MS specials including cost and conveyance to site etc., complete.					
	Diameter and thickness	Unit	Rate	Diameter and thickness	Unit	Rate
	80 mm dia x 15 mm thick	Each Flange	719	500mm dia x 20 mm thick	Each Flange	7362
	100 mm dia x 15 mm thick	Each Flange	991	600 mm dia x 20 mm thick	Each Flange	9267
	125 mm dia x 15 mm thick	Each Flange	1191	700 mm dia x 25 mm thick	Each Flange	13080
	150 mm dia x 15 mm thick	Each Flange	1588	750 mm dia x 25 mm thick	Each Flange	14386
	200 mm dia x 15 mm thick	Each Flange	1982	800 mm dia x 25 mm thick	Each Flange	16111
	250 mm dia x 15 mm thick	Each Flange	2582	900 mm dia x 25 mm thick	Each Flange	18502
	300 mm dia x 15 mm thick	Each Flange	2938	1000 mm dia x 25 mm thick	Each Flange	21803
	350 mm dia x 18 mm thick	Each Flange	4260	1050 mm dia x 25 mm thick	Each Flange	23159
	400 mm dia x 18 mm thick	Each Flange	5322	1100 mm dia x 25 mm thick	Each Flange	24976
	450 mm dia x 18 mm thick	Each Flange	6189	1200 mm dia x 32 mm thick	Each Flange	33086

Note: a) The above rate of PSC pipes are based on the HT wire cost of Rs.54500/-MT (excluding all taxes but including freight) and cement price of Rs.4750/- per MT (excluding all taxes but including freight)

The rates may be revised depending upon the increase/decrease in the cost of HT wire and cement. as per the following method. The cost of HT wire may be obtained from reputed firms like SAIL/TATA/ SS Ltd. etc.,

Revised Cost = Cost as per the above table + R1 + R2.

R1 = Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of HT Wire = $(H2-H1)/1000 \times Wh$.

R2 = Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of Cement = $(C2-C1)/1000 \times Wc$.

H1 = Rs. 54500/- H2 = Cost of HT Wire (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs. 4750/- C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Wh = Weight of HT Wire required (Kg.) per metre of pipe. Wc = Weight of Cement required (Kg.) per metre of pipe.

The rates for MS flanges are considering landed price of MS Plates of Rs.47000/- per MT. Price variation to be released on actual weight of flange.

Note: The duties and taxes as applicable shall be added as per rules at the time of preparation of estimate.

12. S o R FOR PRE-STRESSED (CYLINDER) CONCRETE PIPES FOR THE YEAR 2018-19

SI No.	Description											
1	2											
1	Pre-stressed (Cylinder type) concrete pipes conforming to IS 784/2001 @ ex-factory cost of pipes, excluding transportation, laying, jointing, testing, bends, tees, specials & taxes. For the following field test pressures.(the manufacture shall design the pipes as per the IS Code 784-2001).											
	Size	Unit	SoR For 2018-19									20
			4	6	8	10	12	14	16	18	Kg/cm2	
			Kg/cm2	Kg/cm2	Kg/cm2	Kg/cm2	Kg/cm2	Kg/cm2	Kg/cm2	Kg/cm2	Kg/cm2	
	400 mm dia	Meter	5271	5271	5271	5271	5298	5351	5442	5530	5596	
	450 mm dia	Meter	5729	5729	5729	5755	5821	5900	5997	6038	6090	
	500 mm dia	Meter	6111	6111	6171	6224	6275	6347	6429	6491	6553	
	600 mm dia	Meter	7019	7089	7162	7244	7317	7389	7512	7605	7689	
	700 mm dia	Meter	7979	8071	8175	8268	8371	8464	8637	8742	8876	
	800 mm dia	Meter	9387	9501	9625	9759	9883	10007	10192	10367	10513	
	900 mm dia	Meter	10670	10834	10990	11155	11320	11485	11922	12138	12395	
	1000 mm dia	Meter	12815	13011	13208	13414	13611	13817	14395	14683	14971	
	1100 mm dia	Meter	14233	14471	14718	14956	15204	15441	16150	16469	16840	
	1200 mm dia	Meter	15822	16111	16390	16680	16979	17267	18108	18509	18913	
	1300 mm dia	Meter	17691	18032	18372	18713	19054	19704	20399	20901	21448	
	1400 mm dia	Meter	19844	20266	20699	21171	22014	22558	23354	23578	24511	
	1500 mm dia	Meter	23279	23798	24242	24696	25586	26092	26767	27792	28360	
	1600 mm dia	Meter	26255	26957	27549	28500	29079	29718	30874	31515	32155	
	1700 mm dia	Meter	28251	29018	29598	30683	31335	32704	33440	34173	34914	
	1800 mm dia	Meter	30931	31783	33453	34488	35500	37400	39008	39826	40663	
	1900 mm dia	Meter	35939	36672	37956	38755	40380	41288	42212	43132	44050	
	2000 mm dia	Meter	37902	39244	40133	41033	42845	43846	44875	45889	46919	

Public Health Items

1100 mm dia	Per KM/M	5.45	5.45	5.45	5.45	5.45	5.45	5.45	5.45	5.45	5.45
1200 mm dia	Per KM/M	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79
1300 mm dia	Per KM/M	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79
1400 mm dia	Per KM/M	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79
1500 mm dia	Per KM/M	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79
1600 mm dia	Per KM/M	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79
1700 mm dia	Per KM/M	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95
1800 mm dia	Per KM/M	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95
1900 mm dia	Per KM/M	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95
2000 mm dia	Per KM/M	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75

Note: The rates of PCCP pipes which were incorporated in the SSR are based on the following raw materials cost.

HT Wire: - Rs.54500/- (excluding all taxes but including freight)

HR Coil (Hot Rolled): - Rs.47500/- (excluding all taxes but including freight)

Cement Cost Rs. 4750/-,per MT (excluding all taxes but including freight)

The rates may be revised depending upon the increase/ decrease in the cost of raw materials (landed price) as per the following method.

Revised Cost =Cost as per the above table +R1+R2+R3.

R1= Variation (increase / decrease) in cost (Rs. per metre)due to change in the cost of HT Wire =(H2-H1)/1000 X Wh.

R2= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of HR Coil =(R2-R1)/1000 X Wr.

R3= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of Cement =(C2-C1)/1000 X Wc .

H1 = Rs. 54500/- H2 = Cost of HT Wire (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

R1 = Rs. 47500/- R2 = Cost of HR Coil (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs. 4750/- C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Wh=Weight of HT Wire required (Kg.) per metre of pipe. Wc= Weight of Cement required (Kg.) per meter of pipe.

Wr = Weight of HR Coil required (kg) per metre of pipe.

Note: The duties and taxes as applicable shall be added as per rules at the time of preparation of estimate

	900 mm dia	Meter	1259	1259	1259	1259	1259	1259	1259	1259	1259	1259
	1000 mm dia	Meter	1391	1391	1391	1391	1391	1391	1391	1391	1391	1391
	1100 mm dia	Meter	1635	1635	1635	1635	1635	1635	1635	1635	1635	1635
	1200 mm dia	Meter	1830	1830	1830	1830	1830	1830	1830	1830	1830	1830
3	Conveyance of Bar Wrapped Steel Cylinder (BWSC) pipes and accessories including loading at factory, un-loading at site and stacking for the following sizes. (minimum distance of 100 km to be considered if the distance is less by 100 km from factory to site)											
	250 mm dia	Per KM/M	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
	300 mm dia	Per KM/M	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
	350 mm dia	Per KM/M	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
	400 mm dia	Per KM/M	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
	450 mm dia	Per KM/M	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
	500 mm dia	Per KM/M	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91
	600 mm dia	Per KM/M	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
	700 mm dia	Per KM/M	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28
	800 mm dia	Per KM/M	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99
	900 mm dia	Per KM/M	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
	1000 mm dia	Per KM/M	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
	1100 mm dia	Per KM/M	8.26	8.26	8.26	8.26	8.26	8.26	8.26	8.26	8.26	8.26
	1200 mm dia	Per KM/M	11.54	11.54	11.54	11.54	11.54	11.54	11.54	11.54	11.54	11.54

Note: The above rates of BWSC pipes are based on the following raw materials' cost.

HR Plates - Rs.47500/- per MT (excluding all taxes but including freight), M.S. Wire rods - Rs.45000/- per MT (excluding all taxes but including freight) Cement Cost Rs. 4750/-per MT (excluding all taxes but including freight)

The rates may be revised depending upon the increase/ decrease in the cost of raw materials (landed price) as per the following method.

Revised Cost =Cost as per the above table +R1+R2+R3.

R1= Variation (increase / decrease) in cost (Rs. per metre)due to change in the cost of HR Plate =(H2-H1)/1000 X Wh.

R2= Variation (increase / decrease) in cost (Rs. per metre)due to change in the cost of wire rods =(W2-W1)/1000 X Ww.

R3= Variation (increase / decrease) in cost (Rs. per metre)due to change in the cost of Cement =(C2-C1)/1000 X Wc .

H1 = Rs. 47500/- H2 = Cost of HR Plate (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

W1 = Rs. 45000/- W2 = Cost of Wire rods (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs. 4750/- C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Wh=Weight of HR Plate required (Kg.) per metre of pipe. Wc= Weight of Cement required (Kg.) per metre of pipe.

Ww = Weight of wire rods required (kg) per metre of pipe.

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

14. S o R FOR M.S. PIPES FOR THE YEAR 2018-19

Sl.No.	Description	Unit	Thicknes s in mm	Rate (Rs.)
1	2	3	4	5
1	Manufacture, supply and delivery of M.S Pipes conforming to is 3589/2001 including in lining with cement mortar (1:2) 15mm thick using 4 numbers of 6mm dia M.S.Rings at each end of the pipe and out coating with cement mortar (1:3) 30mm thick by shortcreting or gunetting duly providing wire mesh of size 50x50x3mm including cost of all materials, labour charges, transportation to anywhere in T.G, but excluding all taxes.			
	500 mm dia	Metre	8.00	9035
	500 mm dia	Metre	10.00	10647
	600 mm dia	Metre	8.00	10734
	600 mm dia	Metre	10.00	12651
	700 mm dia	Metre	8.00	12389
	700 mm dia	Metre	10.00	14640
	800 mm dia	Metre	8.00	14028
	800 mm dia	Metre	10.00	16575
	800 mm dia	Metre	12.00	19132
	900 mm dia		8.00	15717
	900 mm dia	Metre	10.00	18523
	900 mm dia	Metre	12.00	21367
	1000 mm dia	Metre	8.00	17427
	1000 mm dia	Metre	10.00	20567
	1000 mm dia	Metre	12.00	23708
	1000 mm dia	Metre	14.00	26810
	1100 mm dia	Metre	10.00	22454
	1100 mm dia	Metre	12.00	25892
	1100 mm dia	Metre	14.00	29329
	1100 mm dia	Metre	16.00	32825
	1200 mm dia	Metre	10.00	24499
	1200 mm dia	Metre	12.00	28234
	1200 mm dia	Metre	14.00	31920
	1200 mm dia	Metre	16.00	35662
	1200 mm dia	Metre	18.00	39395
	1300 mm dia	Metre	10.00	26438
	1300 mm dia	Metre	12.00	30417
	1300 mm dia	Metre	14.00	34446
	1300 mm dia	Metre	16.00	38535
	1300 mm dia	Metre	18.00	42568
	1300 mm dia	Metre	20.00	46606

Public Health Engineering Items

1400 mm dia	Metre	10.00	28383
1400 mm dia	Metre	12.00	32709
1400 mm dia	Metre	14.00	37035
1400 mm dia	Metre	16.00	41409
1400 mm dia	Metre	18.00	45745
1400 mm dia	Metre	20.00	50131
1400 mm dia	Metre	22.00	54457
1500 mm dia	Metre	10.00	30369
1500 mm dia	Metre	12.00	34993
1500 mm dia	Metre	14.00	39566
1500 mm dia	Metre	16.00	44189
1500 mm dia	Metre	18.00	48872
1500 mm dia	Metre	20.00	53495
1500 mm dia	Metre	22.00	58234
1500 mm dia	Metre	24.00	62857
1600 mm dia	Metre	10.00	32373
1600 mm dia	Metre	12.00	37234
1600 mm dia	Metre	14.00	42201
1600 mm dia	Metre	16.00	47121
1600 mm dia	Metre	18.00	52049
1600 mm dia	Metre	20.00	56969
1600 mm dia	Metre	22.00	61948
1600 mm dia	Metre	24.00	66975
1600 mm dia	Metre	26.00	71963
1700 mm dia	Metre	10.00	34255
1700 mm dia	Metre	12.00	39518
1700 mm dia	Metre	14.00	44735
1700 mm dia	Metre	16.00	49901
1700 mm dia	Metre	18.00	55225
1700 mm dia	Metre	20.00	60441
1700 mm dia	Metre	22.00	65657
1700 mm dia	Metre	24.00	70989
1700 mm dia	Metre	26.00	76265
1700 mm dia	Metre	28.00	81540
1800 mm dia	Metre	10.00	36297
1800 mm dia	Metre	12.00	41818
1800 mm dia	Metre	14.00	47319
1800 mm dia	Metre	16.00	52832
1800 mm dia	Metre	18.00	58345
1800 mm dia	Metre	20.00	63914
1800 mm dia	Metre	22.00	69486
1800 mm dia	Metre	24.00	75000
1800 mm dia	Metre	26.00	80618
1800 mm dia	Metre	28.00	86199
1900 mm dia	Metre	10.00	38243
1900 mm dia	Metre	12.00	44040
1900 mm dia	Metre	14.00	49851
1900 mm dia	Metre	16.00	55648

Public Health Engineering Items

1900 mm dia	Metre	18.00	61466
1900 mm dia	Metre	20.00	67335
1900 mm dia	Metre	22.00	73191
1900 mm dia	Metre	24.00	79008
1900 mm dia	Metre	26.00	84924
1900 mm dia	Metre	28.00	90793
2000 mm dia	Metre	10.00	40173
2000 mm dia	Metre	12.00	46279
2000 mm dia	Metre	14.00	52382
2000 mm dia	Metre	16.00	58488
2000 mm dia	Metre	18.00	64641
2000 mm dia	Metre	20.00	70748
2000 mm dia	Metre	22.00	76907
2000 mm dia	Metre	24.00	83074
2000 mm dia	Metre	26.00	89227
2000 mm dia	Metre	28.00	95393
2000 mm dia	Metre	30.00	101614
2100 mm dia	Metre	12.00	48567
2100 mm dia	Metre	14.00	54970
2100 mm dia	Metre	16.00	61361
2100 mm dia	Metre	18.00	67773
2100 mm dia	Metre	20.00	74221
2100 mm dia	Metre	22.00	80671
2100 mm dia	Metre	24.00	87132
2100 mm dia	Metre	26.00	93591
2100 mm dia	Metre	28.00	100053
2100 mm dia	Metre	30.00	106562
2100 mm dia	Metre	32.00	113071
2100 mm dia	Metre	34.00	119601
2200 mm dia	Metre	12.00	50806
2200 mm dia	Metre	14.00	57492
2200 mm dia	Metre	16.00	64200
2200 mm dia	Metre	18.00	70945
2200 mm dia	Metre	20.00	77692
2200 mm dia	Metre	22.00	84391
2200 mm dia	Metre	24.00	91146
2200 mm dia	Metre	26.00	97952
2200 mm dia	Metre	28.00	104651
2200 mm dia	Metre	30.00	111457
2200 mm dia	Metre	32.00	118270
2200 mm dia	Metre	34.00	125136
2200 mm dia	Metre	36.00	131894
2300 mm dia	Metre	12.00	53059
2300 mm dia	Metre	14.00	60044
2300 mm dia	Metre	16.00	67071
2300 mm dia	Metre	18.00	74113
2300 mm dia	Metre	20.00	81118
2300 mm dia	Metre	22.00	88160
2300 mm dia	Metre	24.00	95203

Public Health Engineering Items

	2300 mm dia	Metre	26.00	102306
	2300 mm dia	Metre	28.00	109309
	2300 mm dia	Metre	30.00	116412
	2300 mm dia	Metre	32.00	123514
	2300 mm dia	Metre	34.00	130675
	2300 mm dia	Metre	36.00	137787
	2400 mm dia	Metre	12.00	55282
	2400 mm dia	Metre	14.00	62560
	2400 mm dia	Metre	16.00	69854
	2400 mm dia	Metre	18.00	77246
	2400 mm dia	Metre	20.00	84527
	2400 mm dia	Metre	22.00	91866
	2400 mm dia	Metre	24.00	99274
	2400 mm dia	Metre	26.00	106613
	2400 mm dia	Metre	28.00	113965
	2400 mm dia	Metre	30.00	121305
	2400 mm dia	Metre	32.00	128711
	2400 mm dia	Metre	34.00	136169
	2400 mm dia	Metre	36.00	143567
	2500 mm dia	Metre	14.00	65161
	2500 mm dia	Metre	16.00	72738
	2500 mm dia	Metre	18.00	80374
	2500 mm dia	Metre	20.00	88010
	2500 mm dia	Metre	22.00	95699
	2500 mm dia	Metre	24.00	103335
	2500 mm dia	Metre	26.00	110972
	2500 mm dia	Metre	28.00	118667
	2500 mm dia	Metre	30.00	126264
	2500 mm dia	Metre	32.00	133959
	2500 mm dia	Metre	34.00	141712
	2500 mm dia	Metre	36.00	149408
	2600 mm dia	Metre	14.00	67739
	2600 mm dia	Metre	16.00	75613
	2600 mm dia	Metre	18.00	83494
	2600 mm dia	Metre	20.00	91427
	2600 mm dia	Metre	22.00	99360
	2600 mm dia	Metre	24.00	107337
	2600 mm dia	Metre	26.00	115278
	2600 mm dia	Metre	28.00	123270
	2600 mm dia	Metre	30.00	131202
	2600 mm dia	Metre	32.00	139193
	2600 mm dia	Metre	34.00	147193
	2600 mm dia	Metre	36.00	155244
	2600 mm dia	Metre	38.00	163236
	2600 mm dia	Metre	40.00	171287
	2600 mm dia	Metre	42.00	179347
	2700 mm dia	Metre	18.00	86679
	2700 mm dia	Metre	20.00	94848
	2700 mm dia	Metre	22.00	103078

Public Health Engineering Items

2700 mm dia	Metre	24.00	111315
2700 mm dia	Metre	26.00	119591
2700 mm dia	Metre	28.00	127925
2700 mm dia	Metre	30.00	136211
2700 mm dia	Metre	32.00	144449
2700 mm dia	Metre	34.00	152738
2700 mm dia	Metre	36.00	161087
2700 mm dia	Metre	38.00	169383
2700 mm dia	Metre	40.00	177730
2700 mm dia	Metre	42.00	186019
2800 mm dia	Metre	18.00	89791
2800 mm dia	Metre	20.00	98325
2800 mm dia	Metre	22.00	106850
2800 mm dia	Metre	24.00	115377
2800 mm dia	Metre	26.00	123902
2800 mm dia	Metre	28.00	132482
2800 mm dia	Metre	30.00	141112
2800 mm dia	Metre	32.00	149638
2800 mm dia	Metre	34.00	158223
2800 mm dia	Metre	36.00	166816
2800 mm dia	Metre	38.00	175460
2800 mm dia	Metre	40.00	184045
2800 mm dia	Metre	42.00	192737
2900 mm dia	Metre	18.00	93028
2900 mm dia	Metre	20.00	101791
2900 mm dia	Metre	22.00	110614
2900 mm dia	Metre	24.00	119444
2900 mm dia	Metre	26.00	128265
2900 mm dia	Metre	28.00	137134
2900 mm dia	Metre	30.00	146015
2900 mm dia	Metre	32.00	154846
2900 mm dia	Metre	34.00	163772
2900 mm dia	Metre	36.00	172701
2900 mm dia	Metre	38.00	181642
2900 mm dia	Metre	40.00	190531
2900 mm dia	Metre	42.00	199473
3000 mm dia	Metre	18.00	96096
3000 mm dia	Metre	20.00	105262
3000 mm dia	Metre	22.00	114330
3000 mm dia	Metre	24.00	123447
3000 mm dia	Metre	26.00	132566
3000 mm dia	Metre	28.00	141732
3000 mm dia	Metre	30.00	150918
3000 mm dia	Metre	32.00	160037
3000 mm dia	Metre	34.00	169262
3000 mm dia	Metre	36.00	178485
3000 mm dia	Metre	38.00	187671
3000 mm dia	Metre	40.00	196908
3000 mm dia	Metre	42.00	206134

2	Cost of Laying, Jointing, Hydrostatic Filed Test Pressure, Including Cost of Site Welding, Jointing Materials And Cost of Transportation of Water Including Emptying Pipe Line After Completion Of Field Testing.			
	500 mm dia	Metre	8.00	822
	500 mm dia	Metre	10.00	842
	600 mm dia	Metre	8.00	1015
	600 mm dia	Metre	10.00	1036
	700 mm dia	Metre	8.00	1282
	700 mm dia	Metre	10.00	1308
	800 mm dia	Metre	8.00	1476
	800 mm dia	Metre	10.00	1505
	800 mm dia	Metre	12.00	1549
	900 mm dia		8.00	1792
	900 mm dia	Metre	10.00	1824
	900 mm dia	Metre	12.00	1877
	1000 mm dia	Metre	8.00	1983
	1000 mm dia	Metre	10.00	2017
	1000 mm dia	Metre	12.00	2075
	1000 mm dia	Metre	14.00	2102
	1100 mm dia	Metre	10.00	2081
	1100 mm dia	Metre	12.00	2143
	1100 mm dia	Metre	14.00	2172
	1100 mm dia	Metre	16.00	2232
	1200 mm dia	Metre	10.00	2146
	1200 mm dia	Metre	12.00	2213
	1200 mm dia	Metre	14.00	2245
	1200 mm dia	Metre	16.00	2309
	1200 mm dia	Metre	18.00	2374
	1300 mm dia	Metre	10.00	2212
	1300 mm dia	Metre	12.00	2286
	1300 mm dia	Metre	14.00	2319
	1300 mm dia	Metre	16.00	2390
	1300 mm dia	Metre	18.00	2459
	1300 mm dia	Metre	20.00	2553
	1400 mm dia	Metre	10.00	2432
	1400 mm dia	Metre	12.00	2510
	1400 mm dia	Metre	14.00	2546
	1400 mm dia	Metre	16.00	2620
	1400 mm dia	Metre	18.00	2696
	1400 mm dia	Metre	20.00	2726
	1400 mm dia	Metre	22.00	2885

Public Health Engineering Items

1500 mm dia	Metre	10.00	2490
1500 mm dia	Metre	12.00	2573
1500 mm dia	Metre	14.00	2612
1500 mm dia	Metre	16.00	2690
1500 mm dia	Metre	18.00	2771
1500 mm dia	Metre	20.00	2879
1500 mm dia	Metre	22.00	2909
1500 mm dia	Metre	24.00	3019
1600 mm dia	Metre	10.00	2548
1600 mm dia	Metre	12.00	2637
1600 mm dia	Metre	14.00	2680
1600 mm dia	Metre	16.00	2765
1600 mm dia	Metre	18.00	2851
1600 mm dia	Metre	20.00	2961
1600 mm dia	Metre	22.00	3043
1600 mm dia	Metre	24.00	3179
1600 mm dia	Metre	26.00	3329
1700 mm dia	Metre	10.00	2611
1700 mm dia	Metre	12.00	2705
1700 mm dia	Metre	14.00	2749
1700 mm dia	Metre	16.00	2838
1700 mm dia	Metre	18.00	2930
1700 mm dia	Metre	20.00	3049
1700 mm dia	Metre	22.00	3170
1700 mm dia	Metre	24.00	3303
1700 mm dia	Metre	26.00	3449
1700 mm dia	Metre	28.00	3604
1800 mm dia	Metre	10.00	2890
1800 mm dia	Metre	12.00	2988
1800 mm dia	Metre	14.00	3036
1800 mm dia	Metre	16.00	3128
1800 mm dia	Metre	18.00	3228
1800 mm dia	Metre	20.00	3351
1800 mm dia	Metre	22.00	3480
1800 mm dia	Metre	24.00	3621
1800 mm dia	Metre	26.00	3775
1800 mm dia	Metre	28.00	3936
1900 mm dia	Metre	10.00	3309
1900 mm dia	Metre	12.00	3415
1900 mm dia	Metre	14.00	3463
1900 mm dia	Metre	16.00	3563
1900 mm dia	Metre	18.00	3667
1900 mm dia	Metre	20.00	3796
1900 mm dia	Metre	22.00	3931
1900 mm dia	Metre	24.00	4079
1900 mm dia	Metre	26.00	4240
1900 mm dia	Metre	28.00	4415
2000 mm dia	Metre	10.00	4182

Public Health Engineering Items

2000 mm dia	Metre	12.00	4292
2000 mm dia	Metre	14.00	4343
2000 mm dia	Metre	16.00	4447
2000 mm dia	Metre	18.00	4555
2000 mm dia	Metre	20.00	4692
2000 mm dia	Metre	22.00	4737
2000 mm dia	Metre	24.00	4891
2000 mm dia	Metre	26.00	5062
2000 mm dia	Metre	28.00	5244
2000 mm dia	Metre	30.00	5537
2100 mm dia	Metre	12.00	4821
2100 mm dia	Metre	14.00	4876
2100 mm dia	Metre	16.00	4983
2100 mm dia	Metre	18.00	5100
2100 mm dia	Metre	20.00	5243
2100 mm dia	Metre	22.00	5393
2100 mm dia	Metre	24.00	5553
2100 mm dia	Metre	26.00	5731
2100 mm dia	Metre	28.00	5754
2100 mm dia	Metre	30.00	6057
2100 mm dia	Metre	32.00	6101
2100 mm dia	Metre	34.00	6458
2200 mm dia	Metre	12.00	5374
2200 mm dia	Metre	14.00	5432
2200 mm dia	Metre	16.00	5544
2200 mm dia	Metre	18.00	5647
2200 mm dia	Metre	20.00	5665
2200 mm dia	Metre	22.00	5804
2200 mm dia	Metre	24.00	5973
2200 mm dia	Metre	26.00	6159
2200 mm dia	Metre	28.00	6359
2200 mm dia	Metre	30.00	6670
2200 mm dia	Metre	32.00	6854
2200 mm dia	Metre	34.00	7031
2200 mm dia	Metre	36.00	7472
2300 mm dia	Metre	12.00	6102
2300 mm dia	Metre	14.00	6160
2300 mm dia	Metre	16.00	6279
2300 mm dia	Metre	18.00	6406
2300 mm dia	Metre	20.00	6560
2300 mm dia	Metre	22.00	6745
2300 mm dia	Metre	24.00	6902
2300 mm dia	Metre	26.00	7095
2300 mm dia	Metre	28.00	7134
2300 mm dia	Metre	30.00	7454
2300 mm dia	Metre	32.00	7651
2300 mm dia	Metre	34.00	7782
2300 mm dia	Metre	36.00	8289
2400 mm dia	Metre	12.00	7347

Public Health Engineering Items

2400 mm dia	Metre	14.00	7408
2400 mm dia	Metre	16.00	7531
2400 mm dia	Metre	18.00	7662
2400 mm dia	Metre	20.00	7826
2400 mm dia	Metre	22.00	7995
2400 mm dia	Metre	24.00	8178
2400 mm dia	Metre	26.00	8380
2400 mm dia	Metre	28.00	8597
2400 mm dia	Metre	30.00	8831
2400 mm dia	Metre	32.00	9034
2400 mm dia	Metre	34.00	9290
2400 mm dia	Metre	36.00	9624
2500 mm dia	Metre	14.00	9048
2500 mm dia	Metre	16.00	9175
2500 mm dia	Metre	18.00	9341
2500 mm dia	Metre	20.00	9483
2500 mm dia	Metre	22.00	9658
2500 mm dia	Metre	24.00	9848
2500 mm dia	Metre	26.00	10060
2500 mm dia	Metre	28.00	10285
2500 mm dia	Metre	30.00	10525
2500 mm dia	Metre	32.00	10786
2500 mm dia	Metre	34.00	11062
2500 mm dia	Metre	36.00	11352
2600 mm dia	Metre	14.00	9245
2600 mm dia	Metre	16.00	9379
2600 mm dia	Metre	18.00	9522
2600 mm dia	Metre	20.00	9694
2600 mm dia	Metre	22.00	9878
2600 mm dia	Metre	24.00	10077
2600 mm dia	Metre	26.00	10295
2600 mm dia	Metre	28.00	10528
2600 mm dia	Metre	30.00	10780
2600 mm dia	Metre	32.00	11049
2600 mm dia	Metre	34.00	11335
2600 mm dia	Metre	36.00	11635
2600 mm dia	Metre	38.00	11960
2600 mm dia	Metre	40.00	12299
2600 mm dia	Metre	42.00	12651
2700 mm dia	Metre	18.00	9604
2700 mm dia	Metre	20.00	9786
2700 mm dia	Metre	22.00	9975
2700 mm dia	Metre	24.00	10182
2700 mm dia	Metre	26.00	10409
2700 mm dia	Metre	28.00	10650
2700 mm dia	Metre	30.00	10911
2700 mm dia	Metre	32.00	11188
2700 mm dia	Metre	34.00	11487
2700 mm dia	Metre	36.00	11800
2700 mm dia	Metre	38.00	12133

Public Health Engineering Items

	2700 mm dia	Metre	40.00	12481
	2700 mm dia	Metre	42.00	12910
				0
	2800 mm dia	Metre	18.00	9808
	2800 mm dia	Metre	20.00	9992
	2800 mm dia	Metre	22.00	10189
	2800 mm dia	Metre	24.00	10406
	2800 mm dia	Metre	26.00	10638
	2800 mm dia	Metre	28.00	10887
	2800 mm dia	Metre	30.00	11156
	2800 mm dia	Metre	32.00	11447
	2800 mm dia	Metre	34.00	11754
	2800 mm dia	Metre	36.00	11963
	2800 mm dia	Metre	38.00	12305
	2800 mm dia	Metre	40.00	12671
	2800 mm dia	Metre	42.00	13053
	2900 mm dia	Metre	18.00	11160
	2900 mm dia	Metre	20.00	11355
	2900 mm dia	Metre	22.00	11556
	2900 mm dia	Metre	24.00	11779
	2900 mm dia	Metre	26.00	12020
	2900 mm dia	Metre	28.00	12281
	2900 mm dia	Metre	30.00	12560
	2900 mm dia	Metre	32.00	12856
	2900 mm dia	Metre	34.00	13174
	2900 mm dia	Metre	36.00	13512
	2900 mm dia	Metre	38.00	13866
	2900 mm dia	Metre	40.00	14241
	2900 mm dia	Metre	42.00	14635
	3000 mm dia	Metre	18.00	11251
	3000 mm dia	Metre	20.00	11449
	3000 mm dia	Metre	22.00	11659
	3000 mm dia	Metre	24.00	11888
	3000 mm dia	Metre	26.00	12140
	3000 mm dia	Metre	28.00	12407
	3000 mm dia	Metre	30.00	12695
	3000 mm dia	Metre	32.00	13004
	3000 mm dia	Metre	34.00	13332
	3000 mm dia	Metre	36.00	13679
	3000 mm dia	Metre	38.00	14047
	3000 mm dia	Metre	40.00	14435
	3000 mm dia	Metre	42.00	14842

The above rates of MS Spiral pipes are based on the following raw materials cost.

MS Plates = Rs 47000/- Per MT (excluding all taxes but including freight). The rates may be revised depending upon the increase/decrease in the cost of raw materials (landed price) as per the following method. Revised Cost = Cost as per the above table "R₁". R₁ = Variation (Increase/Decrease) in cost (Rs. Per metre) due to change in cost of MS Plates = $(M_2 - M_1) / 1000 \times W_m$, M₁ = Rs 47000/-, M₂ = Cost of MS Plates (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate, W_m = Weight of MS Plates required (Kg) per meter of pipe.

Note: The duties and taxes as applicable shall be added as per rules at the time of preparation of estimate.

**15. S o R FOR POLYETHYLENE PIPES (PE - 100 GRADE) FOR WATER SUPPLY FOR
THE YEAR 2018-19.**

Sl. No	Description	6.0 kg/sqcm (SDR 21)	8.0 kg/sqcm (SDR 17)	10.0 kg/sqcm (SDR 13.6)	12.5 kg/sqcm (SDR 11)	16.0 kg/sqcm (SDR 9)
1	2	3	4	5	6	7
I	Manufacture, supply, & delivery of Polyethylene pipes (PE-100 Grade) for water supply conforming to IS 4984-2016 including transportation to any where in T.G, but excluding GST and specials etc., complete. (Supply upto 90 mm dia in coil & above 90 mm dia stright length in 6 M.)					
	Rate per Meter					
	OD 20 mm					34
	OD 25 mm					44
	OD 32 mm			42	57	70
	OD 40 mm		55	67	85	107
	OD 50 mm	69	86	103	133	166
	OD 63 mm	107	130	160	213	259
	OD 75 mm	150	187	227	302	369
	OD 90 mm	216	261	322	422	532
	OD 110 mm	366	394	474	638	782
	OD 125 mm	420	506	618	825	1002
	OD 140 mm	525	635	773	1037	1270
	OD 160 mm	692	833	1012	1351	1639
	OD 180 mm	866	1046	1278	1700	2071
	OD 200 mm	1077	1296	1571	2106	2563
	OD 225 mm	1382	1667	2041	2662	3231
	OD 250 mm	1707	2058	2515	3297	3998
	OD 280 mm	2129	2581	3185	4140	5029
	OD 315 mm	2689	3277	3990	5219	6358
	OD 355 mm	3382	4107	4997	6626	8110
	OD 400 mm	4376	5298	6442	8400	10247
	OD 450 mm	5465	6599	8054	10620	12857
	OD 500 mm	6733	8156	9937	13153	15471
	OD 560 mm	7866	9516	11562	14850	
	OD 630 mm	9900	12033	14643	17691	
	OD 710 mm	12650	15268	18571		
	OD 800 mm	16015	19394	23689		
	OD 900 mm	20289	24551			
	OD 1000 mm	25066				

Note:-

Taxes extra as applicable at the time of supply.

The IPCL resin cost adopted for the above rates are

For PE - 100 grade Rs.114900/- per MT. (Excluding Taxes)

The variation in cost of HDPE pipes due to increase / decrease in raw material cost shall be allowed as per the following price variation formula.

Price variation formula as follows:

$P2 = P1 + (A2 - A1) / 1000 \times M \times 0.95$ (for increase in raw material cost)

$P2 = P1 - (A1 - A2) / 1000 \times M \times 0.95$ (for decrease in raw material cost)

P2 = Revised pipe price in Rs. Per Metre Excluding Taxes

P1 = Existing pipe price in Rs. Per Metre Excluding Taxes

A2 = Revised price of raw material Rs. Per MT Excluding Taxes

A1 = Existing price of raw material Rs. Per MT Excluding Taxes

M = Weight of pipe in Kgs per Metre as per weight chart.

16. S o R FOR H.D.P.E FITTINGS FOR THE YEAR 2018-19.

	Manufacture, Supply, & Delivery of HDPE fittings conforming to IS 4984 - 1995 including transportation to anywhere in T.G. Excluding taxes.	
I (a)	PIPE ENDS LONG NECK	Rate per Each
	OD 50 mm	86
	OD 63 mm	109
	OD 75 mm	131
	OD 90 mm	170
	OD 110 mm	236
	OD 125 mm	424
	OD 140 mm	428
	OD 160 mm	597
	OD 180 mm	847
	OD 200 mm	1089
	OD 225 mm	1248
	OD 250 mm	1463
	OD 280 mm	1635
	OD 315 mm	1886
	OD 355 mm	3940
	OD 400 mm	5251
	OD 450 mm	8738
	OD 500 mm	9725
(b)	MS FLANGES	Rate per Each
	OD 50 mm	103
	OD 63 mm	130
	OD 75 mm	165
	OD 90 mm	178
	OD 110 mm	186
	OD 125 mm	256
	OD 140 mm	277
	OD 160 mm	364
	OD 180 mm	514
	OD 200 mm	666
	OD 225 mm	831
	OD 250 mm	982
	OD 280 mm	1113
	OD 315 mm	1309
	OD 355 mm	2218
	OD 400 mm	2750
	OD 450 mm	3592

	OD 500 mm	4112
(c)	END CAPS	Rate per Each
	OD 50 mm	58
	OD 63 mm	72
	OD 75 mm	88
	OD 90 mm	117
	OD 110 mm	135
	OD 125 mm	185
	OD 140 mm	216
	OD 160 mm	331
	OD 180 mm	538
	OD 200 mm	587
	OD 225 mm	611
	OD 250 mm	870
	OD 280 mm	891
	OD 315 mm	1217
	OD 355 mm	1877
	OD 400 mm	3282
	OD 450 mm	5278
	OD 500 mm	9725
(d)	REDUCERS	Rate per Each
	OD 50 mm x 63 mm	83
	OD 63 mm x 75 mm	117
	OD 75 mm x 90 mm	192
	OD 90 mm x 110 mm	265
	OD 110 mm x 125 mm	406
	OD 125 mm x 140 mm	561
	OD 140 mm x 160 mm	781
	OD 160 mm x 180 mm	1083
	OD 180 mm x 200 mm	1398
	OD 200 mm x 225 mm	1717
	OD 225 mm x 250 mm	2341
	OD 250 mm x 280 mm	3327
	OD 280 mm x 315 mm	4702
	OD 315 mm x 355 mm	5393
	OD 355 mm x 400 mm	7611
	OD 400 mm x 450 mm	7895
	OD 450 mm x 500 mm	10122

Public Health Engineering Items

(e)	TEES	Rate per Each
	OD 50 mm	112
	OD 63 mm	180
	OD 75 mm	216
	OD 90 mm	380
	OD 110 mm	450
	OD 125 mm	677
	OD 140 mm	933
	OD 160 mm	1608
	OD 180 mm	2181
	OD 200 mm	3004
	OD 225 mm	4265
	OD 250 mm	5837
	OD 280 mm	8174
	OD 315 mm	11650
	OD 355 mm	16612
	OD 400 mm	24334
	OD 450 mm	34562
	OD 500 mm	47469
(f)	BENDS	Rate per Each
	OD 50 mm	72
	OD 63 mm	157
	OD 75 mm	205
	OD 90 mm	350
	OD 110 mm	461
	OD 125 mm	682
	OD 140 mm	897
	OD 160 mm	1337
	OD 180 mm	1920
	OD 200 mm	2601
	OD 225 mm	3689
	OD 250 mm	5057
	OD 280 mm	7293
	OD 315 mm	10085
	OD 355 mm	13980
	OD 400 mm	21087
	OD 450 mm	31001
	OD 500 mm	42029

II	Supply and Fixing Electro Fusion Tapping saddle complying with BS EN 12201-3-2011, PN 12.5 rating & WRAS approved raw material as per BS 6920, manufactured from virgin resin of PE-80/PE-100 having blue/black colour using food grade compounded raw material for usage in drinking water system and having working pressure of 10 bar. The cost shall include testing of all materials, labour, inspection charges, transportation upto site, transit insurance, loading, unloading, stacking, providing and fixing etc. Complete as specified and directed by the Departmental Engineers, but excluding of all taxes.	Rate for SoR 2018-19
	SIZE	Rate Each
	(Main pipe outer diameter in mm & Tapping size in Inches)	Rs.
	63x1/2"	608
	63 x3/4"	608
	63 x1"	608
	75 x1/2"	608
	75 x3/4"	608
	75 x1	608
	90 x1/2"	608
	90 x3/4"	608
	90 x1"	608
	90 x 1 1/4"	608
	90 x 1 1/2"	608
	90 x2"	608
	110x1/2"	608
	110 x3/4"	608
	110 x1"	608
	110 x 1 1/4"	608
	110x1 1/2"	608
	110x2"	608
	160 x1/2"	608
	160 x3/4"	608
	160 x1"	608
	160 x 1 1/4"	608
	160 x 1 1/2"	608
	160 x 2"	608
	200 x 1/2"	722
	200 x 3/4"	722

	200 x 1"	722
	200 x 1 1/4"	722
	200 x 1 1/2"	722
	200x 2"	866
	250 x 1/2"	866
	250 x3/4"	866
	250 x1"	866
	250 x 1 1/4"	866
	250 x1 1/2"	866
	250 x 2"	866
	315 x 1/2"	866
	315 x3/4"	866
	315x1"	866
	315x1 1/4"	866
	315x1 1/2"	866
	315x2"	866

S.No.	Description	
III	HOUSE SERVICE CONNECTIONS (COMPRESSION FITTINGS)	
A	Supply and Fixing of Compression Fittings shall comply with ISO 17885 – 2015, PN-16 rating and manufactured from virgin resin of PE-80 having blue colour. Raw material must be WRAS Approved as per BS 6920 for effect on water quality intended for human consumption. Compression fittings should have moulded-in SS 304 threaded insert outlet with thread dimension conforming to IS 554/ISO 7. The cost shall include testing of all materials, labour, inspection charges, transportation up to site, transit insurance, loading, unloading, stacking, providing and fixing etc. Complete as specified and directed by the Departmental Engineers, but excluding all taxes.	Rate for SoR 2018-19
1	Compression Male/ Female threaded adapter with SS Insert D20mmx1/2"	123
2	Compression Male/Female threaded adapter with SS Insert D25mmx3/4"	151
3	Compression Male/Female threaded adapterwith SS Insert D32mmx1"	228
4	Compression Male/Female threaded elbow with SS Insert D20mmx1/2"	131
5	Compression Male/Female threaded elbow with SS Insert D25mmx3/4"	168
6	Compression Male/Female threaded elbow with SS Insert D32mmx1"	250
7	Double compression elbow 20mm	54
8	Double compression elbow 25mm	66
9	Double compression elbow 32mm	94

B	HOUSE SERVICE CONNECTIONS (Composite Strap Saddle for DI/CI Pipes)	
	Supply and Fixing of Composite Strap Saddle shall be of wrap around design, PN-16 rating. Body shall be manufactured using virgin compounded PE80/PE100 polymer with Stainless steel 304 grade stirrup plate mounted with PE straps(Engineering plastic) with Nut bolt joint. Sealing between the saddle and mains shall be obtained by using an elastomer seal(Underneath projection for self interlocking).The cost shall include testing of all materials, labour, inspection charges, transportation up to site, transit insurance, loading, unloading, stacking, providing and fixing etc. Complete as specified and directed by the Departmental Engineers, but excluding all taxes.	
	(Main pipe outer diameter in mm & Tapping size in Inches)	
1	100X1/2"	510
2	100X3/4"	527
3	100X1"	639
4	150X1/2"	728
5	150X3/4"	757
6	150X1"	864
7	200X1/2"	769
8	200X3/4"	847
9	200x1"	881
C	HOUSE SERVICE CONNECTIONS (Regulating Brass ferrule)	
	The cost shall include testing of all materials, labour, Inspection charges, Transportation up to site, transit insurance, loading, unloading, stacking, providing and fixing etc. complete as specified and directed by departmental engineers, but excluding of all taxes.	
1	1/2"	136
2	3/4"	223
3	1"	389

D	Electrofusion Couplers	
1	EF Coupler D20mm PE 100BK 4PIN	32
2	EF Coupler D25mm PE 100BK 4PIN	34
3	EF Coupler D32mm PE 100BK 4PIN	36
4	EF Coupler D40mm PE 100BK 4PIN	62
5	EF Coupler D50mm PE 100BK 4PIN	76
6	EF Coupler D63mm PE 100BK 4PIN	90
7	EF Coupler D75mm PE 100BK 4PIN	204
8	EF Coupler D90mm PE 100BK 4PIN	210
9	EF Coupler D110mm PE 100BK 4PIN	274
10	EF Coupler D125mm PE 100BK 4PIN	366
11	EF Coupler D140mm PE 100BK 4PIN	1058
12	EF Coupler D160mm PE 100BK 4PIN	938
13	EF Coupler D180mm PE 100BK 4PIN	1019
14	EF Coupler D200mm PE 100BK 4PIN	1226
15	EF Coupler D225mm PE 100BK 4PIN	1162
16	EF Coupler D250mm PE 100BK 4PIN	1558
17	EF Coupler D280mm PE 100BK 4PIN	1966
18	EF Coupler D315mm PE 100BK 4PIN	2862

E	EF ELBOW 90 Degree	
1	EF Elbow D20mm PE 100BK 4PIN	76
2	EF Elbow D25mm PE 100BK 4PIN	86
3	EF Elbow D32mm PE 100BK 4PIN	95
4	EF Elbow D40mm PE 100BK 4PIN	103
5	EF Elbow D63mm PE 100BK 4PIN	196
6	EF Elbow D75mm PE 100BK 4PIN	261
7	EF Elbow D90mm PE 100BK 4PIN	514
8	EF Elbow D110mm PE 100BK 4PIN	726
9	EF Elbow D125mm PE 100BK 4PIN	822
F	EF ELBOW 45 Degree	
1	EF Elbow D75mm PE 100BK 4PIN	294
2	EF Elbow D90mm PE 100BK 4PIN	586
G	EF EQUAL TEE	
1	EF Equal Tee D20mm PE 100BK 4PIN	71
2	EF Equal Tee D25mm PE 100BK 4PIN	78
3	EF Equal Tee D32mm PE 100BK 4PIN	91
4	EF Equal Tee D40mm PE 100BK 4PIN	121
5	EF Equal Tee D63mm PE 100BK 4PIN	292
6	EF Equal Tee D75mm PE 100BK 4PIN	383
7	EF Equal Tee D90mm PE 100BK 4PIN	546
8	EF Equal Tee D110mm PE 100BK 4PIN	614
9	EF Equal Tee D122mm PE 100BK 4PIN	1054
H	EF REDUCER	
1	EF Reducer D25X20mm PE 100BK 4PIN	38
2	EF Reducer D32X20mm PE 100BK 4PIN	42
3	EF Reducer D32X25mm PE 100BK 4PIN	47
4	EF Reducer D40X32mm PE 100BK 4PIN	59
5	EF Reducer D63X32mm PE 100BK 4PIN	98
6	EF Reducer D63X40mm PE 100BK 4PIN	104
7	EF Reducer D63X50mm PE 100BK 4PIN	109
8	EF Reducer D75X63mm PE 100BK 4PIN	330
9	EF Reducer D90X50mm PE 100BK 4PIN	618
10	EF Reducer D90X63mm PE 100BK 4PIN	451
11	EF Reducer D90X75mm PE 100BK 4PIN	411
12	EF Reducer D110X63mm PE 100BK 4PIN	543
13	EF Reducer D110X75mm PE 100BK 4PIN	998
14	EF Reducer D110X90mm PE 100BK 4PIN	587
15	EF Reducer D125X63mm PE 100BK 4PIN	702
16	EF Reducer D125X90mm PE 100BK 4PIN	755
I	EF END CAP	
1	EF End Cap D20mm PE 100BK 4PIN	69
2	EF End Cap D25mm PE 100BK 4PIN	70
3	EF End Cap D32mm PE 100BK 4PIN	72
4	EF End Cap D40mm PE 100BK 4PIN	190
5	EF End Cap D50mm PE 100BK 4PIN	247
6	EF End Cap D63mm PE 100BK 4PIN	168
7	EF End Cap D75mm PE 100BK 4PIN	392
8	EF End Cap D90mm PE 100BK 4PIN	504

9	EF End Cap D110mm PE 100BK 4PIN	596
10	EF End Cap D125mm PE 100BK 4PIN	653
11	EF End Cap D140mm PE 100BK 4PIN	1393
J	PP Clamp Saddle shall comply with AS/NZS 4793 or relevant international standards-Mechanical tapping saddles for water works purposes and designed for use with PVC/PE pipe as per IS 4985/ IS 4984 respectively. These saddles should be contoured to fit around the pipe. PP Saddles shall be blue with moulded SS female threaded outlets. Seal shall be thermoplastic elastomer rubber suitable for drinking water and SS nut-bolt-washer. Maximum working pressure rating of 10 bar.	
1	63X1/2"	640
2	63X3/4"	640
3	63X1"	640
4	75X1/2"	640
5	75X3/4"	640
6	75X1"	640
7	90X1/2"	640
8	90X3/4"	640
9	90X1"	640
10	110X1/2"	640
11	110X3/4"	640
12	110X1"	640
13	125X1/2"	640
14	125X3/4"	640
15	125X1"	640
16	140X1/2"	640
17	140X3/4"	640
18	140X1"	640
19	160X1/2"	640
20	160X3/4"	640
21	160X1"	640
22	180X1/2"	763
23	180X3/4"	763
24	180X1"	763
25	200X1/2"	763
26	200X3/4"	763
27	200X1"	763

Note: The above rates (Items from D to J) are exclusive of GST.

17. SoR FOR PVC PIPES FOR THE YEAR 2018-19

Sl. No.	Description	4.0	6	10
		Kgs/cm ²	Kgs/cm ²	Kgs/cm ²
1	2	4	5	6
1	Manufacture, Supply and Delivery of Unplasticised PVCs Pipes for potable water supplies conforming to IS : 4985/2000 (3 rd revision) with bell ends (Socket) as per specification in light Grey/Natural Ivory Grey/ Any other Color (except White) inclusive of transportation to the sub-divisional stores anywhere in TG excluding Taxes.			
	DIA IN MM Rate/Metre	Rs.	Rs.	Rs.
	20			16
	25			24
	32			36
	40		34	55
	50		51	85
	63	56	81	122
	75	82	112	178
	90	113	162	252
	110	164	234	375
	125	214	299	490
	140	267	384	608
	160	351	498	797
	180	448	641	1021
	200	544	781	1244
	225	727	1049	1669
	250	844	1284	2027
	280	1103	1623	2564
	315	1396	2041	3237
	355	1831	2657	
	400	2308	3380	

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate. The resin cost adopted for the above rates is Rs.78860/- per MT(Basic rate excluding Taxes) The variation in cost of PVC pipes due to increase / decrease in raw material cost shall be allowed subject to the following price variation formula.
The price variation formula to be adopted is as follows:

$$P2 = P1 + (A2 - A1) / 1000 \times M \times 0.95$$
 (for increase in raw material cost)

$$P2 = P1 - (A1 - A2) / 1000 \times M \times 0.95$$
 (for decrease in raw material cost)
P2 = Revised pipe price in Rs. Per Metre, P1 = Existing pipe price in Rs. Per Metre
A2 = Revised price of raw material Rs. Per MT, A1 = Existing price of raw material Rs. Per MT
M = Weight of pipe in Kgs per Metre as per weight chart.

18. SoR FOR NON- PRESSURE P.V.C.U PIPES FOR THE YEAR 2018-19

Code No	Description	
1	2	4
	Manufacture, Supply, & Delivery of unplasticized Non-pressure polyvinyl chloride(PVC-U) pipes of dark (any shade of brown) for use in underground drainage & sewerage system conforming to IS 15328/2003) <u>with solvent cement jointing</u> as per specification inclusive of transportation to the sub-divisional stores anywhere in T.G, excluding Taxes.	Rates 2018-19
	Rate per Meter	Rs.
	Pipe Series (S25)	
	OD 160 mm	297
	OD 200 mm	454
	OD 250mm	703
	OD 315 mm	1109
	Pipe Series (S20)	
	OD 125 mm	231
	OD 160 mm	370
	OD 200 mm	560
	OD 250mm	873
	OD 315 mm	1371
	Pipe Series (S16.5)	
	OD 110 mm	203
	OD 125 mm	274
	OD 160 mm	428
	OD 200 mm	666
	OD 250mm	1031
	OD 315 mm	1630

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

The resin cost adopted for the above rates is Rs.78860/- per MT (Basic rate, excluding Taxes)

The variation in cost of PVC pipes due to increase / decrease in raw material cost shall be allowed subject to the following price variation formula.

The price variation formula to be adopted is as follows:

$$P2 = P1 + (A2 - A1) / 1000 \times M \times 0.95 \text{ (for increase in raw material cost)}$$

$$P2 = P1 - (A1 - A2) / 1000 \times M \times 0.95 \text{ (for decrease in raw material cost)}$$

P2 = Revised pipe price in Rs. Per Metre

P1 = Existing pipe price in Rs. Per Metre

A2 = Revised price of raw material Rs. Per MT

A1 = Existing price of raw material Rs. Per MT

M = Weight of pipe in Kgs per Meter as per weight chart.

19. SoR FOR NON- PRESSURE P.V.C.U PIPES FOR THE YEAR 2018-19

Code No	Description	
1	2	4
	Manufacture, supply, & delivery of un-plasticized Non-Pressure Polyvinyl Chloride(PVC-U) pipes of dark (any shade of Brown) for use in underground drainage & sewerage system conforming to IS 15328/2003) with <u>Elastomeric Seal Ring Joints</u> (Ringtite PVC Pipes)as per specification inclusive of transportation to the Sub-Divisional stores any where in T.G, excluding Taxes.	Rates 2018-19
	Rate per Meter	Rs.
	Pipe Series (S25)	
	OD 160 mm	318
	OD 200 mm	482
	OD 250mm	749
	OD 315 mm	1179
	Pipe Series (S20)	
	OD 125 mm	248
	OD 160 mm	391
	OD 200 mm	595
	OD 250mm	927
	OD 315 mm	1455
	Pipe Series (S16.5)	
	OD 110 mm	216
	OD 125 mm	291
	OD 160 mm	457
	OD 200 mm	704
	OD 250mm	1095
	OD 315 mm	1727

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.
The resin cost adopted for the above rates is Rs78860/- per MT (Basic rate excluding Taxes)
The variation in cost of PVC pipes due to increase / decrease in raw material cost shall be allowed subject to the following price variation formula.
The price variation formula to be adopted is as follows:
 $P2 = P1 + (A2 - A1) / 1000 \times M \times 0.95$ (for increase in raw material cost)
 $P2 = P1 - (A1 - A2) / 1000 \times M \times 0.95$ (for decrease in raw material cost)
P2 = Revised pipe price in Rs. Per Metre
P1 = Existing pipe price in Rs. Per Metre
A2 = Revised price of raw material Rs. Per MT
A1 = Existing price of raw material Rs. Per MT
M = Weight of pipe in Kgs per Metre as per weight chart.

20. SoR FOR CENTRIFUGALLY CAST (SPUN) IRON PRESSURE PIPES

Sl. No.	Description	Unit	S.S. Rates for 2018-19		
			4	5	6
I	Socket and Spigot Centrifugally Cast (Spun) Iron pressure pipes for water, Gas and Sewage conforming to specification No: IS 1536/2001 (third revision) with amdt. No: 1 & 2 in standard lengths of 3.66 m, 4 m, 4.5m, 5 m, 5.5 m & 6 m and details given below, suitable either for lead jointing or rubber gasket (push on) jointing at purchasers option at ex-factory excluding transportation & taxes.		LA Class (Rs)	A Class (Rs)	B Class (Rs)
	Nominal dia (in MM)				
	80	Rmt	853	925	995
	100	Rmt	1040	1143	1221
	125	Rmt	1316	1437	1548
	150	Rmt	1600	1753	1889
	200	Rmt	2336	2536	2744
	250	Rmt	3149	3428	3709
	300	Rmt	4060	4441	4810
	350	Rmt	5183	5623	6100
	400	Rmt	6311	6896	7443
	450	Rmt	7633	8386	9045
	500	Rmt	9016	9821	10625
	600	Rmt	11933	13027	14110
	700	Rmt	15670	17120	18497
	750	Rmt	17551	19190	20817
	800	Rmt	19646	21407	23157
	900	Rmt	23940	27403	28303
	1000	Rmt	28762	31418	33957
II	Conveyance of Centrifugally Cast (Spun) Iron Pressure Pipes and accessories including loading at Factory, un-loading at site and stacking for the following sizes. (The Minimum distance/lead in Km for destination below 100 Km to be taken as 100 Km)		Class		
	SIZE IN MM	UNIT	LA	A	B
	80	Per KM/RMT	0.27	0.27	0.27
	100	Per KM/RMT	0.27	0.27	0.27
	125	Per KM/RMT	0.41	0.41	0.41
	150	Per KM/RMT	0.41	0.41	0.41
	200	Per KM/RMT	0.69	0.69	0.69
	250	Per KM/RMT	0.83	0.83	0.83
	300	Per KM/RMT	1.10	1.24	1.24
	350	Per KM/RMT	1.51	1.51	1.65
	400	Per KM/RMT	1.78	1.78	1.92

Public Health Engineering Items

450	Per KM/RMT		2.07	2.20	2.34
500	Per KM/RMT		2.47	2.62	2.75
600	Per KM/RMT		2.47	2.62	2.75
700	Per KM/RMT		2.47	2.62	2.75
750	Per KM/RMT		4.12	4.39	4.68
800	Per KM/RMT		7.00	7.00	7.00
900	Per KM/RMT		7.00	7.00	7.00
1000	Per KM/RMT		7.00	7.00	7.00

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

Price Variation Formula due to Increase / Decrease in the cost of pig iron.

$$P2 = P1 + (R2 - R1) / 1000 * M * 1.0$$

Where M = Weight of pipe in kg per metre.

P2 = Revised rate of pipe in Rs. per Rmt.

P1 = Rate of pipe in Rs. per Rmt. as per above table.

R2 = Price of Pig Iron (Rs per MT excluding Taxes) at the time of preparation of estimate.

R1 = Price of Pig Iron (Rs per MT excluding Taxes) at the time of preparation of SoR = Rs.
32000/-

21.S o R FOR DUCTILE IRON PRESSURE PIPES FOR THE YEAR2018-19

Sl. No.	Description	Unit	S.S. Rate for 2018-19	
1	2	3	4	5
1	Centrifugally cast (Spun) Ductile Iron pressure pipes for water, gas and sewage with <u>Socket Spigot ends</u> conforming to IS.: 8329/2000 in standard working lengths of 4, 5 5.5 & 6 meter for classification K9 & K7 suitable for push-on-joint (rubber gasket d jointing) with cement mortar lining inside the pipes with outside zinc coating. Rates are ex-factory, excluding transportation & taxes.			
	Nominal Dia in mm	Rmt	K7	K9
	100	Rmt	859	1023
	150	Rmt	1197	1515
	200	Rmt	1661	2025
	250	Rmt	2223	2659
	300	Rmt	2851	3368
	350	Rmt	3586	4198
	400	Rmt	4347	5058
	450	Rmt	5220	6049
	500	Rmt	6215	7039
	600	Rmt	8266	9285
	700	Rmt	10682	11985
	750	Rmt	11962	13451
	800	Rmt	13232	14846
	900	Rmt	16138	18099
	1000	Rmt	19140	21466
	1100	Rmt		23113
	1200	Rmt		27003
2	Centrifugally cast (Spun) Ductile Iron pressure pipes for water, gas and sewage <u>with plain ends</u> conforming to IS:8329/2000in standard working lengths of 4, 5, 5.5 & 6 meter for classification K9 & K7 with cement mortar lining inside the pipes with outside zinc coating. Rates are ex-factory, excluding transportation & taxes.			
	Nominal Dia in mm		K7	K9
	100	Rmt	738	941
	150	Rmt	1066	1385
	200	Rmt	1502	1881
	250	Rmt	1956	2494
	300	Rmt	2566	3155
	350	Rmt	3219	3921
	400	Rmt	3891	4722
	450	Rmt	4650	5582
	500	Rmt	5532	6650
	600	Rmt	7320	8595

Public Health Engineering Items

	700	Rmt	9661	10903
	750	Rmt	10798	12216
	800	Rmt	11950	13487
	900	Rmt	14449	16310
	1000	Rmt	17177	19389
	1100	Rmt		20802
	1200	Rmt		24200
3	Centrifugally cast (Spun) Ductile Iron pressure pipes with <u>flanged (welded) ends</u> for water, gas, sewage conforming to IS: 8329/2000 in standard working lengths of 1,2,3, 4, 5 mts for classification K9 with cement mortar lining inside the pipes with outside zinc coating. Rates are ex-factory, excluding transportation & taxes.			
	Nominal Dia in mm		1.0 Mt. Length	2.0 Mt. Length
	100	Each	3418	4497
	150	Each	4845	6425
	200	Each	6434	8596
	250	Each	8411	11294
	300	Each	10540	14187
	350	Each	16446	20970
	400	Each	20236	25699
	450	Each	24431	30876
	500	Each	29620	37185
	600	Each	41913	51862
	700	Each	49949	62573
	800	Each	61598	77215
	900	Each	73437	92319
	1000	Each	93650	115942
	1100	Each	109077	133010
			3.0 Mt. Length	4.0 Mt. Length
	100	Each	5576	6168
	150	Each	8006	8982
	200	Each	10761	12225
	250	Each	14177	16159
	300	Each	17828	20428
	350	Each	25495	28215
	400	Each	31162	34062
	450	Each	37320	40663
	500	Each	44750	48596
	600	Each	61811	66469
	700	Each	75199	81431
	800	Each	92829	100611
	900	Each	111204	120800
	1000	Each	139101	149550
	1100	Each	157384	186911

			5.0 Mt. Length		
	100	Each	7224		
	150	Each	10551		
	200	Each	14386		
	250	Each	19040		
	300	Each	24079		
	350	Each	32737		
	400	Each	39518		
	450	Each	47105		
	500	Each	56149		
	600	Each	76397		
	700	Each	94035		
	800	Each	116198		
	900	Each	143500		
	1000	Each	171959		
	1100	Each	201954		
4	Conveyance of Ductile Iron Pressure Pipes and accessories including loading at Factory, unloading at site and stacking for the following sizes		Class		WELDED DOUBLE FLANGED PIPES
	SIZE IN MM	UNIT	K7	K9	K9
	100	Per KM/RMT	0.23	0.23	0.34
	150	Per KM/RMT	0.34	0.34	0.45
	200	Per KM/RMT	0.34	0.45	0.68
	250	Per KM/RMT	0.45	0.57	0.91
	300	Per KM/RMT	0.68	0.68	1.13
	350	Per KM/RMT	0.79	0.91	1.36
	400	Per KM/RMT	0.91	1.02	1.59
	450	Per KM/RMT	1.13	1.25	1.93
	500	Per KM/RMT	1.36	1.47	2.27
	600	Per KM/RMT	1.93	1.93	2.95
	700	Per KM/RMT	2.83	2.83	4.31
	750	Per KM/RMT	3.40	3.40	5.21
	800	Per KM/RMT	5.78	5.78	8.61
	900	Per KM/RMT	5.78	5.78	8.61
	1000	Per KM/RMT	5.78	5.78	8.61
	1100	Per KM/RMT	5.78	5.78	
	1200	Per KM/RMT	6.18	6.18	
5	Supply and Delivery of Polyethylene (PE) Sleeves for Ductile Iron Pipes used to guard the pipe against corrosion.				
	DIA IN MM				
	100 mm dia		RMT	41	
	150 mm dia		RMT	50	
	200 mm dia		RMT	64	
	250 mm dia		RMT	74	
	300 mm dia		RMT	81	

Public Health Engineering Items

	350 mm dia		RMT	91
	400 mm dia		RMT	127
	450 mm dia		RMT	127
	500 mm dia		RMT	154
	600 mm dia		RMT	154
	700 mm dia		RMT	200
	750 mm dia		RMT	200
	800 mm dia		RMT	200
	900 mm dia		RMT	227
	1000 mm dia		RMT	227
	1100 mm dia		RMT	227
6	Additional price for HAC(high alumina cement motar lining)			
	DIA IN MM			
	100 mm dia		RMT	61
	150 mm dia		RMT	80
	200 mm dia		RMT	98
	250 mm dia		RMT	117
	300 mm dia		RMT	125
	350 mm dia		RMT	143
	400 mm dia		RMT	196
	450 mm dia		RMT	196
	500 mm dia		RMT	242
	600 mm dia		RMT	242
	700 mm dia		RMT	310
	750 mm dia		RMT	310
	800 mm dia		RMT	310
	900 mm dia		RMT	354
	1000 mm dia		RMT	354
	1100 mm dia		RMT	354
	1200 mm dia		RMT	354

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

Price Variation Formula due to Increase / Decrease in the cost of pig iron.

$P2 = P1 + (R2 - R1) / 1000 * M * 0.96$, Where

M = Weight of pipe in kg per metre as per I.S.8329-2000.

P2 = Revised rate of pipe in Rs. per Rmt.

P1 = Rate of pipe in Rs. per Rmt. as per above table.

R2 = Price of Pig Iron(Rs per MT excluding Taxes) at the time of preparation of estimate.

R1 = Price of Pig Iron(Rs per MT excluding Taxes) at the time of preparation
of SoR =Rs.32000/-

22 S o R FOR DUCTILE IRON FITTINGS FOR THE YEAR 2018-19

Sl. No.	Description	Unit	
1	2	3	
	Centrifugally cast (spun) Ductile Iron Fittings conforming to IS:9523/2000 having dimensions as per table. The rates mentioned here under are for fittings, zinc coated externally with inside mortar lining (with finishing as per class 13/IS 9523/2000) (ex-works) Excluding Transportation and Taxes.		
I	DI double socket branch flange Tee		
	Upto 500 x 500 mm dia	Kg	105
	Above 500 x 500 mm dia	Kg	117
II	DI All Socket Tees		
	Upto 300 x 300 mm dia	Kg	105
	Above 300 x 300 mm dia	Kg	117
III	DI Double socket Tapers (Reducer)		
	Upto 500 x 450 mm dia	Kg	105
	Above 500 x 450 mm dia	Kg	117
IV	DI Flanged Socket		
	Upto 500 mm dia	Kg	105
	Above 500 mm dia	Kg	117
V	DI Flanged Spigot		
	Upto 500 mm dia	Kg	105
	Above 500 mm dia	Kg	117
VI	DI Double Socket Duck Foot Bend		
	Upto 300mm dia	Kg	105
	Above 300mm dia	Kg	117
VII	DI Double Flange Duck/Foot bend		
	Upto 300 mm dia	Kg	105
	Above 300 mm dia	Kg	117
VIII	DI All socket Cross.		
	Upto 300 x 300 mm dia	Kg	105
	Above 300 x 300 mm dia	Kg	117
IX	DI All Flange Tee		
	Upto 500 x 500 mm dia	Kg	105
	Above 500 x 500 mm dia	Kg	117
X	DI All Flange Cross		
	Upto 300 x 300 mm dia	Kg	105
	Above 300 x 300 mm dia	Kg	117
XI	DI Double Flange Reducer		
	Upto 500 x 450 mm dia	Kg	105

Public Health Engineering Items

	Above 500 x 450 mm dia	Kg	117
XII	Blank Flange		
	Upto 500 mm dia	Kg	105
	Above 500 mm dia	Kg	117
XIII	Mechanical Joints		
	Upto 300 mm dia	Kg	105
	Above 300 mm dia	Kg	117
XIV	DI Double Socket Bends		
	Upto 500mm dia	Kg	105
	Above 500 mm dia	Kg	117
XV	DI Double Flanged Bends		
	Upto 500mm dia	Kg	105
	Above 500 mm dia	Kg	117

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

23. S o R FOR RUBBER GASKETS SUITABLE FOR C.I/ D.I. S/S PIPES

Sl. No.	Description	Unit	S.S Rates For 2018-19
1	2	3	4
1	Manufacture as per BIS:12820/2004 with S.B.R. Quality Rubber confirming to BIS: 5382/85, supply and delivery of Rubber Gaskets suitable for C.I/ D.I S/S pipes anywhere in T.G. F.O.R. Destination departmental stores including cost of material, loading, incidental handling with companies standard packing, transportation, unloading & stacking but excluding taxes.		
	80mm dia	Each	61
	100mm dia	Each	94
	125mm dia	Each	112
	150mm dia	Each	138
	200mm dia	Each	168
	250mm dia	Each	187
	300mm dia	Each	285
	350mm dia	Each	361
	400mm dia	Each	393
	450mm dia	Each	423
	500mm dia	Each	586
	600mm dia	Each	696
	700mm dia	Each	923
	750mm dia	Each	1026
	800mm dia	Each	1229
	900mm dia	Each	1484
	1000mm dia	Each	1623

24. S O R FOR CI PIPES AND SPECIALS FOR THE YEAR 2018-19

Sl. No.	Description	Quality or sort	Rate/ Kg including packing, forwarding, Transit risk and delivery any where in T.G. for the year 2018-19. Rs.
1	2	3	4
	Manufacture, Supply and Delivery of Cast Iron Fittings (spls.) Conforming to IS. No. 7181/1986, 5531/1988, 3950/1979 and C.I.D Joints confirming to is No.8794/1988 at site of work anywhere in T.G. Including, loading, unloading, transportation to site of work stacking at site transit risk and package, excluding all taxes.	I.S. No. 7181/1986 5531/1988 3950/1979 & 8794/1988	79.38

Foot Note: The rate of CI pipes, CI Specials and CID Joints etc., which are to be incorporated in the SSR are based on the following raw materials cost.

Pig Iron: Rs.32000/- per M.T.(Excluding Taxes)

Coke : Rs.36,800/- per M.T. .(Excluding Taxes)

The rates may be revised depending upon the increase/decrease in the cost of raw materials as per the following method. For every increase/decrease of Rs.1000/- in the cost of raw materials or part there of proportionately.

In respect of Pig Iron: The increase/decrease in cost of CI Specials per Kg is 3.43%.

In respect of coke: The increase/decrease in cost of CI Specials per Kg is 0.67%.

The above price is at site of work , Taxes extra as applicable at the time of supply.

Note: The taxes as applicable shall be added as per rules at the time of preparation of estimate.

25. S o R FOR WATER HAMMER CONTROL DEVICES FOR THE YEAR 2018-19**(Rate Each in Rs.)**

Sl. No.	Description	TEST PRESSURE				Additional charges for Flanged ended valves
		10 Kgs/cm ²	15 Kgs/cm ²	20 Kgs/cm ²	25 Kgs/cm ²	
1	2	3	4	5	6	7
1	Manufacture, supply and delivery of zero velocity valve/ PSLV with CI body with flanged ends as per AWWA, ex-factory excluding transportation etc., complete.					
	DIA IN MM Rate/Each	Rs.	Rs.	Rs.	Rs.	
	150	66761	77929	82534	90790	
	200	69746	80207	86224	94844	
	250	78693	90496	97284	107013	
	300	88559	101843	109484	120430	
2	Manufacture, Supply and delivery of zero velocity valve/ PSLV with MS Fabricated Body with Plain ends. as per AWWA, Ex-factory excluding transportation etc. Complete.					
	DIA IN MM Rate/ Each	Rs.	Rs.	Rs.	Rs.	Rs.
	350	94324	108471	116607	128266	8173
	400	104261	119899	128891	141786	9854
	450	121263	139453	149912	164904	11776
	500	140150	161170	173259	190585	12740
	525/550	150537	171131	188479	207326	16464
	600	168552	193833	208371	229208	23486
	650	188674	207544	235905	254653	26559
	700	219922	242033	274962	296954	31726
	750	243595	267989	304524	328919	35619
	800	296742	341256	366847	403530	40138
	900	352697	405602	427824	479625	48552
	1000	427824	427824	427824	594508	61649
	1050	432102	432102	432102	625969	64116
	1100	545067	618062	673855	741242	71385
	1200	656037	721655	822120	885694	80758

Public Health Engineering Items

	1400	984056	1082480	1233180	1328536	113566
	1500	1146593	1261241	1433209	1547739	115837
	1600	1169524	1286463	1461874	1578691	121137
3	Manufacture, Supply and delivery of Air Cushion valves / Quick Released damped Air Valves (QRDA) as per AWWA, Ex-factory excluding transportation etc., complete.					
	DIA IN MM Rate/Each	Rs.	Rs.	Rs.	Rs.	
	100	61050	70209	77228	84948	
	150	92776	106693	117361	129097	
	200	99025	113877	125267	137793	
4	Conveyance of valves and accessories including loading at factory and unloading, stacking at site of work.	5% on basic cost of valves				

Note: The taxes as applicable shall be added as per rules at the time of preparation of estimate.

26. S o R FOR CAST STEEL VALVES FOR THE YEAR 2018-19.

Sl.No.	Description	TEST PRESSURES			
		3	4	5	6
1	Manufacture, Supply and Delivery of Cast Carbon Steel rising / Non rising spindle sluice valve design standard as per IS:14846/2000 for Water Supply Scheme with SS Spindle & SS Working parts the grade of Cast Steel for body Bonnet, Dome, Stool Cover, Wedge, Stuffing Box, Gland Thrust Plate, shall be as per IS : 1030 / 1998. (The valve shall be used for High pressure schemes & pumping stations) excluding transportation etc., complete. ISI Marked	Class-150 Body 425PSI Seat 300 PSI PN-20	Class-300 Body 1100 PSI Seat 750 PSI PN-30	for Enclosed Spur Gear Arrangement.	
	Rate/Each			Class 150	Class 300
	DIA IN MM	Rs.	Rs.	Rs.	
	40	5443	10885		
	50	8968	16326		
	65	11223	20408		
	80	13461	24490		
	100	17952	32652		
	125	23023	41862		
	150	26936	48978		
	200	43504	88435	53246	97289
	250	61231	139191	70973	148047
	300	77349	175820	87089	184675
	350	103142	234428	116424	246503
	400	209520	476181	222803	488256
	450	234846	523275	248130	535352
	500	276289	627930	289572	640006
	600	315429	715841	328713	727917
	700	610138		623421	
	750	656187		674783	
	800	759795		778391	
	900	897941		916537	
	1000	1151206		1169802	
	1100	1243302		1261898	
	1200	1404471		1423067	

2	Manufacture, Supply and delivery of Cast Carbon Steel Bolted Cover Non Return Valve as per IS : 5312 / Part1 /2004. Round body heavy duty material spec. As per IS:1030/1998 with SS Hinge & Seat Rings. excluding transportation etc., complete. Dia in mm.				
	Rate/Each Rs.	PN-20	PN-30		
	40	5410	9838		
	50	8051	14651		
	65	10061	18315		
	80	12075	21978		
	100	16567	29305		
	125	20722	37677		
	150	22784	41443		
	200	34536	75351		
	250	48351	125586		
	300	69072	156983		
	350	92097	209311		
	400	188798	429086		
	450	211822	481413		
	500	248661	565138		
	600	287801	654093		
3	Manufacture, Supply and delivery of Cast Carbon Steel Multi Door Type Non return Valve as per IS; 5312/ Part II / 1984 Heavy duty material spec. as per 1030/1998 with SS hinges & Seat Rings excluding transportation and GST etc., complete.	PN-20			
		Rate/Each			
	500	418619			
	600	523275			
	700	627930			
	750	774448			
	800	1151206			
	900	1381446			
	1000	1507032			
	1100	1779136			
	1200	1800067			

4	Manufacture, Supply and delivery of Cast Carbon Steel D/F Butter fly Valves conforming to IS; 13095/1991 manually heavy duty Gear operation, excluding transportation and GST etc., complete.				
	DIA IN MM Rate/Each	PN- 1.0/1.6	PN-2.5		
	300	79899	99601		
	350	107481	135062		
	400	129153	167459		
	450	156514	198105		
	500	178405	227657		
	600	207957	267059		
	700	326164	404968		
	750	404968	503473		
	800	444370	552726		
	900	503473	631531		
	1000	798991	996002		
	1100	996002	1291518		
	1200	1193013	1291518		
	1300	1597980	1784047		
	1400	1685540	1882552		
	1500	1784047	1981058		
	1600	2079563	2375081		
	1800	2572092	2769103		
	2000	3557148	3852664		
5	Conveyance of valves and accessories including loading at factory and unloading, stacking at site of work.	5% on basic cost of valves			

Note : Taxes as applicable shall be added as per rules at the time of preparation of estimate.

27. S o R FOR DI D/F VALVES FOR THE YEAR 2018-19.Rate/Each in Rs.

Sl. No.	Description	TEST PRESSURE			
		3	4	5	6
1	2	3	4	5	6
1	Manufacture, supply and delivery of Single Chamber DI <u>Air Valve</u> with Body and cover in Ductile Iron of grade GGG-40/SG-400/15 or GGG-50/SG-500/7 or equivalent grade as per I.S.3896-part2-1985 and subsequent revisions. All internal parts such as float, shell etc., all cover bolts, of stainless steel, and Gaskets and seals of EPDM food grade quality Epoxy powder coating (EP-P) inside and outside colour blue. Drilled as per requirement of the dept.				
	DIA IN MM	PN 10	PN 16	PN 25	
	25 (Screwed End)	8559	8559		
	32 (Screwed End)	17023	17023		
	40 (Screwed End)	17870	17870		
	50	30745	30745	39560	
	80	41016	41016	41016	
	100	47888	47888	55070	
	150	58298	58298	66625	
	200	63850	63850	74260	
	300	103455	103455	113905	
2	Manufacture, Supply and delivery of DI D/F <u>Gate Valves</u> (Soft Seated) Resilient seated soft sealing gate valves (Sluice valves) with body bonnet of ductile cast iron of grade GGG-40/ SG-400/15 or GGG-50/SG-500/7 or equivalent grade as per I.S.3896-part2-1985 and subsequent revisions, wedge fully rubber lined with EPDM food grade quality and seals of NBR and the valves should be of vacuum tight and 100% leak proof with face to face dimensions as per BS5163-89/IS14846-2000/DIN 3202 F 4. All the valves should be with Electrostatic powder coating both inside and outside pocket less body passage. Drilled as per requirement of the dept.				
	DIA IN MM	PN 10	PN 16	PN 25	
	50	7360	7360	12439	
	80	9426	9426	15337	
	100	12434	12434	17389	
	150	19577	19577	29004	
	200	32532	32532	48920	
	250	45058	45058	72663	
	300	68098	68098	117862	
	350	206179	206179	344900	

Public Health Engineering Items

	400	216249	216249	350810	
	450 With By-pass & Gear	372041	372041	699327	
	500 With By-pass & Gear	395083	395083	742639	
	600 With By-pass & Gear	508754	508754	956304	
3	Manufacture, Supply and delivery of DI D/F Butterfly Valves with GGG-40/SG-400/15 or GGG-50/SG-500/7 or equivalent grade as per I.S.3896-part 2-1985 and subsequent revisions, Double eccentrically Disc., with renewable soft seal on the disc and Body seat face of stainless steel / nickel weld overlay, with powder or liquid Epoxy coating with minimum thickness of 250 microns applied on both body and disc inside and outside. Face to face dimensions as per AWWA C 504 or BS 5155 or IS:13095. Drilled as per requirement of dept.				
	DIA IN MM	<u>PN 10</u>	<u>PN 16</u>	<u>PN 25</u>	<u>PN 40</u>
	150	78461	78461	80993	107529
	200	85456	88230	103668	130748
	250	99568	102462	120012	183215
	300	118806	122304	136415	192382
	350	135933	148297	172720	209389
	400	171210	193973	225841	320123
	450	187958	208609	265678	
	500	189744	223971	356159	395586
	600	248686	351120	413392	433457
	700	490950	518029	778576	
	800	532249	554677	1136362	
	900	696076	696076		
	1000	872565	872565	1647797	
	1100	1003450	1003450		
	1200	1169137	1169137	1840795	
	1400	2512703	2512703		
	1600	2996167	2996167		
	1800	3674971	3674971		
	2000	6277801	6277801		
	2200	9063238	9063238		

4	Manufacture, Supply and delivery of DI D/F Swing Check Valves Slanted/Straight seated with metallic, corrosion proof and wear resistant seat faces resilient seat, Body and Disc of ductile cast iron GGG-40/SG 400/15 or GGG-50/SG-500/7 or equivalent grade as per IS 3896(part2)-1985 and subsequent revisions. All the inside and outside of the body is to be coated with double coating of epoxy liquid. Drilled as per requirement of dept.. Specification and Dimensions as per I.S 5312 or equivalent codes.				
	DIA IN MM	<u>PN 10</u>	<u>PN 16</u>	<u>PN 25</u>	<u>PN 40</u>
	100	31090	34544		
	150	52206	58007		
	200	79170	83880	123017	161019
	250	87128	92406	149407	188790
	300	109214	115710	181886	230443
	350	128539	136253	206897	251555
	400	156146	165484	209494	272424
	500	198533	210552	265521	349402
	600	297869	315775	391423	505935
	700	429941	468873	573115	726768
	800	537581	585885	722674	915539
5	Manufacture, supply and delivery of DI (Ductile Iron) Wafer Butterfly valves conforming to IS 13095 (and its amendments). With hand lever below 150 mm, with Worm gear for 200 mm and above.				
	DIA IN MM	<u>PN 10</u>	<u>PN 16</u>		
	40	5330	5330		
	50	5330	5330		
	65	5767	5767		
	80	6289	6892		
	100	8842	9166		
	125	11111	11111		
	150	15005	15330		
	200	20359	20359		
	250	27092	27092		
	300	38121	38121		
	350	46260	50183		

6	Manufacture and supply of “Air Release – Vacuum Break – Surge Alleviation” Valve for potable water. Construction material Cylindrical Body of Ductile Iron GGG-50/SG-500-7, Three cylindrical Floats of High Density Poly Ethylene. Baffle Plate, Orifice venture and all construction bolts of stainless steel, coating internally and externally. Electrostatically applied epoxy (1) Flange connection as per IS 1538, (2) Female (BSP/NPT Threaded for sizes 25 mm				
	DIA IN MM	<u>PN 10</u>	<u>PN 16</u>	<u>PN 25</u>	
	25 mm dia	14073	-	-	
	50 mm dia	-	45353	45353	
	80 mm dia	-	71151	71151	
	100 mm dia	-	78454	78454	
	150 mm dia	-	160890	160890	
	200 mm dia	-	241636	241636	
7	Manufacturer and supply of Metal Seated Gate Valve Non- Rising Stem with by-pass & gear operated, for water and sewage applications& dimensions confirming to IS 14846-2000. Material construction Body, Bonnet, Wedge and Distance Piece of ductile iron GGG-50/SG500/7 DIN1693 or equivalent. Body seat, Wedge seat and Stem nut of Aluminum Bronze BS EN 1982 CC331G/equivalent, Stem of Stainless steel BS EN 100881.4057 or equivalent. 'O' Seal Body/Cover is of EPDM food grade Quality. Fastners is of Steel Sheraplex coated to BS 3692 Gr 8.8 or equivalent. Body and Bonnet internally and externally blue two pack epoxy to WIS 4-52-01 Class B. Leakage tested for seat 1.1 PN and body 1.5 x PN. Flange connection as per IS 1538, ISI Marked.				
	DIA IN MM	<u>PN 10</u>	<u>PN 16</u>		
	DN700	1303581	1303581		
	DN800	1648187	1648187		
	DN 900	1863121	1863121		
	DN 1000	2087471	2087471		
	DN 1100	2844366	2844366		
	DN 1200	3233031	3233031		

NOTE:-All the prices are ex-go down /ex-factory. Taxes Extra as applicable at the time of supply. Packaging and Transportation extra at 5% on basic cost. The duties and taxes as applicable may be added as per rules at the time of preparation of estimate. The grade of DI & conformation to specifications shall be certified by a third party Quality Control Agency approved by indenting authority at the cost of supplier.

28. S o R FOR SFRC MAN-HOLE FRAME WITH COVERS FOR THE YEAR 2018-19

Sl.No.	Description	Unit	SoR for 2018-19.
1	2	3	4
I	Manufacture as per BIS:12592 (Part 1&2) Supply & Delivery of manhole covers and frames with ISI marking anywhere in T.G., F.O.R. destination including, loading, unloading & stacking at site but excluding all taxes, as applicable. <u>I.S.I Mark</u>		Rs.
a)	M.D. -10 with 500mm diaclear opening	Each	1782
b)	H.D.-20 with 500mm diaclear opening	Each	2297
c)	H.D.-10with 560mmdia clear opening(New item)	Each	1802
d)	H.D.-20 with 560mm diaclear opening	Each	2464
e)	H.D.-35 with 560mm diaclear opening.	Each	2640
f)	24x24 MD 10	Each	1943
g)	24x18 MD 10	Each	1788
h)	24x24 HD 20	Each	2184
i)	24x18 HD 20	Each	2225
j)	Deviders 0.9 mtr.	Each	4571
II	Manufacture as per company's standard specification supply and delivery of encapsulated plastic steps for man holes anywhere in T.G. including cost of materials packing as per company's standards, loading, transportation, unloading and stacking at site of work etc, complete but excluding taxes and others etc., as applicable.	Each	186

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

29. S o R FOR CI and M.S. DISMANTLING JOINTS FOR THE YEAR 2018-19

Sl.No.	Description	Unit	2018-19.
1	2	3	4
1	Manufacture, Supply and Delivery of C.I Dismantling Joints with both side flange end suitable for installation in between flange end pipes. These rates are excluding all Taxes and transportation charges etc., complete.		Rs.
	Nominal Dia. In MM		
	50	Each	4836
	80	Each	5294
	100	Each	6947
	125	Each	8932
	150	Each	9799
	200	Each	13896
	250	Each	16542
	300	Each	26468
2	Manufacture, Supply and Delivery of M.S. Dismantling Joints with both side flange end suitable for installation in between flange end pipes. Thickness as per IS: 7322. These rates are excluding all Taxes and transportation charges etc., complete	Each	
	Nominal Dia. In MM		
	350		62774
	400		71932
	450		78041
	500		93407
	600		108691
	700		120919
	750		123979
	800		148433
	900		154856
	1000		185493
	1100		200807
	1200		231441
	1300		262072
	1400		293301
	1600		323994
	1800		383675
	2000		477467
3	Conveyance of joints and accessories including loading at factory and unloading, stacking at site of work.		5% on basic cost
Note:	Taxes as applicable shall be added as per rules at the time of preparation of estimate.		

30. OTHER ITEMS FOR THE YEAR 2018-19

Sl. No.	Description	Unit	S.S. Rates (Rs.) for 2018-19.
1	2	3	4
1	SUPPLY AND DELIVERY OF PIG LEAD 99.99 % PURE EXCLUDING ALL TAXES.	Per Kg	300
2	SUPPLY AND DELIVERY OF LEAD WOOL BEST QUALITY EXCLUDING ALL TAXES.	Per Kg	165
3	SUPPLY AND DELIVERY OF SPUN YARN OF BEST QUALITY EXCLUDING ALL TAXES.	Per Kg	126
4	SUPPLY AND DELIVERY OF RUBBER PACKING EXCLUDING ALL TAXES.		
	a) 3 MM THICK	Per Kg	101
	b) 6 MM THICK	Per Kg	101
5	SUPPLY AND DELIVERY OF BOLTS AND NUTS WITH DOUBLE WASHERS EXCLUDING ALL TAXES. (1/2" TO 1")	Per Kg	As per I&CAD SoR

31. S.S. RATES FOR GLASS FIBRE REINFORCED PLASTIC (GRP) PIPES

The PH & ME department deleted GRP pipes from the SSR 2013-14 and was not included in SoR 2014-15. The ENC (RWS) requested in the SoR meeting on 06.05.2015 to incorporate GRP pipes from SoR-2015-16 for carrying out O&M works, accordingly the following rates are adopted and ENC(RWS) addressed this office, vide Lr no AE/DEE/TDWSP(Plg)/2015 dt 22.05.2015 to incorporate GRP pipes from SoR 2015-16 for O&M works.

Sl.No.	Description						
1	2						
1	GLASSFIBRE REINFORCED PLASTIC (GRP*) PIPES CONFORMING TO IS 12709 - 1994 Stiffness class 124 Kpa including transportation to any where in T.S. with jointing materials i.e., Reka couplings, Rubber Gaskets etc., for jointing pipes including cost of specials, loading, un-loading and stacking etc.,complete but excluding all taxes.						
	Size	Unit	SoR For 2017-18			Rs.	
			3 Bar	6 Bar	9 Bar	12 Bar	15 Bar
	300 mm dia	Metre	2463	2532	2603	2671	2787
	350 mm dia	Metre	2644	2681	2764	2841	2970
	400 mm dia	Metre	2943	3074	3189	3335	3468
	450 mm dia	Metre	3454	3588	3784	3970	4196
	500 mm dia	Metre	3598	3744	3957	4205	4445
	600 mm dia	Metre	5001	5207	5523	6085	6369
	700 mm dia	Metre	5995	6268	7030	7667	8249
	800 mm dia	Metre	7339	7685	8297	9027	9745
	900 mm dia	Metre	9173	9565	10389	11268	12203
	1000 mm dia	Metre	10995	11501	12371	13492	14542
2	Cost of laying jointing, testing to Hydrostatic field test pressure including cost of transportation of water and emptying pipe line after completion of field testing.						
	Size	Unit	S.S. Rates for 2017-18.			Rs.	
			3 Bar	6 Bar	9 Bar	12 Bar	15 Bar
	300 mm dia	Metre	112	112	112	112	112
	350 mm dia	Metre	168	168	168	168	168
	400 mm dia	Metre	252	252	252	252	252
	450 mm dia	Metre	308	308	308	308	308
	500 mm dia	Metre	392	392	392	392	392
	600 mm dia	Metre	419	419	419	419	419
	700 mm dia	Metre	475	475	475	475	475
	800 mm dia	Metre	559	559	559	559	559
	900 mm dia	Metre	614	614	614	614	614
	1000 mm dia	Meter	713	713	713	713	713

***Under any Circumstances the GRP pipes shall not be procured for laying new water lines, except O&M works.**

Note: 1) The material component is 50% of total cost.

2) Taxes as applicable shall be added as per rules at the time of preparation of estimate

3) The cost of other specials like tees, reducers etc with flange will be charge @4 times per meter cost of pipe.

4) The cost of other special like plain ended tees, reducers etc will be charge @ 2.50 times per meter cost of pipe.

The methodology adopted for rates is as follows:

Percentage of raw materials in the finished product of the pipe

a) Hoop Glass Fibre Rovings H% (35%), 2) Chop Glass C% (40%) and 3) Resin R% (25%)

The cost of variation in Raw materials are:

a) Variation in cost of Hoop Glass : h%

b) Variation in cost of Chop Glass : c%

c) Variation in cost of Resin : r%

The percentage of variation in cost of pipe allowed is $(H \times h + C \times c + R \times r)/100$

The above raw materials rates are obtained from the principal manufacturers.

The rates of raw materials are:

a) Hoop Glass Fibre Rovings - Rs. 86.50/kg (Excluding taxes)

b) Chop Glass - Rs. 96.50/kg (Excluding taxes)

c) Resin - Rs.130.00/kg (Excluding taxes)

**32. S o R FOR TRENCH LESS TECHNOLOGY WITH PIPE JACKING METHOD
FOR THE YEAR 2018-19**

Sl. No.	Description	Unit	S.S Rates For 2018-19
1	2	3	4
1	Railway crossing/Road crossing/Canal crossing by adopting trenchless technology tunneling work through specialized pipe jacking method by erecting the equipment to true to the alignment and gradient, by hydraulic pipe jacking technique complete including tunneling, excavation in all types of soils including hard rock and construction of RCC chambers suitable to casing pipe pits, and conveyance charges of machinery and other required materials but excluding cost of encasing pipe, in co-ordination with the concerned authorities as per approved drawings and directed by the Engineer-in – Charge.		
	800 mm dia	Rmt	27300
	900 mm dia	Rmt	28665
	1000 mm dia	Rmt	30030
	1100 mm dia	Rmt	31395
	1200 mm dia	Rmt	32760
	1300 mm dia	Rmt	34125
	1400mm dia	Rmt	36855
	1500 mm dia	Rmt	40950

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

33. Water Meters

A	Mechanical Flow meter (Domestic meters)		
1	Supply of magnetically coupled, multijet, inferential type, dry dial Class-B water meters (Screwed end) AMR compatible manufactured in accordance with ISO 4064 standards and its latest amendments/IS 779/1994 and its latest amendments and shall have ISI/EEC/MID pattern approval (valid life cycle certificate and IP 68 protection from FCRI, GOI). (excluding all taxes-with 3 years warranty)	Unit	Rates for SoR 2018-19
	15 mm Dia	Each	1100
	20 mm Dia	Each	1650
2	Installation & fixing cost of water meter.	Each	200
B	Electromagnetic Flow Meters (Bulk Flow Meter)		
	Supply & delivery of Electromagnetic Flow meter, manufacturer should have ISO 9001:2008 certification and flow meter testing confirming to ISO 17025; Flow meter Tube: SS 304; Flanges: Carbon Steel as per DIN PN 10 or higher rating as per requirement; Liner: Hard Rubber or PTFE suitable for drinking water application; Grounding: Grounding Rings SS 304 /Grounding Electrodes of material SS 316; Coil Housing and Junction Box: SS 304 /Die Cast Aluminum/ Carbon Steel with anticorrosive epoxy coating of minimum thickness 150 microns/ equivalent as per EN ISO-12944 standard (as per the site condition) ; Ingress Protection: IP 68 for sensor and IP 67 for transmitter; Flow Transmitter Accuracy: +/- 0.5% of the measured value for velocities 0.5 m/sec and above; Display: Digital LCD/LED (backlit LCD / LED) Display, Instantaneous flow, Bi- Directional flow and Totalized flow; Cable between Flow Head and Transmitter: Maximum 25 meters including PVC conduit; Surge Arrester: To be provided; Power Supply & Output: 230 V AC or 24 V DC as applicable to Site condition & 4-20 mA HART; Compatible to SCADA/WEB Based Data acquisition System; Flow meter test lab certification should be provided from NABL approved lab/FCRI ; Excluding all taxes with 5 years Warranty. (Make: M/s Krohne Marshall/Endress+Hauser/ Yokogawa /Siemens/ Emerson/ABB/ or equivalent make)	Unit	Rates for SoR 2018-19
	100 mm dia	Each	108014
	150 mm dia	Each	119147
	200 mm dia	Each	150214
	250 mm dia	Each	170310
	300 mm dia	Each	204252
	400 mm dia	Each	343055
	450 mm dia	Each	369604
	500 mm dia	Each	405035
	600 mm dia	Each	465479
	700 mm dia	Each	525949

	800 mm dia	Each	627284
	900 mm dia	Each	735853
	1000 mm dia	Each	787435
	1100 mm dia	Each	1304100
	1200 mm dia	Each	1422225
C	AMR Water Meters		
i)	Multijet (Domestic) AMR Water Meter		
	<p>Supply installation and satisfactory field testing of Multijet Inferential Dry Dial screwed end Water Meters conforming to latest editions of IS 779/ISO 4064 with ISI/MID marking (PN-10). The water meters shall be manufactured with copper can/non magnetic metallic register and IP 68 protection. The module must be connected to meter without wire. The same model of the meter must have passed life cycle/Endurance test from FCRI after 2015. The meter should have IP 68 test report certificate conducted in FCRI. The RF based AMR accuracy test conducted at FCRI should also be submitted. The modules shall be warranted for 5 years battery life. The Module or meter interface unit shall be Radio Frequency based. The remote reading shall be two way communicating. The module should be battery operated and external power supply should not be required. The readings should be obtainable by either walkby or drive by on Android device. The module shall be fitted on the meter wirelessly and shall be with IP 68 protection. The IP 68 test report for module should have been conducted at FCRI. The radio frequency shall be as per Dept of Communications, Govt of India and supplier should specify the frequency of the AMR on the module. In case the RF band is free band, necessary documents from Dept. of Telecom, Govt of India shall be submitted along with declaration on a Rs.100 Stamp paper mentioning the band. The RF based meter reading software should have sync facility to upload the data back to CLOUD server after reading the meters from site using GPRS/Wifi. The AMR meters shall carry warranty of atleast 5 years from the date of delivery/date of installation which ever is earlier. The meter, module and AMR software shall be from the same manufacturer. Lot samples of the meters supplied shall be tested as per IS779 at FCRI for accuracy of meters. The rates are excluding GST.</p>	Unit	Rates for SoR 2018-19
	15 mm	Each	6450
	20 mm	Each	7000
	25 mm	Each	7800
	40 mm	Each	9500

ii)	Woltman type (Bulk) AMR Meter		
	Supply, installation and field testing of Horizontal Woltman type hermetically sealed type water meters with IP 68 protection (PN-10/PN-16). The meters shall be manufactured as per ISO 4064 - 1:1993 with MID marking. The meter must have passed life cycle/Endurance test from FCRI. The module should be battery operated by inbuilt. The data logger shall be capable of transmitting data on daily bases to central server through GSM/GPRS. The AMR data hourly shall be collected by MIU and stored. The MIU shall be connected to Data logger. The data logger should have inbuilt battery. The AMR meter should be capable of providing data like reverse flow, tampering, daily flow rate distribution. The System shall send alerts for blocked meter, flow rate above limit, pressure below or above limits, back flow detection. The meters shall be installed with CI strainers. The AMR meter and battery shall carry warranty of atleast 5 years from the date of delivery/date of installation which ever is earlier. The data shall be accessible on web server as required by the Client. The rates are excluding of GST.	Unit	Rates for SoR 2018-19
	50 mm	Each	54600
	80 mm	Each	58800
	100 mm	Each	63840
	150 mm	Each	76440
	200 mm	Each	94080
	250mm	Each	124320
	300mm	Each	264600

34.Instrumentation

1	Ultrasonic Flow Meter:	
	Providing, installing and giving satisfactory test & trial of Ultrasonic Flow meter of ISO working on 85 -260 V AC, 50 HZ electric power supply of following type working on time of flight principle suitable for satisfactory continuous operation in all seasons & with following accessories, working conditions Specifications & duly tested as specified below:	
A)	Ultrasonic Clamp-on portable type Flow Meter (Single Channel)	
	Providing, installing and giving satisfactory test & trial of No ultrasonic clamp on portable type flow meter working on conditions & specifications, calibration, inspection, testing, training, guarantees and manufacturers test certificate/declaration copy along with accessories as mentioned above along with accessories like. 1)Magnetic Clamos – 1 Pair & 2)Suitable carrying case-1 No.	304464
B)	Ultrasonic Clamp-on Fixed type Flow Meter (Single Channel)	
	Providing,installing and giving satisfactory test & trial of Ultrasonic damp on Fixed type flow meter working on conditions & specifications, calibration, inspection, testing, training, guarantees and manufacturers test certificate/declaration copy along with accessories as mentioned in a (1) to (14) below	296943
C)	Ultrasonic Insertion Fixed type Flow Meter (Single Channel)	
	Providing, installing and giving satisfactory test & trial of ultrasonic Insertion Fixed type flow meter working on conditions & specifications, calibration, inspection, testing, training, guarantees and manufacturers test certificate/declaration copy along with accessories as mentioned in a (1) to (14) below & with inbuilt assembly to fix the insertion type transducer on the pipeline	283843
a)	Mandatory Accessories:	
	<p>1) Integrated signal converter transmitter enclosed in die cast aluminum case / any anticorrosive material confirming to IP-65 or better -1 No.</p> <p>2) Pair of transducers (Sensors) confirming to IP-68 or better with junction boxes - 1 No.</p> <p>3) Stainless steel straps for mounting clamp on type sensors - 2 Nos. (only required for category A,B)</p> <p>4) Grease count plant, 100 ml : Bottle - 5 Nos. (only required for category A,B)</p> <p>5) Signal & power cables for each transducer -50 Mtrs length/each (insertion type flow meter) & 10 mtrs length /each (portable type flow meter)</p> <p>6) a) for fixed type flow meter-UPS working on 230 V AC, 50 Hz or 24V DC power supply suitable for 24 hrs continuous operation.-1 No. (only required for category B,C).</p> <p>b) Built in portable type battery back up for minimum 5 Hrs continuous operation with spare battery and separate battery charger working on 230 V AC, 50 Hz power supply for charging battery-1 No. (only required for category A)</p> <p>c) Aluminium / anticorrosive carrying case for flow meter and all accessories (only required for category A)</p> <p>7) Data storage capacity with built in or separate for date, time, actual flow rate, totaliser & error messages if any with storage capacity of 120 days and at 5 minutes interval data logging along with local indication and necessary cables and software to download data to laptop -1 No</p> <p>8) Dot matrix printer of EPSON, WIPRO, WEP or Hewlett Packard make with</p>	

	<p>built in or separate printer interface unit for printing of stored data with online / offline printing facility -1 No.</p> <p>9) Proper earthing shall be provided for protection against high voltage surge (only required for category B,C)</p> <p>10) Suitable over voltage protection unit for protection of instrument from higher voltage (upto 275 V-300 V AC & above)</p> <p>11) M.S. sensor protection boxes with suitable size for above ground lines where construction of chamber is not possible. (only required for category B,C)</p> <p>12) Magnetic clamp for metallic pipe lines and Nylon / SS strips, chain arrangement for clamp on sensors suitable for pipe diameters 50 mm to 3000 mm (only required for category A,B)</p> <p>13) Battery powered ultrasonic thickness gauge along with charger, test sample, coupling agent and carrying case suitable measuring thickness of 1 mm to 100 mm (only required for category A)</p> <p>14) 5 meter steel measurement tape with level bottle (only required for category A)</p>	
b)	Additional/Optional Accessories	
	1) Pressure transducer, which should be connected to the pressure lead of dual channel data loggers, compatible with the dual channel loggers of appropriate type with a pressure range of 5m to 150 m with an accuracy of not less than +/-1% to be supplied and installed at the upstream of the flow meters.	21834
	2) Fixing flow meter transmitter to internal walls of buildings in a suitably designed panel cabinet with proper locking arrangement with glass window on front door for seeing the readings of flow transmitter and data logger without opening of the panel cabinet. It should house complete ancillaries and including the provision for connection of electrical power supply from nearby apparatus. The panel cabinet shall be prewired and with suitable gland entries.	23144
	3) Laptop with core 2 duo processor, 2 GB RAM, 256 GB HDD, DVD writer, web cam, 14" LCD screen with carrying case, windows XP professional branded with necessary software & upload data should be provided	26201
	4) The portable Device shall be compatible to the logger & flow meters for the purpose of retrieving data & resetting the data loggers, The portable device should be simple to operate & robust in design. The portable hand held units shall have sufficient memory to download & store data up to 6 flow meters. Hand held units shall be supplied with necessary communication leads for data logger to hand held & hand held to commercial PC, All the necessary software for download & upload to be provided.	26201
	5) Remote monitoring system for data acquisition/data transfer & alert SMS /warning based on GSM technology with complete hardware like wireless communication device, cables,necessary software system (BOM with each GSM system is as given below) for each flow meter excluding data SIM card & its regular billing.	43668
	a) Wireless communication device to communicate between central computer & flow transmitter installed at remote site with GSM based system	
	<p>b) DA Scheduler software for CSV file storage and data acquisition</p> <p>c) Cables for pressure, flow & totalized details from transmitter to field gate system {10 Mtrs with each GSM / GPRS system)</p> <p>d) OPC Software to be installed in central PC for SCADA interface.</p> <p>e) Commissioning charges for each locations</p>	

	<p>f) Customized page with Java Applets XML-Data import software for online MIMIC</p> <p>g) R.F. Module / Cyble for operation of AMR shall be taken as Rs.7000 per meter</p> <p>h) RTU (Remote Terminal Unit) for each meter shall be taken as Rs. 12000/-</p>	
	<p>6) Sensor/Transmitter cable of following specification 3 x 0.38 mm² PVC cable with common branded copper shielded 7mm dia and individually shielded cores-with empty pipe detection 9 EPD: 4 x 0.38 mm² PVC cable with common branded copper shield 7 mm dia and individually shielded cores. Conductor resistance: ≤ 50 Ohm/Km. (Rate per meter).</p>	230
	<p>7) Conduit pipe (PVC / HDPE plumbing) 32 mm diameter with suitable digging, laying and concealing the duct. (Rate Per Meter)</p>	18
	<p>8) Other Civil Works:</p>	
	<p>a)Flow meter chamber work with suitable man hole for entering the chamber & removal of flow meter for maintenance in future</p>	
	<p>b) Construction of meter room with roof slab (100 mm) brick masonry with pile foundation of minimum 1.5 M x 1.5 M or as per instruction from Engineer-in -Charge with RCC beam/column minimum 0.15m x 0.15m size with steel door & cement jali ventilator and plinth height of minimum 0.5 M above GL and roof slab shall be 2.1 M from plinth inner and outer plaster with water proof cement painting</p>	
c)	Working Condition & Specifications	
	<p>a) Water Temp : 10° to 50° C</p> <p>b) Water Quality: Raw water, turbid in nature. Potable chlorinated water</p> <p>c) Operating pressures 0-15 Kg./cm²</p> <p>d) Pipeline MOC : CI, DI, MS with /without mortar lined, Non-metallic pipes.</p> <p>e) Pipe diameter :> 1000 mm -4000 mm</p> <p>f) Flow -Up to 300 Mld</p> <p>g) Pipe Condition: Pipe shall be running full</p> <p>h) Ultrasonic flow meters shall be designed, manufactured to international standards with accuracy of +/- 2% of actual flow. The supplier should have full ISO -9000 series accreditation & facility for fully traceable calibration flow rig as per international standard</p> <p>i) Functional details: Freely programmable</p> <p>j) Measurement - Volumetric flow rate, totalized flow</p> <p>k) Flow direction- Forward & Reverse</p> <p>l) Display- LCD display with suitable lines, digits, segments, markers, for identification of current output. The digit shall be clear, bold & can be read from 1 Mtrs distance</p> <p>m) Out put- for current-4 m A-20mA HART (active/passive) for measuring flow in pipeline. Frequency output shall be 1 khz, Open collector, passive</p> <p>n) Status output-open collector</p> <p>o) Meter shall be suitable for remote facility</p> <p>p) Power supply-85-260 V AC(45-65 Hz)/20-55 V AC (45-65 Hz)/16-62 V DC</p> <p>q) Galvanic isolation- input & output galvanically isolated from power supply from the sensor and from each other</p> <p>r) instruments must carry "CE" mark</p> <p>s) Functionality verification check should be possible inline using recommended software tools</p> <p>t) Future upgradation to field bus foundation. Profibus should be possible with minimal changes</p>	
d)	Calibration, Testing & Inspection	
	<p>The 10% of total supply quantity shall be inspected and tested .The flowmeter shall be calibrated at manufacturers place as per international standard given above.Manufacturer having NABL lab accreditation ,the calibration testing shall be witness by Third party approved by MJP The manufacturer not having NABL lab accreditation shall be tested at FCRI/CWPRS/IDEMI etc, for which third party inspection is not required.</p>	

e)	Manufacturers Guarantee, Certificate & Training	
	The flow meters shall be supplied with manufacturer's test certificate as per international standards -given above, calibration certificates. 12 months guarantee for the trouble free performance and given Adequate training for handling flow meter and installation in field so that trainees can carryout the job independently	
f)	60 Month's O & M towards flow meter & accessories:	
	<p>The O & M shall be decided based on " planned preventive maintenance" Program (PPM) to be finalized with suppliers with following service included (but not limited) for 60 months beyond standard warranty terms as per H) However for project cases user must discuss with supplier for lumpsum O & M cost for the overall project.</p> <p>Planned Preventive Maintenance (PPM):</p> <ul style="list-style-type: none"> a) Regular visit to the flow meters (once in 2 month to check the healthyness of instruments) b) Repairs/ replacement of components/spare parts as may be necessary during the flow meter inspection. c) Free replacement of the spare parts and consumables as necessary d) Emergency visit to site within 48 hours for attending any major trouble shooting and break downs. e) Technical training/ trouble shooting training to the user by the supplier. f) Providing complete technical details on instrument with necessary manuals 	
g)	General Terms & Conditions	
	<ul style="list-style-type: none"> a) General Specifications with accessories (except required for each type of meter specified) working conditions, mandatory accessories, calibration, inspection testing manufacturers test certificates, installation and commissioning, guarantee and training shall be common for all flow meters as mentioned above. The Additional/ optional accessories mentioned above to be considered as per project and site requirements. b) The above prices are inclusive of import duty as applicable. c) The above prices inclusive of counter vailing duty (CVD) as applicable with education cess of 2% on CVD. Also includes necessary charges for customs clearances clearing and forwarding charges in India. d) The above prices are includes local inland transportation from manufacturer's godown /custom's godown upto sites anywhere in Telangana. e) The above prices includes necessary packing & forwarding charges as applicable for each project f) Octroi charges are not included in above rates and shall be as per actuals which will be included wherever applicable in estimates for meter up to site storage g) The above prices are inclusive of Marine & inland insurance of flow meters up to site storage h) Meter shall be procured with prior permission from concerned superintending Engineer/Chief Engineer. i) Planning for installation for meter shall be done during execution of pipe work. Straight pipe length of 5 D or more on up stream side and 2 D or more on down stream side of meter is necessary (D is diameter of flow meter) The meters shall be installed so as to have a laminar flow with pipe running full. j) The above rates are exclusive of GST. 	

S.No.	Item Description	Unit	Rate in Rs.
2	Providing, installation, testing and commissioning of ULTRASONIC LEVEL TRANSMITTER for water application : Principle: Time of Flight / Sensor MOC PP/ Process connection 1 1/2 inch BSP or 2 inch BSP threaded type / Power Supply: 24 V DC / Out put: 4-20mA / Display: Integral Display for programming and Display reading/IP66. Ranging from 0 - 5 Mts, including LCD Display and configurable to any level and warranty for 5 years. The rates are excluding GST.	Each	62,890/-
3	Providing, installation, testing and commissioning of PRESSURE TRANSMITTER : for water application: Range: 0-10 bar/power supply:24 V DC / Output: 4-20 mA with HART / Diaphragm: SS316L / Process Connection: ½ “NPT (M) / Accuracy: 0.15% , Protection: IP67, including LCD Display and configurable to any level and warranty for 5 years. The rates are excluding GST.	Each	70751/-

GOVERNMENT OF TELANGANA
ABSTRACT



Mines & Minerals - New Sand Mining Policy - 2014 for the State of Telangana - Usage of Manufactured Sand - Certain Instructions - Issued.

INDUSTRIES AND COMMERCE (MINES.I) DEPARTMENT

G.O.Ms.No.37

Date:29.05.2018.

Read the following:-

1. G.O.Ms.No.38, Ind. & Com (M.I) Department, dated.12.12.2014
2. G.O.Ms.No.03, Ind. & Com (M.I) Department, dated.08.01.2015

ORDER:

The Government of Telangana is committed to encourage use of Manufactured Sand as an alternative to river sand in order to conserve the environment on the one hand and to overcome the problem of growing shortage of natural sand on the other hand. In the references read above, the Government of Telangana have issued orders, for regulation of sand mining wherein it was mentioned that usage of Manufactured Sand shall be encouraged in place of river sand to meet the requirement of bulk consumers. Manufactured sand is defined as purpose made crushed fine aggregate produced from a suitable source material.

2. The utility and demand for manufactured sand has increased considerably over a period of time due to certification by reputed Scientific Organizations such as National Council for Cement and Building Material (NCCBM), National Academy of Construction (NAC), BICARD, a Scientific Research and Certification Lab at Department of Civil Engineering, JNTU, Hyderabad. The Technical viability of Manufactured Sand has been established without doubt.

3. Government, hereby direct all the Engineering Works Departments to use Manufactured Sand (Rock Sand) and Natural River sand in the ratio of 50:50 in all the mixes of cement concrete and in the items of works where sand is used earlier, to reduce the burden on Natural Resources and to make the sustainable ecosystem.

4. The Engineer in Chiefs, Roads and Buildings, Irrigation & Command Area Development and Panchayat Raj & Rural Development shall take necessary action in the matter accordingly.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

SHAILENDRA KUMAR JOSHI
CHIEF SECRETARY TO GOVERNMENT

To
The Engineer in Chief, Roads and Buildings.
The Engineer in Chief, Irrigation & Command Area Development.
The Engineer in Chief, Panchayat Raj.
The Engineer in Chief, RWS&S.

Copy to:

The I&CAD Department, Telangana Secretariat.
The TR&B Department, Telangana Secretariat.
The PR&RD Department, Telangana Secretariat, Hyderabad.
The Director of Mines & Geology, Telangana State, Hyderabad.
The Vice Chairman & Managing Director, TSMDC Ltd, Hyderabad.
The Commissioner of Panchayat Raj, Hyderabad
All the District Collectors in the State of Telangana
P.S to Principle Secretary to the Hon'ble Chief Minister.
P.S to Hon'ble Minister for Mine and Geology.
P.S to Hon'ble Minister for Panchayat Raj & Rural Development.
P.S to Hon'ble Minister for Irrigation
P.S to Hon'ble Minister for Roads & Buildings
P.S to Chief Secretary to Government.
P.S to Prl. Secretary Government & CIP (FAC), Ind & Com Dept.
Sf/Sc (C.No.2823/M.I(1)/2018)

//FORWARDED : : BY ORDER//

Mam/aj
SECTION OFFICER

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