



**STANDARD SCHEDULE OF RATES
FOR THE YEAR 2019-2020**

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TAMILNADU WATER SUPPLY AND DRAINAGE BOARD

No. 31, Kamarajar Salai, Chempauk, Chennai - 600 005.

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FOREWORD

Dr. C.N. MAHESVARAN, I.A.S., Managing Director



I fully recognize that, the updating of Schedule of Rate (SoR) on an annual basis is a dynamic process propelled by the PWD SoR, feed backs, field experiences and market rates of materials (WPI Index). The drills of processes underwent by a dedicated team to collate rates for the SoR in an acceptable format, require a lot of team work behind, prior to competent compilation by Contract Management (CoM) Wing. The arduous process of preparation of TWAD Board SoR for 2019-20 including the newer items stem from the Rates quoted by Manufacturers, proposals emanated from the respective Chief Engineers based on field experience and the supplemental rates approved by the Superintending Engineers.

As such, I take immense pleasure in dedicating **"TWAD Board Schedule of Rates for 2019-20"**, for adoption in the preparation of Estimates for Water Supply and Sewerage Projects. At this juncture, the flawless compilations of the SoR by the CoM unit deserve appreciation. I find pride in placing on record the valuable contribution of all concerned in the publishing of **"TWAD Board SoR for 2019-20"**. I request the TWAD Board Engineers, to make use of the specifications and rates adeptly in preparing the Estimates.

**Managing Director,
TWAD Board, Chennai - 5.**

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**PROCEEDING OF THE JOINT MANAGING DIRECTOR, TWAD BOARD,
HEAD OFFICE, CHEPAUK, CHENNAI-5
PRESENT: Thiru. L. Nirmal Raj, I.A.S.,
JOINT MANAGING DIRECTOR**

Proc.No.Sch.rate/CM/AE1/2019/dt.15. 07.2019

Sub: TWAD Board-Schedule of Rates for 2019 - 20 – State Level Technical Committee - Rates finalized – Communicated – reg.

- Ref: 1. Joint Managing Director, TWAD Board, Chennai-5, Proc. No. Sch. rate/ CM / AE / 2018 / dt: 29.06.2018.
2. Engineer - in - Chief, WRD & Chief Engineer (General), PWD, Chennai-5. Proceedings .No.HDO/ Sr.DO-2/ SSR 2019-20/ 19020/ 2018-1, dt:17.06.2019.
3. Minutes of the State Level Technical Committee meeting held on 12.07.2019 at TWAD Board, Head Office, Chennai-5.
4. Resolution No. 3.2 / dt: 10.12.2001 of 369th Board Meeting.

TWAD Board communicated the approved Schedule of Rates of for the year 2018-19 vide reference 1st cited, to all the Chief Engineers, Superintending Engineers, Executive Engineers of TWAD Board for adoption.

After due observance of procedures, the proposals for revision of Schedule of Rates for 2019-20 were placed before the State Level Technical Committee. The State Level Technical Committee of TWAD Board during the meeting on 12.07.2019, deliberated and approved the proposals concerning the Standard Schedule of Rates for 2019-20, in sequel to the publication of Schedule of Rates for PWD vide reference 2nd cited.

Accordingly, the approved Standard Schedule of Rates of TWAD Board for the year 2019-20 is communicated herewith for adoption in the preparation of cost estimates **with effect from 01.07.2019.**

The receipt of Standard Schedule of Rates for the year 2019-20 along with the enclosures may be acknowledged.

End: TWAD Board Standard Schedule of Rates
for 2019-20 – One Booklet

Sd/- L. Nirmal Raj, dt: 15.07.2019.
Joint Managing Director,
TWAD Board, Chennai-5.

<t.c.f.b.o>


For Joint Managing Director
TWAD Board, Chennai-5.

To
All the Chief Engineers/Superintending Engineers/Executive Engineers of TWAD Board,
All the Joint Chief Engineers of Head Office, TWAD Board.

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I. GENERAL NOTES

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I. GENERAL NOTES

1. For items not covered in the schedule of rates, the Superintending Engineer can fix the rates based on the lowest sealed quotations duly observing all the departmental formalities under intimation to the concerned Chief Engineer and Head Office.
2. For special nature of works, for which rates are not covered in the Schedule of Rates separate schedule of rates issued by the respective Officers / Department / Board are to be followed.
3. Extra percentage other than those for the specified areas noted below, shall not be allowed.

1. Corporation Limits.

An extra 10% on the Rates of Labour, Rates of Works and for Head Load shall be allowed for the works in Erstwhile Chennai Corporation limit and the belt area of 32 km around erstwhile Chennai Corporation limits (i.e) prior to formation of Greater Chennai Corporation, Madurai Corporation limits, Coimbatore Corporation limits and also for works in Hosur Taluk.

2. **An extra 5%** on the Rates of Labour, Rates of Works and for Head Load shall be allowed for the works in Trichy, Salem, Tirunelveli, Tiruppur, Erode, Thoothukudi and Vellore Corporation limits.

3. Restricted areas:

- I. **An extra 10%** on the Rates of Labour and Rates of Works shall be allowed for **sewer works under unhygienic condition**.
- II. **An extra 10%** on the Rates of Labour, Rates of Works and Conveyance charges shall be allowed for works in the campus of **Central Jails**.
- III. **An extra 5%** on the Rates of Labour, Rates of Works and Conveyance charges shall be allowed for works in the campus of **Sub-Jails**.
- IV. **An extra 20%** on the Rates of Labour, Rates of Materials, Rates of Works, Conveyance Charges and Head Load shall be allowed for works in **Reserve Forest Areas**.

4. Special Nature of Works

- I.
 - i. 5 times over the basic rates for earthwork excavation for both rural and urban areas is allowed **for putting trial pits**.
 - ii. 5 times over the basic rates for earthwork excavation **for leak rectification works** is allowed.
 - iii. If the works are done (**leak rectification works**) in odd hours (i.e) **8.00PM to 8.00AM of the next day**, 7.50 times over the basic rate is allowed.

- II. For **individual footings of the service reservoirs, valve pits** double the relevant rate for earthwork excavation is allowed.
- III. An extra 5% is allowed for laying of **sewers under UGSS** for earthwork excavation alone below 4m depth.

5. For Works in Hills:

As the transport facilities in most of the Hilly Areas are now considerably improved and as there is no necessity for allowing extra percentage as hitherto followed, the Hilly Areas are now again regrouped as detailed hereunder and the extra percentage allowable has been revised accordingly and fixed.

The conveyance table approved and furnished in the Schedule of Rates under the Head "**Conveyance table**", **Conveyance of materials by Road on hills** shall be adopted for all works in hills.

- i. For works in **Nilgiris District** an extra **40% on the** rates of labour, rates of work, head load and **an extra 25 %** on the rates of materials shall be allowed.
- ii. For works in **Mudumalai Sanctuary, Shandy Nallah Sheep Farm, Dansandle areas**, an extra **40%** over rates of labour, rates of work and head load and **an extra 25%** on the rates of materials shall be allowed.
- iii. For works in **Valparai Area** an extra **40% on the** rates of labour, rates of work, head load and **an extra 25%** on the rates of materials shall be allowed.
- iv. For works in **Gudiyalathur, Siruvani, Thavalamalai Hills, Talavadi Hills, Bargur Hills, Anamalai, Chennimalai and Sivanmalai Hills** an extra **20%** on the Rates of Labour, Rates of Materials, Rates of Works and Head Load shall be allowed.
- v. **For works in Western Ghats** of Madurai, Virudhunagar, Coimbatore, Tirunelveli & Kanyakumari Districts **an extra 20%** on the Rates of Labour, Rates of Materials, Rates of Works and Head Load shall be allowed.
- vi. (a) **An Extra 50%** on the Rates of Labour for works in Thekkady shall be allowed.
(b) **Add 25% extra** shall be allowable on the Rates of Materials which are to be supplied at Thekkady, subject to the condition that there shall not be any extra on conveyance, tollgate fee, interstate allowance, etc.

The conveyance charge as applicable for Ghat Road, Cart Track, etc., as per schedule of rates is only applicable.

- vii. **An extra 60%** shall be allowable on the Rates of Materials to be supplied for Periyar Dam Site subject to the condition that there shall not be any extra on conveyance, tollgate fee, interstate allowance, etc. The conveyance charge as applicable for Ghat Road, Cart Track, etc., as per Schedule of Rates is only applicable.
- viii. **An extra 100%** on the Rates of Labour for works in Periyar Dam Site under normal condition shall be allowed.
- ix. **An extra 150%** on the Rates of Labour for works in Periyar Dam Site under hanging condition shall be allowed.
- x. **An extra 50%** on the Rates of Labour, Rates of Materials, Rates of Works and Head Load shall be allowed for the works at Lower Camp above Kuruvanthu Bridge, Bodi Hills, Cumbam mettu, Sirumalai, Pachai Kamatchi Hills, Palani Hills, Thiruparankundram Hills, Idumban Hills, Megamalai Panchayat and Thummakundu Panchayat.
- xi. **An extra 40%** on the Rates of Labour, Rates of Works and Head Load and **an extra 25%** over the rates of materials shall be allowed for the works at Kodaikanal.
- xii. **An extra 25%** on the Rates of Labour, Rates of Materials, Rates of Works and Head Load shall be allowed for works in Yercaud, Yercaud Sub-Taluk, Boothamalai, Aranuthumalai, Sarugumalai and Thiruchengode Hills in Salem & Namakkal District.
- xiii. **An extra 40%** on the Rates of Labour, Rates of Works and Head Load and **an extra 25%** over the Rates of Materials shall be allowed for works in Kalrayan Hills, Pachamalai Hills and Kolli Hills in Salem & Namakkal Districts.
- xiv. **An extra 40%** on the Rates of Labour, Rates of Works and Head Load and **an extra 25%** over the Rates of Materials shall be allowed for works in Jawadhu Hills, Elagiri Hills, Kalrayan Hills, Nakkanamalai Hills, Naickerner Hills in Thiruvannamalai and Vellore Districts.
- xv. **An extra 40%** on the Rates of Labour, Rates of works and Head Load and **an extra 25%** over the Rates of Materials shall be allowed for works in Piranmalai covering Oduvarpatti, Kattugudipatti, Ponnadaipattu, V.Pudur Village, Mamalai covering Vannar Irruppu, Nagamangalam Villages, Usilamalai covering Poolankurichi Village, Hillocks at Musundapatti, Usilam, Ammapatti and Thuthampatti in Sivagangai District.
- xvi. **An extra 40%** on the Rates of Labour, Rates of Works and Head Load and **an extra 25%** over the Rates of Materials shall be allowed for works in Chitteri Hills, Sittiling in Kalrayan Hills in Dharmapuri District.

xvii. An extra 40% on the Rates of Labour, Rates of Works and Head Load and **an extra 25%** over the Rates of Materials shall be allowed for works in Kalrayan Hills in Cuddalore and Villupuram Districts.

xviii. An extra 40% on the Rates of Labour, Rates of Works and Head Load and **an extra 25%** over the Rates of Materials shall be allowed for works in Pachamalai Hills in Trichy, Karur and Perambalur Districts.

Note: Since the studies for allowing extra percentage for hilly areas was worked out in the year 2002-2003, the Committee decided that the same has to be revised or modified by constituting a separate Committee to take a decision on revision, based on the latest transport facilities, infrastructural facilities etc., available in the hilly areas for the issue of Schedule of Rates from the next year 2019 – 2020 onwards.

6. ISLANDS in Ramanathapuram District:

a. For works in Rameswaram Island:

An extra 25% on the Rates of Labour, Rates of Works and Head Load shall be allowed.

b. For works in Other Islands:

An extra 125% on the Rates of Labour, Rates of Materials, Rates of Works, Conveyance Charges and Head Load shall be allowed for other Islands in Ramanathapuram viz., (1) Upputhannie Island, (2) Puleevilaichalli Island, (3) Aalaippar Island, (4) Valimunai Island, (5) Appa Island, (6) Thalaiyari Island, (7) Valai Island, (8) Mullai Island, (9) Manoli Island, (10) Minoliputti Island, (11) Nadu Island, (12) Nallathannie Island, (13) Pullivasal Island, 14) Poomarichan Island, 15) Muyal Island, (16) Singala Island and (17) Kurusedar Island.

c. For works in Islands of Thoothukudi District:

An extra 125% on the Rates of Labour, Rates of Materials, Rates of Works, Conveyance Charges and Head Load shall be allowed for Van, Kasuvar, Karaichalli Island and Vilankuchali Islands.

7. TUNNELS:

An extra 15% on the Rates of Labour and Rates of Works shall be allowed for works inside Tunnels.

8. DAM SITES UNDER HANGING CONDITION (Other than Periyar Dam Site)

An extra 75% on the Rates of Labour employed for the items of works, which may have to be executed by **hanging from the top of Dam through**

slings (or) rope ladders to work in dizzy height. (This will apply only for maintenance and repair works).

9. General Foot Note:

- i) The rates of labour means the labour rates fixed under the head, **Rates of Labour**.
- ii) **Rates of works** includes the labour for earthwork, refilling foundation, dismantling, jungle clearance, head load etc., also where human labour alone is involved.
- iii) The percentage increase provided for the materials are applicable **only for the materials which are quarried or manufactured locally in the specified area**.
- iv) The percentage increase provided for **Rates of Works** are allowable only on the items where human labour alone is involved.
- v) The percentage increase provided for **Conveyance Charges** are allowable for the distance covered in the specified area / Special Tract only.
- vi) The extra percentage allowable as specified above shall not be applicable for the materials / works covered under "Rates of other construction materials" and "Rates of Electrical items of works". Similarly, no conveyance charges shall be allowed for the items covered under these two categories. The rates approved therein are applicable at site of work.
- vii) While adopting source of any materials inside the special tracts viz., Corporation limits, Reserve Forest Areas, Hilly areas, Islands, Dam Sites etc., where extra percentage allowable for the materials which are quarried or manufactured locally, it is the duty of the officer in charge of the work (not below the rank of Assistant Executive Engineer), to analyse and confirm whether the finished cost of such materials/ works are higher if the materials are conveyed and brought to the site from the areas outside the specified area, where such extra percentage are not permissible.
- viii) As per Notification No.31/2017- Central Tax(Rate) dated 13th October, 2017 the concessional rate of GST at 12 % [CGST at 6% + SGST at 6%] is leviable for any Government contract, whether Civil or Electrical, irrespective of the GST rate applicable on purchase of goods used in the execution of Government Contract. The contractor is eligible to get refund of excess tax paid over or liable to pay tax as per Notification No.20/2017, Central Tax (Rate) dated 22.8.2017, Notification No.24/2017, Central Tax (Rate) dated 21.9.2017 and Notification No.31/2017, Central Tax (Rate) dated 13.10.2017.

- ix) Further, for Works Contract services involving predominantly earth works (that is, constituting more than 75 % of the value of the works contract) supplied to Central Government, State Governments, Local Authority, Governmental Authority for Government Entity shall be taxed at 5 % as per Notification No.31/2017 - Central Tax (Rate) dated 13th October, 2017. Therefore, for such contract the amount of GST is to be calculated at 5 % [CGST at 2.5 % + SGST at 2.5 %) over and above the Basic rate.

10. LEAD

District-wise average lead may be approved by the concerned Chief Engineers based on the approved quarry by the PWD.

**STATEMENT SHOWING THE EXTRA PERCENTAGE ALLOWABLE AS PER
GENERAL NOTE TO SCHEDULE OF RATES FOR THE YEAR 2019-2020
(with effect from 01-07-2019)**

Sl. No.	Area	PERCENTAGE EXTRA ALLOWABLE ON				
		Labour	Material	Rate of work (where human labour involved)	Conveyance	Head Load
1	For works in Erstwhile Chennai Corporation limits and the belt area of 32 KM around erstwhile Chennai Corporation limits (i,e) prior to formation of Greater Chennai Corporation, Madurai Corporation limits, Coimbatore Corporation limits and also for works in Hosur Taluk.	10%	—	10%	—	10%
2.	For works in Trichy, Salem, Tirunelveli, Tiruppur, Erode, Thoothukudi and Vellore Corporation limits.	5%	—	5%	-	5%
3.	Restricted Areas					
i	For Sewer works under unhygienic condition	10%	—	10%	—	—
ii	For works in Central jail Campus	10%	—	10%	10%	—
iii	For works in Sub Jail Campus	5%	—	5%	5%	—
iv	For works in Reserve Forest Areas	20%	20%	20%	20%	20%
4	Hills					
i	For works in Nilgiris District	40%	25%	40%	—	40%
ii	For works at Mudumalai Sanctuary, Shandy Nalla Sheep Farm, Dansandle Area	40%	25%	40%	—	40%
iii	For works at Valparai	40%	25%	40%	—	40%
iv	For works at Gudiyalathur, Siruvani, Thavalamalai Hills, Thalavadi Hills, Bargur Hills, Anamalai, Chennimalai and Sivanmalai Hills	20%	20%	20%	—	20%
v	For works in Western Ghats of Madurai, Virudhunagar, Coimbatore, Tirunelveli and Kanyakumari Districts.	20%	20%	20%	—	20%

Sl. No.	Area	PERCENTAGE EXTRA ALLOWABLE ON				
		Labour	Material	Rate of work (where human labour involved)	Conveyance	Head Load
	In Madurai, Theni & Dindigul Districts.					
vi	For works at Thekkady	50%	25%	—	—	—
vii	For works at Periyar Dam Site	—	60%	—	—	—
viii	For works at Periyar Dam Site under normal condition	100%	—	—	—	—
ix	For works at Periyar Dam Site under hanging condition	150%	—	—	—	—
x	For works at Lower Camp above Kuruvanthu Bridge, Bodi Hills, Cumbum Mettu, Sirumalai, Pachai Kamatchi Hills, Palani Hills, Tiruparankundram Hills, Idumban Hills, Megamalai Panchayat and Thummakundu Panchayat	50%	50%	50%	—	50%
xi	For works at Kodaikanal	40%	25%	40%	—	40%
xii	For works at Yercaud Hills, Yercaud Sub - Taluk, Boothamalai, Aranuthumalai, Sarugumalai and Tiruchengodu Hills in Salem & Namakkal Districts.	25%	25%	25%	—	25%
xiii	For works at Kalrayan Hills, Pachamalai Hills, Kolli Hills in Salem and Namakkal Districts.	40%	25%	40%	—	40%
xiv	For works at Jawadhu Hills, Elagiri Hills, Kalrayan Hills, Nakkanamalai Hills, Naickenneri Hills in Thiruvannamalai and Vellore Districts.	40%	25%	40%	—	40%
xv	For works at Piranmalai covering Oduvarpatti, Kattugudipatti, Pannadaipattu, V.Pudur Villages, Mamalai covering Vannar Iruppu, Nagamangalam Villages, Usilamalai covering Poolankurichi Village, Hillocks at Musundapatti, Usilam, Ammapatty and Thuthampatti in Sivagangai District.	40%	25%	40%	—	40%

Sl. No.	Area	PERCENTAGE EXTRA ALLOWABLE ON				
		Labour	Material	Rate of work (where human labour involved)	Conveyance	Head Load
xvi	For works at Chitheri Hills, Sittiling in Kalrayan Hills in Dharmapuri District.	40%	25%	40%	—	40%
xvii	For works at Kalrayan Hills in Cuddalore and Villupuram Districts.	40%	25%	40%	-	40%
xviii	For works at Pachamalai Hills in Trichy, Karur and Perambalur Districts.	40%	25%	40%	—	40%
5	ISLANDS					
I	For works at Rameswaram Island in Ramanathapuram District.	25%	-	25%	-	25%
ii	For works in other Islands viz., Upputhannie, Puleevilaichalli, Alaiappar, Valimunai, Appa, Thalaiyari, Valai, Mullai, Manoli, Minidiputti, Nadu, Nallathannie, Pullivasal, Poomarichan, Muyal, Singala, Kuruseedar Islands in Ramanathapuram District.	125%	125%	125%	125%	125%
iii	For works in Van, Kasvar, Karaichalli and Vilankurichi Islands in Thoothukudi District.	125%	125%	125%	125%	125%
6	TUNNELS					
i	Where human labour alone is involved	15%	-	15%	-	-
7	DAM SITES UNDER HANGING CONDITION					
i.	For works at dam sites other than Periyar Dam Site, which may be executed by hanging from top of dam through slings or rope ladders to work in dizzy height.	75%	-	-	-	-

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II. RATES FOR LABOUR

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TWAD BOARD

II. RATES FOR LABOUR

Schedule Item No.	Description	Unit	Rate for 2019-20 in Rupees
1	Driller	Day	610.00
2	Assistant Driller	Day	501.00
3	Special heavy labour for driving sheet pile	Day	610.00
4	Boring Attendant	Day	445.00
5	Water Meter Reader	Day	426.00
6	Helper for Rig	Day	445.00
7	a. Electrician with LEE/DEE and 'C' certificate	Day	780.00
	b. Electrician with LEE/ DEE	Day	747.00
	C. Electrician with ITI and 'C' Certificate	Day	669.00
	d. Electrician with ITI 'and B' Certificate	Day	610.00
	e. Electrician with ITI	Day	610.00
8	a. Pump Operator with ITI	Day	610.00
	b. Pump Operator without ITI	Day	520.00
9	Laboratory Attender SSLC/ 10th Std passed	Day	361.00
10	a. Filter Bed Operator with D.M.E.	Day	747.00
	b. Filter Bed Operator with ITI	Day	610.00
	c. Filter Bed operator without I.T.I.	Day	520.00
11	Cleaner for Treatment Unit, Pump and vehicles	Day	426.00
12	Boring Mechanic for Hand Boring set	Day	520.00
13	Turn Cock (Experience in pipe line Operation and maintenance	Day	426.00
14	Fitter (Pipe laying / Bar bending) I Class	Day	566.00
15	Fitter (Pipe laying / Bar bending) II Class	Day	549.00
16	Sewer Cleaner	Day	426.00
17	Store Attender SSLC /10th Std Passed	Day	426.00
18	Divers and Well Sinkers	Day	584.00
19	Hammer Man (Geophysical survey)	Day	404.00
20	Geological Assistant	Day	619.00
21	Maintenance Assistant	Day	445.00
22	Plant Operator, SSLC passed with 3 years experience	Day	500.00
23	Reverse Osmosis (R.O.) Plant Operator SSLC passed with 3 years experience	Day	610.00
24	Mechanic with ITI	Day	502.00
25	a. Carpenter I Class	Day	638.00
	b. Carpenter II Class	Day	609.00
26	a. Cleaner I Gr.	Day	339.00
	b. Cleaner II Gr.	Day	336.00
27	a. Fitter I Class	Day	576.00
	b. Fitter II Class	Day	560.00

Schedule Item No.	Description	Unit	Rate for 2019-20 in Rupees
28	Floor Polisher	Day	502.00
29	Gardener	Day	398.00
30	Head Mazdoor for Well sinking	Day	422.00
31	a. Driver (Light duty)	Day	502.00
	b. Driver (Heavy duty)	Day	537.00
32	Jumper Mazdoor	Day	398.00
33	a. Maistry, Road Inspector & Work Inspector	Day	484.00
	b. Maistry, Road Inspector & Work Inspector (Degree holder)	Day	537.00
34	a. Mason for Brick Work - I Class	Day	652.00
	b. Mason for Brick Work - II Class	Day	609.00
35	a. Mason for Stone Work - I Class	Day	652.00
	b. Mason for Stone Work - II Class	Day	609.00
36	a. Mazdoor Category I	Day	426.00
	b. Mazdoor Category II	Day	368.00
	c. Head Mazdoor	Day	440.00
37	a. Moplah - I Class	Day	501.00
	a. Moplah - II Class	Day	483.00
38	a. Painter/Varnisher-I Class	Day	522.00
	b. Painter/Varnisher-II Class	Day	505.00
39	Pile Driver	Day	463.00
40	a. Plumber I Class	Day	566.00
	b. Plumber II Class	Day	549.00
41	Pump Driver	Day	440.00
42	a. Stone cutter- I Class	Day	501.00
	b. Stone cutter- II Class	Day	483.00
43	a. Welder/ Bracer - I Class	Day	501.00
	b. Welder/ Bracer - II Class	Day	483.00
44	Well sinking Diver working with Helmet (above two metres depth of water)	Day	584.00
	Technical Assistant		
45	a. Technical Assistant Gr.I (BE passed)	Day	837.00
	b. Technical Assistant-Gr.II (Diploma in Engg. Passed/ B.E. failed/Degree in Geology for ground water works)	Day	754.00
	c. Technical Assistant Gr.III (Diploma in Engg. Failed / ITI (Civil) passed	Day	638.00
46	a. Laboratory Assistant. Gr.I (Post Graduate in Science)	Day	638.00
	b. Laboratory Assistant. Gr.II (Degree in Science/ Degree in Geology for ground water)	Day	584.00
	c. Laboratory Assistant Grade III (with Degree qualification to work as works clerk)	Day	526.00
47	a. Mazdoor employed for Geological mapping	Day	426.00

Schedule Item No.	Description	Unit	Rate for 2019-20 in Rupees
	b. Mazdoor employed for Pitting, Trenching, Sampling and Drilling works	Day	426.00
	c. Mazdoor employed for Geophysical Investigation works	Day	426.00
	d. Head Mazdoor to supervise exploratory works	Day	450.00
48	Mixer Operator (including concrete mixer)	Day	463.00
49	Mixer Driver	Day	440.00
50	Compressor Operator	Day	443.00
51	Computer Operator		
	a. Gr.I [B.E. (Computer Science)/ M.Sc., (Computer Science)]	Day	837.00
	b. Gr.II [B.Sc., (Computer Science)/ Diploma in Computer Science]	Day	754.00
52	Stone & Crusher Operator	Day	443.00
53	Heavy Mazdoor	Day	463.00
54	Wireman Grade I/ Electrician Grade I	Day	568.00
55	Wireman Grade II/ Electrician Grade II	Day	537.00
56	Electrical Helper	Day	422.00
57	Laboratory Attendant	Day	361.00
58	Electrical Maistry	Day	619.00
59	Axe Mazdoor	Day	398.00
60	Blacksmith - 1st Class	Day	502.00
61	Blacksmith - 2nd Class	Day	483.00
62	Boat Mazdoor	Day	422.00
63	Bullocks pair with driver (with bandy)	Day	787.00
64	Bullocks single with driver (with bandy)	Day	566.00
65	Caulker	Day	440.00
66	Ferry Mazdoor	Day	440.00
67	Hammer Mazdoor	Day	404.00
68	Mechanic - 1st Class	Day	502.00
69	Mechanic - 2nd Class	Day	483.00
70	Navagonies or Javali Man - 1st Class	Day	422.00
71	Sawyer	Day	463.00
72	Smith 1st Class	Day	501.00
73	Smith 2nd Class	Day	483.00
74	Sprayer Mazdoor (for bitumen, tar etc.,)	Day	398.00
75	Syrang-1st Class	Day	501.00
76	Syrang-2 nd Class	Day	483.00
77	Thatcher	Day	422.00
78	Tinker 1 st Class	Day	404.00
79	Tinker 2 nd Class	Day	398.00
80	Turner 1 st Class	Day	463.00
81	Turner 2 nd Class	Day	440.00

Schedule Item No.	Description	Unit	Rate for 2019-20 in Rupees
82	Time Keeper Ist Class	Day	501.00
83	Time Keeper 2nd Class	Day	483.00
84	Well Diver for removing silt - 1 st Class	Day	501.00
85	Well Diver for removing silt - 2nd Class	Day	483.00
86	Well sinker - 1st Class	Day	566.00
87	Well sinker - 2nd Class	Day	549.00
88	Wodder	Day	422.00
89	Cinema Operator (ITI Passed)	Day	526.00
90	B.Sc., (Agriculture) Passed- Technical Assistant	Day	754.00
91	Irrigation Community Organiser GradeI [B.E(Agri) passed/B.Sc.,(Agri)Passed/PG (Geology) & Rural Development]	Day	807.00
92	Irrigation Community Organiser Grade II [B.E (Agri) failed / B.Sc.,(Agri)failed /Diploma in Agri. Passed)]	Day	672.00
93	HeatMaster Operator	Day	422.00
94	Raker	Day	440.00
95	Lift Operator	Day	484.00
96	Sound Service Operator	Day	404.00

III (A) RATES FOR MATERIALS

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**1.0 UN PLASTICIZED PVC PIPES FOR POTABLE WATER SUPPLY
AS PER IS 4985 / 2000**

Sl. No	Description	Unit	Rate for 2019-20 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
I	4KSC					
1	63mm	Metre	44.00			
2	75mm	Metre	61.00			
3	90mm	Metre	86.00			
4	110mm	Metre	122.00			
5	140mm	Metre	204.00			
6	160mm	Metre	269.00			
7	180mm	Metre	348.00			
8	200mm	Metre	420.00			
II	6KSC					
1	50mm	Metre	39.00			
2	63mm	Metre	62.00			
3	75mm	Metre	87.00			
4	90mm	Metre	123.00			
5	110mm	Metre	125.00			
6	140mm	Metre	300.00			
7	160mm	Metre	376.00			
8	180mm	Metre	489.00			
9	200mm	Metre	605.00			
III	10KSC					
1	50mm	Metre	61.00			
2	63mm	Metre	95.00			
3	75mm	Metre	134.00			
4	90mm	Metre	193.00			
5	110mm	Metre	290.00			
6	140mm	Metre	463.00			
7	160mm	Metre	602.00			
8	180mm	Metre	770.00			
9	200mm	Metre	944.00			

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO

1.1 PVC CASING PIPE AS PER IS 12818 / 2010

Sl. No	Description	Unit	Rate for 2019-20 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
1	150mm CS	Metre	421.00			
2	150mm CM	Metre	549.00			
3	150mm RS	Metre	722.00			
4	200mm CS	Metre	786.00			
5	200mm CM	Metre	1010.00			
6	200mm RS	Metre	1247.00			

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO

CS - Casing Shallow depth up to 80m
CM - Casing Medium depth 81m to 250m
RS - Ribbed screen pipe

**1.2 UN PLASTICIZED NON - PRESSURE POLYVINYL CHLORIDE (PVC-U)
PIPES FOR USE IN UNDERGROUND DRAINAGE AND SEWERAGE
SYSTEMS AS PER IS 15328/2003**

Sl. No.	Description	Unit	Rate for 2019- 20 in Rupees
I	SN8-SDR 34(S 16.5)		
1	110mm	Per Metre	191.00
2	125mm	Per Metre	250.00
3	160mm	Per Metre	402.00
4	200mm	Per Metre	627.00
5	250mm	Per Metre	972.00
6	315mm	Per Metre	1559.00
II	SN4-SDR 41(S 20)		
1	125mm	Per Metre	214.00
2	160mm	Per Metre	326.00
3	200mm	Per Metre	518.00
4	250mm	Per Metre	811.00
5	315mm	Per Metre	1254.00
III	SN2-SDR 51(S 25)		
1	160mm	Per Metre	277.00
2	200mm	Per Metre	428.00
3	250mm	Per Metre	662.00
4	315mm	Per Metre	1060.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO

1.3 UPVC- Column Pipe

Sl.No.	Description	Unit	Rate for 2019 -20 in Rupees
1	25mm	Per Metre	69.00
2	32mm	Per Metre	110.00
3	40mm	Per Metre	148.00
4	50mm	Per Metre	240.00
5	65mm	Per Metre	309.00
6	80mm	Per Metre	427.00
7	100mm	Per Metre	640.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

1.4 PVC SPECIALS AS PER IS 7834/1987

Sl.No.	Description	Unit	Rate for 2019 -20 in Rupees
	PVC THREADED COUPLER		
1	63 mm x 50 mm	Each	39.00
2	75 mm x 50 mm	Each	61.00
3	90 mm x 80 mm	Each	77.00
4	110 mm x 100 mm	Each	137.00
5	140 mm x 125 mm	Each	192.00
	UNEQUAL TEE		
1	63 mm x 50 mm	Each	32.00
2	75 mm X 50 mm	Each	39.00
3	90 mm x 50 mm	Each	87.00
4	90 mm x 63 mm	Each	83.00
5	90 mm x 75 mm	Each	86.00
6	110 mm x 50 mm	Each	81.00
7	110mm x 63 mm	Each	82.00
8	110 mm x 90mm	Each	153.00
9	140mm x 50 mm	Each	312.00
10	140 mm x 63 mm	Each	300.00
11	140 mm x 90 mm	Each	312.00
12	140 mm x 110 mm	Each	265.00
13	160 mm x 50 mm	Each	472.00
14	160 mm x 63 mm	Each	460.00
15	160 mm x 90 mm	Each	218.00
16	160 mm x 110mm	Each	250.00
17	160 mm x140 mm	Each	586.00
	PVC REDUCER COUPLER		
1	63 mm x 50 mm	Each	15.00
2	75 mm x 63 mm	Each	11.00
3	90 mm x 63 mm	Each	24.00
4	90 mm x 75 mm	Each	18.00
5	110 mm x 63 mm	Each	35.00
6	110 mm x 75 mm	Each	40.00
7	110 mm x 90 mm	Each	28.00
8	140 mm x 63 mm	Each	101.00
9	140 mm x 90 mm	Each	72.00
10	140 mm x 110 mm	Each	45.00
11	160 mm x 110 mm	Each	108.00
12	160 mm x 140 mm	Each	83.00

Sl.No.	Description	Unit	Rate for 2019 -20 in Rupees
	PVC REDUCER MULTI STAGE		
1	90 mm x 63 mm	Each	24.00
2	110 mm x 63 mm	Each	35.00
3	110 mm x 75 mm	Each	40.00
4	110 mm x 90 mm	Each	40.00
5	140 mm x 90 mm	Each	192.00
	PVC REDUCER FABRICATED		
1	75 mm x 63 mm	Each	11.00
2	90 mm x 75 mm	Each	18.00
3	110 mm x 90 mm	Each	28.00
4	140 mm x 110 mm	Each	45.00
5	160 mm x 140 mm	Each	83.00
	SADDLE PIECE		
1	63 mm x 20 mm	Each	51.00
2	75 mm x 20 mm	Each	59.00
3	90 mm x 20 mm	Each	68.00
4	110 mm x 20 mm	Each	75.00
5	140 mm x 20 mm	Each	99.00
6	160 mm x 20 mm	Each	113.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

1.5 PVC SPECIALS AS PER IS 10124/1982 Part-II cont..

Sl. No.	Description	Rate for 2019 - 20 in Rupees											
		20mm	25mm	32mm	40mm	50mm	63mm	75mm	90mm	110mm	140mm	160mm	200mm
1	PVC Couplers fabricated 4 KSC	-	-	-	-	6	8	12	19	30	54	84	177
2	PVC Couplers fabricated 6 KSC	-	-	-	-	6	12	19	29	46	78	124	263
3	PVC Bends fabricated 4 KSC	-	-	-	-	18	23	39	59	100	246	337	649
4	PVC Bends fabricated 6 KSC	-	-	-	-	18	36	60	92	156	357	497	963
5	PVC Equal Tee Fabricated 4 KSC	-	-	-	-	34	47	50	121	173	280	338	419
6	PVC Equal Tee Fabricated BIS 10124/1982 PartV 6 KSC	-	-	-	-	36	61	88	133	237	411	434	531
7	PVC Couplers (Mould) BIS 7834/1975 Part VI	3	3	5	5	8	19	29	43	66	186	228	428
8	PVC Elbow (Mould) BIS 7834/1975 Part VI	3	5	8	13	24	41	62	88	153	147	234	541
9	PVC Equal tee (Mould) BIS 7834/1975	5	7	10	18	29	52	73	120	186	216	328	942
10	PVC Male Threaded Adopter	-	-	-	-	14	19	38	52	75	125	207	298
11	PVC End Cap	2	3	5	7	9	15	19	29	47	67	91	287
12	PVC Tail piece without flange (BIS marks)	-	-	-	-	33	23	35	54	87	161	236	329
13	PVC flanged Tail piece	-	-	-	-	-	182	219	273	319	530	694	1039

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

O-PVC PIPES (NEW ITEM)

1.6 UN PLASTICIZED O-PVC PIPES FOR PORTABLE WATER SUPPLY AS PER IS 16647 / 2017

Sl. No	Description	Unit	Rate for 2019-20 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
I	PN 12.5 Class 500					
1	110mm	Metre	681.00			
2	160mm	Metre	1114.00			
3	200mm	Metre	1457.00			
4	250mm	Metre	2044.00			
5	315mm	Metre	2695.00			
6	400mm	Metre	4088.00			
II	PN 16 Class 500					
1	110mm	Metre	752.00			
2	160mm	Metre	1250.00			
3	200mm	Metre	1641.00			
4	250mm	Metre	2174.00			
5	315mm	Metre	2992.00			
6	400mm	Metre	4491.00			

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO

2.0 HDPE PIPES - PE 100 AS PER IS 4984/2016

Sl. No	Description	Unit	Rate for 2019-20 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
	PN 6					
1	50 mm	Metre	70.00			
2	63 mm	Metre	109.00			
3	75 mm	Metre	155.00			
4	90 mm	Metre	214.00			
5	110 mm	Metre	317.00			
6	125 mm	Metre	411.00			
7	140 mm	Metre	515.00			
8	160 mm	Metre	671.00			
9	180 mm	Metre	845.00			
10	200 mm	Metre	1044.00			
11	225 mm	Metre	1325.00			
12	250 mm	Metre	1625.00			
13	280 mm	Metre	2038.00			
14	315 mm	Metre	2581.00			
15	355 mm	Metre	3269.00			
16	400 mm	Metre	4105.00			
17	450 mm	Metre	5202.00			
18	500 mm	Metre	6417.00			
19	560 mm	Metre	8034.00			
20	630 mm	Metre	10148.00			
	PN 8					
1	50 mm	Metre	87.00			
2	63 mm	Metre	136.00			
3	75 mm	Metre	192.00			
4	90 mm	Metre	275.00			
5	110 mm	Metre	412.00			
6	125 mm	Metre	528.00			
7	140 mm	Metre	660.00			
8	160 mm	Metre	864.00			
9	180 mm	Metre	1089.00			
10	200 mm	Metre	1342.00			
11	225 mm	Metre	1702.00			
12	250 mm	Metre	2094.00			
13	280 mm	Metre	2627.00			
14	315 mm	Metre	3324.00			
15	355 mm	Metre	4206.00			
16	400 mm	Metre	5112.00			
17	450 mm	Metre	6458.00			

Sl. No	Description	Unit	Rate for 2019-20 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
18	500 mm	Metre	7984.00			
19	560 mm	Metre	9995.00			
20	630 mm	Metre	12639.00			
	PN 10					
1	50 mm	Metre	106.00			
2	63 mm	Metre	164.00			
3	75 mm	Metre	236.00			
4	90 mm	Metre	334.00			
5	110 mm	Metre	495.00			
6	125 mm	Metre	638.00			
7	140 mm	Metre	796.00			
8	160 mm	Metre	1042.00			
9	180 mm	Metre	1323.00			
10	200 mm	Metre	1516.00			
11	225 mm	Metre	2055.00			
12	250 mm	Metre	2533.00			
13	280 mm	Metre	3173.00			
14	315 mm	Metre	4018.00			
15	355 mm	Metre	5109.00			
16	400 mm	Metre	6175.00			
17	450 mm	Metre	7788.00			
18	500 mm	Metre	9622.00			
19	560 mm	Metre	12058.00			
20	630 mm	Metre	15273.00			
	PN 12.5					
1	50 mm	Metre	125.00			
2	63 mm	Metre	202.00			
3	75 mm	Metre	284.00			
4	90 mm	Metre	415.00			
5	110 mm	Metre	614.00			
6	125 mm	Metre	788.00			
7	140 mm	Metre	987.00			
8	160 mm	Metre	1290.00			
9	180 mm	Metre	1630.00			
10	200 mm	Metre	2009.00			
11	225 mm	Metre	2548.00			
12	250 mm	Metre	3131.00			
13	280 mm	Metre	3931.00			
14	315 mm	Metre	4977.00			
15	355 mm	Metre	6314.00			

Sl. No	Description	Unit	Rate for 2019-20 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
16	400 mm	Metre	7359.00			
17	450 mm	Metre	9308.00			
18	500 mm	Metre	11506.00			
19	560 mm	Metre	14410.00			
20	630 mm	Metre	18243.00			
	PN 16					
1	50 mm	Metre	154.00			
2	63 mm	Metre	250.00			
3	75 mm	Metre	345.00			
4	90 mm	Metre	496.00			
5	110 mm	Metre	741.00			
6	125 mm	Metre	956.00			
7	140 mm	Metre	1196.00			
8	160 mm	Metre	1566.00			
9	180 mm	Metre	1975.00			
10	200 mm	Metre	2437.00			
11	225 mm	Metre	3087.00			
12	250 mm	Metre	3806.00			
13	280 mm	Metre	4770.00			
14	315 mm	Metre	6033.00			
15	355 mm	Metre	7652.00			
16	400 mm	Metre	8700.00			
17	450 mm	Metre	10994.00			
18	500 mm	Metre	13584.00			

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO

**2.1 SPECIALS FOR HDPE PIPES AS PER IS 8360/1977/Part I, (Reaffirmed 1992)
PART II and III (Reaffirmed 2002)**

Sl. No	Description	Unit	Rate for 2019-20 in Rupees	
			90 Degree Bend	Equal Tee
	PN6			
1	50 mm	Each	52.00	57.00
2	63 mm	Each	76.00	78.00
3	75 mm	Each	105.00	135.00
4	90 mm	Each	184.00	257.00
5	110 mm	Each	332.00	426.00
6	125 mm	Each	437.00	450.00
7	140 mm	Each	602.00	618.00
8	160 mm	Each	872.00	910.00
9	180 mm	Each	1216.00	1294.00
10	200 mm	Each	1648.00	1724.00
11	225 mm	Each	2268.00	2433.00
12	250 mm	Each	3090.00	3306.00
13	280 mm	Each	4330.00	4596.00
14	315 mm	Each	7295.00	6339.00
15	355 mm	Each	10650.00	8866.00
16	400 mm	Each	15371.00	12966.00
17	450 mm	Each	20392.00	18408.00
18	500 mm	Each	30111.00	31798.00
19	560 mm	Each	39825.00	39748.00
20	630 mm	Each	50097.00	55040.00
	PN 8			
1	125 mm	Each	417.00	478.00
2	140 mm	Each	556.00	653.00
3	160 mm	Each	792.00	946.00
4	180 mm	Each	1106.00	1319.00
5	200 mm	Each	1433.00	1762.00
6	225 mm	Each	2044.00	2457.00
7	250 mm	Each	2750.00	3315.00
8	280 mm	Each	3805.00	4581.00
9	315 mm	Each	7907.00	6276.00
10	355 mm	Each	11276.00	8730.00
11	400 mm	Each	16458.00	12660.00
12	450 mm	Each	23445.00	17880.00
13	500 mm	Each	32157.00	32340.00
14	560 mm	Each	45190.00	40490.00
15	630 mm	Each	64344.00	51556.00
	PN 10			
1	50 mm	Each	71.00	82.00
2	63 mm	Each	117.00	121.00
3	75 mm	Each	151.00	222.00
4	90 mm	Each	272.00	359.00
5	110 mm	Each	443.00	600.00
6	125 mm	Each	608.00	837.00
7	140 mm	Each	891.00	1154.00
8	160 mm	Each	1259.00	1770.00
9	180 mm	Each	1923.00	2448.00
10	200 mm	Each	2464.00	3269.00

Sl. No	Description	Unit	Rate for 2019-20 in Rupees	
			90 Degree Bend	Equal Tee
11	225 mm	Each	3377.00	4510.00
12	250 mm	Each	4510.00	6090.00
13	280 mm	Each	6253.00	8391.00
14	315 mm	Each	10966.00	11450.00
15	355 mm	Each	15833.00	15884.00
16	400 mm	Each	23228.00	22926.00
17	450 mm	Each	31196.00	30434.00
18	500 mm	Each	41377.00	52288.00
19	560 mm	Each	63410.00	84048.00
20	630 mm	Each	94046.00	119783.00
PN 12.5				
1	125 mm	Each	613.00	817.00
2	140 mm	Each	856.00	1152.00
3	160 mm	Each	1225.00	1715.00
4	180 mm	Each	1701.00	2458.00
5	200 mm	Each	2274.00	3367.00
6	225 mm	Each	3237.00	4431.00
7	250 mm	Each	4134.00	6048.00
8	280 mm	Each	5917.00	8524.00
9	315 mm	Each	12554.00	11191.00
10	355 mm	Each	16610.00	16011.00
11	400 mm	Each	23452.00	21410.00
12	450 mm	Each	34180.00	40522.00
13	500 mm	Each	46846.00	58107.00
14	560 mm	Each	65741.00	81576.00
15	630 mm	Each	93627.00	116133.00
PN 16				
1	50 mm	Each	151.00	148.00
2	63 mm	Each	236.00	216.00
3	75 mm	Each	275.00	369.00
4	90 mm	Each	423.00	564.00
5	110 mm	Each	771.00	976.00
6	125 mm	Each	834.00	1228.00
7	140 mm	Each	1165.00	1728.00
8	160 mm	Each	2022.00	2628.00
9	180 mm	Each	2731.00	3760.00
10	200 mm	Each	3660.00	5161.00
11	225 mm	Each	5210.00	6788.00
12	250 mm	Each	6661.00	9281.00
13	280 mm	Each	9524.00	13066.00
14	315 mm	Each	17989.00	17878.00
15	355 mm	Each	24217.00	25591.00
16	400 mm	Each	35881.00	44631.00
17	450 mm	Each	50876.00	60768.00
18	500 mm	Each	73942.00	91523.00

Note : 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
2) GST extra applicable as per GO

3.0 A.C.PRESSURE PIPES AS PER IS 1592 / 2003

Sl.No	Description	Unit	Rate for 2019-20 in Rupees
I	Class 15		
1	80mm	Metre	296.00
2	100mm	Metre	389.00
3	125mm	Metre	508.00
4	150mm	Metre	715.00
5	200mm	Metre	1184.00
6	250mm	Metre	1500.00
7	300mm	Metre	2099.00
8	350mm	Metre	2559.00
9	400mm	Metre	3628.00
10	450mm	Metre	4307.00
II	Class 20		
1	80mm	Metre	324.00
2	100mm	Metre	495.00
3	125mm	Metre	633.00
4	150mm	Metre	890.00
5	200mm	Metre	1515.00
6	250mm	Metre	1946.00
7	300mm	Metre	2735.00
8	350mm	Metre	3326.00
9	400mm	Metre	4746.00
10	450mm	Metre	5718.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO.

3.1 A.C. COUPLER AS PER IS 1592 /2003

Sl.No	Description	Unit	Rate for 2019-20 in Rupees
I	Class 15		
1	80mm	Each	256.00
2	100mm	Each	331.00
3	125mm	Each	417.00
4	150mm	Each	500.00
5	200mm	Each	856.00
6	250mm	Each	999.00
7	300mm	Each	1268.00
8	350mm	Each	1655.00
9	400mm	Each	2436.00
10	450mm	Each	2878.00
II	Class 20		
1	80mm	Each	272.00
2	100mm	Each	351.00
3	125mm	Each	449.00
4	150mm	Each	591.00
5	200mm	Each	919.00
6	250mm	Each	1236.00
7	300mm	Each	1601.00
8	350mm	Each	2075.00
9	400mm	Each	3094.00
10	450mm	Each	3699.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO.

3.2 C.I.D.JOINTS AS PER IS 8794 / 1988

Sl.No	Description	Unit	Rate for 2019-20 in Rupees
I	Class 15		
1	80mm	Each	432.00
2	100mm	Each	542.00
3	125mm	Each	683.00
4	150mm	Each	875.00
5	200mm	Each	1273.00
6	250mm	Each	1656.00
7	300mm	Each	1998.00
8	350mm	Each	3361.00
9	400mm	Each	4191.00
10	450mm	Each	5033.00
II	Class 20		
1	80mm	Each	443.00
2	100mm	Each	549.00
3	125mm	Each	737.00
4	150mm	Each	887.00
5	200mm	Each	1353.00
6	250mm	Each	1783.00
7	300mm	Each	1857.00
8	350mm	Each	3576.00
9	400mm	Each	4292.00
10	450mm	Each	5070.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO.

4.0 C.I. SPUN PIPES AS PER IS 1536/2001 Amendment No.3. July 2008

SI No.	Description	Unit	Rate for 2019- 20 in Rupees
I	LA Class		
1	80mm	Metre	985.00
2	100mm	Metre	1220.00
3	125mm	Metre	1590.00
4	150mm	Metre	1888.00
5	200mm	Metre	2729.00
6	250mm	Metre	3677.00
7	300mm	Metre	4742.00
8	350mm	Metre	6135.00
9	400mm	Metre	7466.00
10	450mm	Metre	9003.00
11	500mm	Metre	10539.00
12	600mm	Metre	14045.00
13	700mm	Metre	18026.00
14	750mm	Metre	20257.00
	A Class		
1	80mm	Metre	1070.00
2	100mm	Metre	1344.00
3	125mm	Metre	1737.00
4	150mm	Metre	2067.00
5	200mm	Metre	2962.00
6	250mm	Metre	3994.00
7	300mm	Metre	5184.00
8	350mm	Metre	6655.00
9	400mm	Metre	8159.00
10	450mm	Metre	9890.00
11	500mm	Metre	11481.00
12	600mm	Metre	15332.00
13	700mm	Metre	19632.00
14	750mm	Metre	22052.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
III	B Class		
1	80mm	Metre	1149.00
2	100mm	Metre	1433.00
3	125mm	Metre	1870.00
4	150mm	Metre	2225.00
5	200mm	Metre	3204.00
6	250mm	Metre	4331.00
7	300mm	Metre	5618.00
8	350mm	Metre	7218.00
9	400mm	Metre	8808.00
10	450mm	Metre	10670.00
11	500mm	Metre	12420.00
12	600mm	Metre	16610.00
13	700mm	Metre	21153.00
14	750mm	Metre	23857.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO

4.1 C.I D/F PIPES AS PER IS 7181/1986 & IS 1537/1996

Sl. No.	Description	Unit	Rate for 2019 - 20 in Rupees
I	STANDARD		
1	80mm to 200mm	Kg	68.00
2	250mm to 400mm	Kg	70.00
3	450mm to 750mm	Kg	74.50
II	NON-STANDARD		
1	80mm to 200mm	Kg	72.00
2	250mm to 400mm	Kg	74.50
3	450mm to 750mm	Kg	78.50

4.2 CI D/F SPECIALS & S/S SPECIALS AS PER IS 1538/1993

Sl. No.	Description	Unit	Rate for 2019 - 20 in Rupees
I	STANDARD		
1	80mm to 200mm	Kg	64.00
2	250mm to 400mm	Kg	74.50
3	450mm to 750mm	Kg	80.50
II.	NON-STANDARD		
1	80mm to 200mm	Kg	68.00
2	250mm to 400mm	Kg	78.00
3	450mm to 750mm	Kg	83.50

- Note: 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
- 2) GST extra applicable as per GO

5.0 G I PIPES (MEDIUM) AS PER IS 1239/PART I/2004

Sl. No.	Description	Unit	Rate for 2019 - 20 in Rupees
1	15mm	Metre	96.00
2	20mm	Metre	128.00
3	25mm	Metre	186.00
4	32mm	Metre	233.00
5	40mm	Metre	271.00
6	50mm	Metre	369.00
7	65mm	Metre	472.00
8	80mm	Metre	584.00
9	100mm	Metre	832.00
10	125mm	Metre	1196.00
11	150mm	Metre	1338.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO

5.1a G.I. SPECIALS AS PER IS 1239/PART II

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
	GI REDUCER (HEAVY)		
1	150 mm x 125 mm	Each	775.00
2	150 mm x 100 mm	Each	775.00
3	150 mm x 80 mm	Each	775.00
4	125 mm x 100 mm	Each	698.00
5	125 mm x 80 mm	Each	698.00
6	125 mm x 65 mm	Each	698.00
7	125 mm x 50 mm	Each	698.00
8	100 mm x 80 mm	Each	481.00
9	100 mm x 65 mm	Each	481.00
10	100 mm x 50 mm	Each	481.00
11	80 mm x 65 mm	Each	300.00
12	80 mm x 50 mm	Each	300.00
13	80 mm x 40 mm	Each	300.00
14	80 mm x 32 mm	Each	300.00
15	65 mm x 50 mm	Each	206.00
16	65 mm x 40 mm	Each	206.00
17	65 mm x 32 mm	Each	206.00
18	65 mm x 20 mm	Each	206.00
19	50 mm x 40 mm	Each	113.00
20	50 mm x 32 mm	Each	113.00
21	50 mm x 20 mm	Each	113.00
22	40 mm x 32 mm	Each	79.00
23	40 mm x 20 mm	Each	79.00
	GI REDUCER (MEDIUM)		
1	150 mm x 125 mm	Each	630.00
2	150 mm x 100 mm	Each	630.00
3	150 mm x 80 mm	Each	630.00
4	125 mm x 100 mm	Each	533.00
5	125 mm x 80 mm	Each	533.00
6	125 mm x 65 mm	Each	533.00
7	125 mm x 50 mm	Each	533.00
8	100 mm x 80 mm	Each	347.00
9	100 mm x 65mm	Each	347.00
10	100 mm x 50 mm	Each	347.00
11	80 mm x 65 mm	Each	193.00
12	80 mm x 50 mm	Each	151.00

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
13	80 mm x 40 mm	Each	151.00
14	80 mm x 32 mm	Each	151.00
15	65 mm x 50 mm	Each	109.00
16	65 mm x 40 mm	Each	109.00
17	65 mm x 32 mm	Each	109.00
18	65 mm x 20 mm	Each	109.00
19	50 mm x 40 mm	Each	73.00
20	50 mm x 32 mm	Each	73.00
21	50 mm x 20 mm	Each	73.00
22	40 mm x 32 mm	Each	47.00
23	40 mm x 20 mm	Each	47.00
	G I UNEQUAL TEE (HEAVY)		
1	150 mm x 125 mm	Each	1655.00
2	150 mm x 100 mm	Each	1655.00
3	150 mm x 80 mm	Each	1655.00
4	125 mm x 100 mm	Each	1345.00
5	125 mm x 80 mm	Each	1345.00
6	125 mm x 65 mm	Each	1345.00
7	125 mm x 50 mm	Each	1345.00
8	100 mm x 80 mm	Each	934.00
9	100 mm x 65mm	Each	934.00
10	100 mm x 50 mm	Each	934.00
11	80 mm x 65 mm	Each	545.00
12	80 mm x 50 mm	Each	545.00
13	80 mm x 40 mm	Each	545.00
14	80 mm x 32 mm	Each	545.00
15	65 mm x 50 mm	Each	401.00
16	65 mm x 40 mm	Each	401.00
17	65 mm x 32 mm	Each	401.00
18	65 mm x 20 mm	Each	401.00
19	50 mm x 40 mm	Each	238.00
20	50 mm x 32 mm	Each	238.00
21	50 mm x 20 mm	Each	238.00
22	40 mm x 32 mm	Each	150.00
23	40 mm x 20 mm	Each	150.00
24	32 mm x 20 mm	Each	108.00

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
	G.I UNEQUAL TEE(MEDIUM)		
1	150 mm x 125 mm	Each	993.00
2	150 mm x 100 mm	Each	993.00
3	150 mm x 80 mm	Each	993.00
4	125 mm x 100 mm	Each	806.00
5	125 mm x 80 mm	Each	806.00
6	125 mm x 65 mm	Each	806.00
7	125 mm x 50 mm	Each	806.00
8	100 mm x 80 mm	Each	530.00
9	100 mm x 65mm	Each	530.00
10	100 mm x 50 mm	Each	530.00
11	80 mm x 65 mm	Each	261.00
12	80 mm x 50 mm	Each	261.00
13	80 mm x 40 mm	Each	261.00
14	80 mm x 32 mm	Each	261.00
15	65 mm x 50 mm	Each	184.00
16	65 mm x 40 mm	Each	184.00
17	65 mm x 32 mm	Each	184.00
18	65 mm x 20 mm	Each	184.00
19	50 mm x 40 mm	Each	109.00
20	50 mm x 32 mm	Each	109.00
21	50 mm x 20 mm	Each	109.00
22	40 mm x 32 mm	Each	79.00
23	40 mm x 20 mm	Each	79.00
24	32 mm x 20 mm	Each	79.00
	MS BOLTS AND NUTS		
1	16 mm dia x 65 to 90 mm length fully threaded bolts and nuts with 2 Nos.	Kg.	94.00
2	20mm dia and above x 90mm to 120mm length fully threaded bolts and with nuts 2 Nos.	Kg.	99.00
	RUBBER INSERTION SHEET		
1	3 Ply R.I. Sheet	Kg.	83.00
	AC COWL		
1	80 mm dia	Each	29.00
2	100 mm dia	Each	50.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

5.1b G.I. SPECIALS AS PER IS 1239/PART II

CONTINUED....

Sl. No.	Description	Rate for 2019-20 in Rupees										
		15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm
1	G.I. Equal Elbow plain	22.00	30.00	47.00	79.00	99.00	149.00	267.00	393.00	702.00	724.00	1736.00
2	G.I. Equal Tee plain	35.00	43.00	62.00	91.00	133.00	220.00	346.00	491.00	879.00	1267.00	1773.00
3	G.I. Coupling	21.00	21.00	28.00	51.00	79.00	115.00	198.00	244.00	487.00	734.00	1480.00
4	G.I. Flange set	—	—	—	—	—	70.00	86.00	99.00	163.00	238.00	843.00
5	G.I. Cross	51.00	65.00	107.00	172.00	221.00	334.00	517.00	817.00	1075.00	1354.00	—
6	G.I. Hex Nipple	21.00	37.00	37.00	58.00	73.00	101.00	172.00	242.00	359.00	383.00	825.00
7	G.I. Three Way Elbow	45.00	69.00	102.00	161.00	209.00	336.00	—	—	—	—	—
8	G.I. Plug Dia Head Taper Thread	9.00	20.00	20.00	34.00	34.00	62.00	85.00	123.00	172.00	228.00	—
9	G.I. Bend	21.00	37.00	58.00	69.00	91.00	136.00	231.00	349.00	612.00	885.00	2094.00
10	G.I. Union	61.00	65.00	110.00	155.00	197.00	280.00	525.00	732.00	1087.00	1453.00	2160.00
11	G.M. Ferrule	339.00	511.00	752.00	—	—	—	—	—	—	—	—
12	G.I. stop cock	162.00	217.00	393.00	586.00	871.00	1260.00	1607.00	2122.00	3252.00	4653.00	—
13	Rubber sheet for Flange set	—	—	—	—	—	14.00	14.00	20.00	39.00	41.00	94.00
14	G.I. Reduced Elbow Plain	28.00	32.00	54.00	86.00	112.00	164.00	287.00	437.00	753.00	1086.00	1465.00
15	G.I. Reduced Tee Plain	39.00	53.00	80.00	115.00	146.00	221.00	339.00	525.00	989.00	1396.00	1667.00
16	G.I. Reduced Socket Plain	22.00	45.00	49.00	69.00	106.00	151.00	193.00	298.00	420.00	543.00	784.00
17	G.I. Check Nut	14.00	20.00	27.00	40.00	53.00	72.00	119.00	157.00	209.00	265.00	764.00
18	G.I. Reduced Nipple	21.00	24.00	44.00	85.00	101.00	153.00	286.00	331.00	465.00	660.00	825.00
19	G.I. Dummy (Heavy)	—	—	—	—	22.00	35.00	44.00	58.00	102.00	147.00	—
20	G.I. Dummy (Medium)	—	—	—	—	20.00	29.00	40.00	49.00	94.00	145.00	—
21	M.S. Saddle Piece	—	—	—	—	—	86.00	91.00	109.00	145.00	186.00	574.00
22	Waste Not Tap	—	123.00	—	—	—	—	—	—	—	—	—
23	C.I. Footvalve with stainer	—	—	—	—	—	383.00	—	569.00	—	—	—
24	M.S. Clampset	—	—	—	—	170.00	197.00	338.00	474.00	564.00	—	827.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.

2) GST extra applicable as per GO

5.2 G.M GATE VALVES AS PER IS BS 5154 and related IS Specs

Sl.No.	Description	Rate for 2019-20 in Rupees									
		15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm	125mm
1	G.M. Gate valves	—	475.00	637.00	846.00	1143.00	1836.00	2866.00	4509.00	7725.00	10992.00
2	G.M. Non Return valves	—	—	—	—	—	1836.00	1881.00	2949.00	—	—

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

**6.0 DUCTILE IRON SOCKET/SPIGOT PIPES FOR CLASS K7
AS PER IS 8329/2000**

Sl. No.	Description	Unit	Rate for 2019 - 20 in Rupees
1	100 mm	Metre	1019.00
2	150 mm	Metre	1475.00
3	200 mm	Metre	1904.00
4	250 mm	Metre	2505.00
5	300 mm	Metre	3160.00
6	350mm	Metre	3884.00
7	400 mm	Metre	4664.00
8	450 mm	Metre	5513.00
9	500 mm	Metre	6494.00
10	600 mm	Metre	8563.00
11	700 mm	Metre	10508.00
12	750 mm	Metre	12063.00
13	800 mm	Metre	13495.00
14	900 mm	Metre	16386.00
15	1000 mm	Metre	20485.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO.

**6.1 DUCTILE IRON SOCKET/SPIGOT PIPES FOR CLASS K9
AS PER IS 8329/2000**

Sl. No.	Description	Unit	Rate for 2019 - 20 in Rupees
1	100 mm	Metre	1155.00
2	150 mm	Metre	1697.00
3	200 mm	Metre	2290.00
4	250 mm	Metre	3016.00
5	300 mm	Metre	3808.00
6	350mm	Metre	4647.00
7	400 mm	Metre	5577.00
8	450 mm	Metre	6705.00
9	500 mm	Metre	7752.00
10	600 mm	Metre	10266.00
11	700 mm	Metre	11840.00
12	750 mm	Metre	13276.00
13	800 mm	Metre	14720.00
14	900 mm	Metre	17793.00
15	1000 mm	Metre	21325.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO.

**6.2 DUCTILE IRON CLASS PN10 FLANGED PIPES
AS PER IS 8329/2000**

Sl. No.	Description	Unit	Rate for 2019 - 20 in Rupees
I	4 m length of pipes		
1	80 mm	Each	5661.00
2	100 mm	Each	6419.00
3	150 mm	Each	9244.00
4	200 mm	Each	12431.00
5	250 mm	Each	16375.00
6	300 mm	Each	21071.00
7	350mm	Each	28400.00
8	400 mm	Each	36373.00
9	450 mm	Each	44031.00
10	500 mm	Each	51501.00
11	600 mm	Each	66655.00
12	700 mm	Each	88660.00
13	750 mm	Each	102859.00
14	800 mm	Each	114164.00
15	900 mm	Each	155792.00
16	1000mm	Each	182808.00
II	5 m length of pipes		
1	80 mm	Each	6565.00
2	100 mm	Each	8336.00
3	150 mm	Each	12141.00
4	200 mm	Each	16044.00
5	250 mm	Each	21793.00
6	300 mm	Each	27843.00
7	350 mm	Each	33611.00
8	400 mm	Each	42308.00
9	450 mm	Each	50995.00
10	500 mm	Each	58763.00
11	600 mm	Each	77039.00
12	700 mm	Each	97425.00
13	750 mm	Each	111119.00
14	800 mm	Each	124469.00
15	900 mm	Each	169257.00
16	1000 mm	Each	198964.00
III	1 m length of pipes		
1	80 mm	Each	2632.00
2	100 mm	Each	3137.00
3	150 mm	Each	4349.00

Sl. No.	Description	Unit	Rate for 2019 - 20 in Rupees
4	200 mm	Each	5787.00
5	250 mm	Each	7780.00
6	300 mm	Each	10143.00
7	350mm	Each	12918.00
8	400 mm	Each	17554.00
9	450 mm	Each	21511.00
10	500 mm	Each	24514.00
11	600 mm	Each	31152.00
12	700 mm	Each	41600.00
13	750 mm	Each	47793.00
14	800 mm	Each	53985.00
15	900 mm	Each	75101.00
16	1000mm	Each	87175.00
IV	1.5 m length of pipes		
1	80 mm	Each	3244.00
2	100 mm	Each	3583.00
3	150 mm	Each	4976.00
4	200 mm	Each	6652.00
5	250 mm	Each	8889.00
6	300 mm	Each	11541.00
7	350 mm	Each	15059.00
8	400 mm	Each	20113.00
9	450 mm	Each	24555.00
10	500 mm	Each	28049.00
11	600 mm	Each	35838.00
12	700 mm	Each	47989.00
13	750 mm	Each	55466.00
14	800 mm	Each	62944.00
15	900 mm	Each	87018.00
16	1000 mm	Each	101338.00
V	2 m length of pipes		
1	80 mm	Each	3855.00
2	100 mm	Each	4031.00
3	150 mm	Each	5604.00
4	200 mm	Each	7516.00
5	250 mm	Each	9996.00
6	300 mm	Each	12939.00
7	350mm	Each	17201.00
8	400 mm	Each	22676.00

Sl. No.	Description	Unit	Rate for 2019 - 20 in Rupees
9	450 mm	Each	27598.00
10	500 mm	Each	31582.00
11	600 mm	Each	40527.00
12	700 mm	Each	54372.00
13	750 mm	Each	63137.00
14	800 mm	Each	71903.00
15	900 mm	Each	98941.00
16	1000mm	Each	115508.00
VI	2.5 m length of pipes		
1	80 mm	Each	4467.00
2	100 mm	Each	4478.00
3	150 mm	Each	6231.00
4	200 mm	Each	8380.00
5	250 mm	Each	11102.00
6	300 mm	Each	14337.00
7	350 mm	Each	19341.00
8	400 mm	Each	25238.00
9	450 mm	Each	30643.00
10	500 mm	Each	35117.00
11	600 mm	Each	45218.00
12	700 mm	Each	60760.00
13	750 mm	Each	69054.00
14	800 mm	Each	77349.00
15	900 mm	Each	106042.00
16	1000 mm	Each	124043.00
VII	3 m length of pipes		
1	80 mm	Each	4826.00
2	100 mm	Each	4924.00
3	150 mm	Each	6859.00
4	200 mm	Each	9243.00
5	250 mm	Each	12284.00
6	300 mm	Each	15773.00
7	350mm	Each	21484.00
8	400 mm	Each	27794.00
9	450 mm	Each	33688.00
10	500 mm	Each	38649.00
11	600 mm	Each	49908.00

Sl. No.	Description	Unit	Rate for 2019 - 20 in Rupees
12	700 mm	Each	67151.00
13	750 mm	Each	76537.00
14	800 mm	Each	85923.00
15	900 mm	Each	117441.00
16	1000mm	Each	137599.00
VIII	3.5 m length of pipes		
1	80 mm	Each	5163.00
2	100 mm	Each	5373.00
3	150 mm	Each	7486.00
4	200 mm	Each	10107.00
5	250 mm	Each	13535.00
6	300 mm	Each	17353.00
7	350 mm	Each	23627.00
8	400 mm	Each	30356.00
9	450 mm	Each	36730.00
10	500 mm	Each	42181.00
11	600 mm	Each	54596.00
12	700 mm	Each	73537.00
13	750 mm	Each	84014.00
14	800 mm	Each	94489.00
15	900 mm	Each	128848.00
16	1000 mm	Each	151142.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO.

6.3 DUCTILE IRON SPECIALS AS PER IS 9523/2000

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
	ALL SOCKET		
1	100mm - 200 mm dia	Kg	113.00
2	250 mm - 300 mm dia	Kg	113.00
3	350 mm - 450 mm dia	Kg	113.00
4	500 mm - 600 mm dia	Kg	113.00
5	700 mm - 750 mm	Kg	165.00
6	800mm	Kg	165.00
7	900 mm	Kg	174.00
8	1000 mm	Kg	188.00
	ALL FLANGE		
1	100mm - 200 mm dia	Kg	118.00
2	250 mm - 300 mm dia	Kg	118.00
3	350 mm - 450 mm dia	Kg	118.00
4	500 mm - 600 mm dia	Kg	118.00
5	700 mm - 750 mm	Kg	174.00
6	800 mm	Kg	174.00
7	900 mm	Kg	189.00
8	1000 mm	Kg	189.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO.
 - 3) In respect of flanged and spigot, flanged and socketted type specials, the rate applicable for flanged type specials is allowed.

7.0 HOUSE SERVICE CONNECTION IN WSS.

Sl.No	Description	Unit	Rate for 2019-20 in Rupees.
1	HSC Connection in HDPE Mains for Water Supply Scheme Electrofusion tapping saddle PE 80 blue, PN 12.5 with female threaded metal insert of SS 304 as per standards BS EN 12201 tested as per BS 6920 for drinking water in WRC-NSF Ltd, UK. (Non Wrap with top loading type). Sizes:63mm to 315mm dia distribution HDPE pipes.		
	20mm (1/2")	1 No.	489.00
	25mm (3/4")	1 No.	489.00
	32mm (1")	1 No.	489.00
2	HSC Connection in DI Mains for Water Supply Scheme Providing suitable dia non corrosive engineering plastic moulded Clamp Saddle with SS 304 threaded metal inserted for tapping outlet suiting for 1/2", 3/4" & 1" clear bore and with wide plastic strap (Engineering Plastic) with SS 304 suitable bolts & nuts. Saddle to have sealing of Thermo plastic elastomeric (TPE) material around shall as detailed in a drawing furnished.		
	20mm (1/2")	1 No.	629.00
	25mm (3/4")	1 No.	723.00
	32mm (1")	1 No.	748.00
3	Common Items for HSC Connection		
i	Brass Ferrule as per IS 319 grade of sizes 15mm, 20mm and 25mm size and threaded as per IS :554 BSPT, ISO:7-1 to suit the corresponding bore sizes of 15mm, 20mm and 25mm dia size (1/2", 3/4" and 1") in the saddle Connection, as per IS:1554 BSPT, ISO:7-1		
	15mm (1/2")	1 No.	128.00
	20mm (3/4")	1 No.	213.00
	25mm (1")	1 No.	272.00
ii	Poly Propylene compression Female Threaded Adaptor with metal insert of SS 304 as per standards ISO 14236 and Tested as per BS 6920 in WRC-NSF LTD, UK for connecting 15mm, 20mm and 25mm outlet points of Brass ferrule of sizes 15mm, 20mm and 25mm respectively.		

Sl.No	Description	Unit	Rate for 2019-20 in Rupees
	20mm (1/2")	1 No.	106.00
	25mm (3/4")	1 No.	136.00
	32mm (1")	1 No.	162.00
iii	Poly propylene 90 Degree Compression elbow with compression joint at both ends as per standards ISO 14236 and Tested as per BS 6920 in WRC-NSF LTD, UK suitable for 20mm, 25mm and 32mm OD MDPE pipes		
	20mm (1/2")	1 No.	60.00
	25mm (3/4")	1 No.	77.00
	32mm (1")	1 No.	123.00
iv	Poly Propylene compression Female Threaded Elbow with metal insert of SS 304 as per standards ISO 14236 and Tested as per BS 6920 in WRC-NSF LTD, UK suitable for 20mm, 25mm and 32mm OD MDPE pipes		
	20mm (1/2")	1 No.	106.00
	25mm (3/4")	1 No.	136.00
	32mm (1")	1 No.	162.00
v	Poly Propylene compression Male Threaded Adaptor with metal insert of SS 304 as per standards ISO 14236 and Tested as per BS 6920 in WRC-NSF LTD, UK suitable for 20mm, 25mm and 32mm OD MDPE pipes		
	20mm (1/2")	1 No.	102.00
	25mm (3/4")	1 No.	133.00
	32mm (1")	1 No.	162.00
vi	MDPE PE 80 PN16 Blue pipe as per standards ISO 4427 and Tested as per BS 6920 in WRC-NSF LTD, UK		
	20mm (1/2")	1M	17.00
vii	MDPE PE 80 PN12.5 Blue pipe as per standards ISO 4427 and Tested as per BS 6920 in WRC-NSF LTD, UK, suitable for 20mm, 25mm and 32mm OD MDPE pipes		
	25mm (3/4")	1M	24.00
	32mm (1")	1M	26.00
viii	U PVC ball valve with one side compression end and other side female end as per ISO 4422-4 and Tested as per BS 6920 in WRC-NSF LTD, UK, size : 20mm ODx1/2"ID, 25mm ODX1/2"ID and 32mm OD X 3/4" ID		

Sl.No	Description	Unit	Rate for 2019-20 in Rupees
	20mm (1/2")	1 No.	106.00
	25mm (3/4")	1 No.	136.00
	32mm (1")	1 No.	162.00
ix	Supply and delivery of protection box of size 20cm x 30cm for fixing of Water Meter. The box should be rectangular base in construction and material of construction should be weather resistant polyethylene (PE) blue /black .Reinforcement ribs should be provided at the walls of the box. Box should be at two components comprising body and lid. Lid should be press fitted to the body. No hinges should be used for opened /closed. Operation meter box should be provided with built in lock. The body as inlet and outlet windows to pass the pipe through suitable for use with pipes of sizes up to 1" .Base of the box should be designed in such a way That the box can be installed to the floor/wall using anchor Bolts / screws without grouting the entire base of the meter Box. Provision for fixing Name plate showing the name of the Department etc., complete and as directed by the TWAD Board Officers.	1 No.	391.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

8.0 BAR WRAPPED STEEL CYLINDER PIPES AS PER IS 15155 - 2002

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
	4 Ksc Pipe		
1	350mm	Metre	3207.00
2	400mm	Metre	3551.00
3	450mm	Metre	4081.00
4	500mm	Metre	4451.00
5	600mm	Metre	5719.00
6	700mm	Metre	6640.00
7	800mm	Metre	7599.00
8	900mm	Metre	9436.00
9	1000mm	Metre	10927.00
10	1100mm	Metre	15636.00
11	1200mm	Metre	17357.00
12	1300mm	Metre	19186.00
13	1400mm	Metre	21418.00
14	1500mm	Metre	25498.00
	6 Ksc Pipe		
1	350mm	Metre	3209.00
2	400mm	Metre	3556.00
3	450mm	Metre	4086.00
4	500mm	Metre	4461.00
5	600mm	Metre	5727.00
6	700mm	Metre	6658.00
7	800mm	Metre	7609.00
8	900mm	Metre	9445.00
9	1000mm	Metre	10942.00
10	1100mm	Metre	15646.00
11	1200mm	Metre	17502.00
12	1300mm	Metre	19196.00
13	1400mm	Metre	21433.00
14	1500mm	Metre	25518.00
	8 Ksc Pipe		
1	350mm	Metre	3212.00
2	400mm	Metre	3562.00
3	450mm	Metre	4092.00
4	500mm	Metre	4473.00
5	600mm	Metre	5735.00
6	700mm	Metre	6679.00

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
7	800mm	Metre	7621.00
8	900mm	Metre	9452.00
9	1000mm	Metre	10958.00
10	1100mm	Metre	15661.00
11	1200mm	Metre	17357.00
12	1300mm	Metre	19208.00
13	1400mm	Metre	21452.00
14	1500mm	Metre	25540.00
	10 Ksc Pipe		
1	350mm	Metre	3214.00
2	400mm	Metre	3566.00
3	450mm	Metre	4100.00
4	500mm	Metre	4485.00
5	600mm	Metre	5745.00
6	700mm	Metre	6704.00
7	800mm	Metre	7635.00
8	900mm	Metre	9458.00
9	1000mm	Metre	10978.00
10	1100mm	Metre	15681.00
11	1200mm	Metre	17357.00
12	1300mm	Metre	19223.00
13	1400mm	Metre	21477.00
14	1500mm	Metre	25565.00
	12 Ksc Pipe		
1	350mm	Metre	3217.00
2	400mm	Metre	3574.00
3	450mm	Metre	4107.00
4	500mm	Metre	4500.00
5	600mm	Metre	5760.00
6	700mm	Metre	6733.00
7	800mm	Metre	7762.00
8	900mm	Metre	9480.00
9	1000mm	Metre	11128.00
10	1100mm	Metre	15706.00
11	1200mm	Metre	17464.00
12	1300mm	Metre	19243.00
13	1400mm	Metre	21507.00
14	1500mm	Metre	25602.00

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
	14 Ksc Pipe		
1	350mm	Metre	3220.00
2	400mm	Metre	3586.00
3	450mm	Metre	4119.00
4	500mm	Metre	4520.00
5	600mm	Metre	5775.00
6	700mm	Metre	7035.00
7	800mm	Metre	8497.00
8	900mm	Metre	10119.00
9	1000mm	Metre	12240.00
10	1100mm	Metre	15766.00
11	1200mm	Metre	17604.00
12	1300mm	Metre	19577.00
13	1400mm	Metre	22610.00
14	1500mm	Metre	27597.00
	16 Ksc Pipe		
1	350mm	Metre	3225.00
2	400mm	Metre	3601.00
3	450mm	Metre	4129.00
4	500mm	Metre	4716.00
5	600mm	Metre	6093.00
6	700mm	Metre	7612.00
7	800mm	Metre	9232.00
8	900mm	Metre	11031.00
9	1000mm	Metre	13383.00
10	1100mm	Metre	16133.00
11	1200mm	Metre	18808.00
12	1300mm	Metre	21477.00
13	1400mm	Metre	24860.00
14	1500mm	Metre	31872.00
	18 Ksc Pipe		
1	350mm	Metre	3230.00
2	400mm	Metre	3611.00
3	450mm	Metre	4297.00
4	500mm	Metre	4297.00
5	600mm	Metre	6374.00
6	700mm	Metre	7972.00

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
7	800mm	Metre	9722.00
8	900mm	Metre	11624.00
9	1000mm	Metre	13450.00
10	1100mm	Metre	17018.00
11	1200mm	Metre	19830.00
12	1300mm	Metre	22710.00
13	1400mm	Metre	26235.00
14	1500mm	Metre	31972.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 2) GST extra applicable as per GO

9.0 PIPES FOR UGSS

Sl.No	Description	Unit	Rate for 2019-20 in Rupees.
1	Supply and Delivery of DWC Structured Wall Polyethylene Piping Systems (Pipe with online/offline coupler and elastomeric sealing ring) with required specials non-smooth external annular corrugated and smooth internal surface (Double wall) (SN 8 Class) for non-pressure underground sewerage, drainage application generally as per IS-16098 (Part-2) type B.		
a	150mm ID SN 8 pipe	Per M	220.00
b	200mm ID SN 8 pipe	Per M	354.00
c	250mm ID SN 8 pipe	Per M	570.00
d	300mm ID SN 8 pipe	Per M	759.00
2	Supply and delivery of HDPE pipes for sewerage PE 100 PN 6 conforming to IS : 14333/1996 (Ammended on 2009)		
a	355 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	3687.00
b	400 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	4790.00
c	450 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	6050.00
d	500 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	7477.00
e	560 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	9346.00
f	630 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	11836.00
g	710 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	15021.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 2) GST extra applicable as per GO.

**10.0 M.S. PIPES- SPIRAL/LONGITUDINAL WELDING AS PER IS 3589/2001
WITH INTERNAL LINING AND EXTERNAL COATING MADE WITH FE410**

- 1 Supply and Delivery of MS pipes of preferred dimensions ranging from 168.30mm OD to 2540mm OD having 2.6mm to 25mm thickness as per Table- 5 of IS 3589/2001 fabricated with Fe410 grade steel conforming to IS 3589:2001 and other allied codes.
- 2 Pipes shall be internally lined with plant applied cement mortar lining 1:2, The Lining thickness range from 6 mm to 12 mm for 168.3 mm OD to 2540 mm OD as per Table - 8 of IS 3589:2001
- 3 Pipes shall be externally coated with plant applied CM 1:3, 20mm thick minimum including reinforcement as per clause A-9 of Annex-A of IS 3589:2001
- 4 Pipes shall be internally lined with plant applied Food Grade Liquid epoxy coating of minimum dry film thickness (DFT)of 406 microns as per Annex -B ,Clause- 1.2 of IS 3589:2001
- 5 Pipes shall be externally coated with plant applied Food grade liquid Epoxy coating of 406 microns dry film minimum thickness (DFT)as per Annex - B of IS 3589:2001
- 6 Pipes shall be externally coated double coating & double wrapping minimum 4mm thick per metre with plant applied coal Tar as per clause 6.1 of IS 10221:2008 recommendations.
- 7 External polyethylene sheathing as per IS recommendations

Sl. No.	Dia metre & thickness of pipe in mm	Rate for 2019-20 in Rupees						
		Bare pipe per metre	CML Internal 6mm to 12mm thick per metre	CMC external 20mm thick per metre	Internal food grade epoxy coating 406 micr.per metre	External epoxy Coating 406 micr. per metre	CTE external double coating & double wrapping minimum 4mm thick per metre	External Polyethylene Sheeting per metre
1	168.3X2.6	600.00	328.00	525.00	544.00	690.00	600.00	751.00
2	168.3X3.2	735.00	328.00	525.00	544.00	690.00	600.00	751.00
3	168.3X4	917.00	328.00	525.00	544.00	690.00	600.00	751.00
4	168.3X4.5	1030.00	328.00	525.00	544.00	690.00	600.00	751.00
5	219.1X2.6	786.00	443.83	699.00	705.00	900.00	780.00	980.00
6	219.1X3.6	1080.00	443.83	699.00	705.00	900.00	780.00	980.00
7	219.1X4.5	1300.00	443.83	699.00	705.00	900.00	780.00	980.00
8	219.1X6.3	1800.00	443.83	699.00	705.00	900.00	780.00	980.00
9	273X3.6	1352.00	552.48	851.00	878.00	1100.00	1000.00	1248.00
10	273X4	1502.00	552.48	851.00	878.00	1100.00	1000.00	1248.00
11	273X5	1850.00	552.48	851.00	878.00	1100.00	1000.00	1248.00
12	273X6.3	2250.00	552.48	851.00	878.00	1100.00	1000.00	1248.00
13	323.9X4	1783.00	657.03	980.00	1050.00	1298.00	1193.00	1483.00
14	323.9X4.5	1849.00	657.03	980.00	1050.00	1298.00	1193.00	1483.00

Sl. No.	Dia metre & thickness of pipe in mm	Rate for 2019-20 in Rupees						
		Bare pipe per metre	CML Internal 6mm to 12mm thick per metre	CMC external 20mm thick per metre	Internal food grade epoxy coating 406 micr.per metre	External epoxy Coating 406 micr. per metre	CTE external double coating & double wrapping minimum 4mm thick per metre	External Polyethylene Sheeting per metre
15	323.9X5.6	2350.00	657.03	980.00	1050.00	1298.00	1193.00	1483.00
16	323.9X7.1	3100.00	657.03	980.00	1050.00	1298.00	1193.00	1483.00
17	355.6X4	1899.00	717.50	1090.00	1050.00	1390.00	1259.00	1600.00
18	355.6X5	2400.00	717.50	1090.00	1050.00	1390.00	1259.00	1600.00
19	355.6X5.6	2700.00	717.50	1090.00	1050.00	1390.00	1259.00	1600.00
20	355.6X8	3700.00	717.50	1090.00	1050.00	1390.00	1259.00	1600.00
21	406.4X4	2150.00	827.18	1236.00	1329.00	1600.00	1363.00	1800.00
22	406.4X5	2500.00	827.18	1236.00	1329.00	1600.00	1363.00	1800.00
23	406.4X6.3	3400.00	827.18	1236.00	1329.00	1600.00	1363.00	1800.00
24	406.4X8.8	4700.00	827.18	1236.00	1329.00	1600.00	1363.00	1800.00
25	457X4	2500.00	922.50	1261.00	1329.00	1850.00	1256.00	1854.00
26	457X5	3100.00	922.50	1261.00	1329.00	1850.00	1256.00	1898.00
27	457X6.3	3751.00	922.50	1261.00	1329.00	1850.00	1256.00	1898.00
28	457X10	6000.00	922.50	1261.00	1329.00	1850.00	1256.00	1898.00
29	508X5	3450.00	973.75	1350.00	1446.00	1927.00	1395.00	1953.00
30	508X5.6	3800.00	973.75	1350.00	1446.00	1927.00	1395.00	1953.00
31	508X6.3	4250.00	973.75	1350.00	1446.00	1927.00	1395.00	1953.00
32	508X11	7300.00	973.75	1350.00	1446.00	1927.00	1395.00	1953.00
33	610X5.8	4750.00	1179.78	1600.00	1651.00	2400.00	1643.00	2600.00
34	610X6.3	5250.00	1179.78	1600.00	1651.00	2400.00	1643.00	2600.00
35	610X12.5	9999.00	1179.78	1600.00	1651.00	2400.00	1643.00	2600.00
36	711X6.3	5900.00	1436.03	1899.00	1952.00	2583.00	1923.00	3000.00
37	711X7.1	6699.00	1436.03	1899.00	1952.00	2730.00	1923.00	3000.00
38	711X14.2	13499.00	1436.03	1899.00	1952.00	2750.00	1923.00	3000.00
39	813X7.1	6800.00	1640.00	2150.00	2250.00	2966.00	2051.00	3400.00
40	813X8	9225.00	1640.00	2150.00	2250.00	3231.00	2051.00	3400.00
41	813X18	19998.00	1640.00	2150.00	2250.00	3251.00	2051.00	3400.00
42	914X8	9499.00	1742.50	2300.00	2451.00	3399.00	2400.00	3900.00
43	914X8.8	10499.00	1742.50	2300.00	2451.00	3500.00	2400.00	3900.00
44	914X10	11849.00	1742.50	2300.00	2451.00	3500.00	2400.00	3900.00

Sl. No.	Dia metre & thickness of pipe in mm	Rate for 2019-20 in Rupees						
		Bare pipe per metre	CML Internal 6mm to 12mm thick per metre	CMC external 20mm thick per metre	Internal food grade epoxy coating 406 micr.per metre	External epoxy Coating 406 micr. per metre	CTE external double coating & double wrapping minimum 4mm thick per metre	External Polyethylene Sheeting per metre
45	914X17.5	20498.00	1742.50	2300.00	2451.00	3500.00	2400.00	3900.00
46	1016X8.8	11799.00	1946.48	2700.00	2900.00	3761.00	2793.00	4725.00
47	1016X10	13499.00	1946.48	2700.00	2900.00	3999.00	2793.00	4725.00
48	1016X20	25998.00	1946.48	2700.00	2900.00	3999.00	2793.00	4725.00
49	1067X8.8	12299.00	2000.80	2750.00	2904.00	4099.00	2851.00	4881.00
50	1067X10	13999.00	2000.80	2750.00	2904.00	4099.00	2851.00	4881.00
51	1067X11	15199.00	2000.80	2750.00	2904.00	4099.00	2851.00	4881.00
52	1118X8.8	12863.00	2152.50	2799.00	3000.00	4247.00	2910.00	5000.00
53	1118X10	14498.00	2152.50	2799.00	3000.00	4247.00	2910.00	5000.00
54	1118X11	15299.00	2152.50	2799.00	3000.00	4247.00	2910.00	5000.00
55	1219X10	15849.00	2408.75	2900.00	3100.00	4472.00	3288.00	5200.00
56	1219X11	17498.00	2408.75	2710.00	3100.00	4472.00	3288.00	5200.00
57	1219X12.5	19998.00	2408.75	2710.00	3100.00	4472.00	3288.00	5200.00
58	1422X12.5	23148.00	2665.00	3599.00	3505.00	5500.00	3599.00	6000.00
59	1422X14.2	26498.00	2665.00	3599.00	4201.00	5500.00	3599.00	6000.00
60	1626X14.2	30097.00	3177.50	4099.00	4300.00	6299.00	4469.00	6999.00
61	1626X16	34497.00	3177.50	4099.00	4300.00	6299.00	4469.00	6999.00
62	1829X14.2	34497.00	3266.68	4600.00	4700.00	6999.00	4600.00	7999.00
63	1829X16	38597.00	3266.68	4600.00	4700.00	6999.00	4600.00	7476.00
64	1829X17.5	42207.00	3266.68	4600.00	4700.00	6999.00	4600.00	7999.00
65	2032X16	42996.00	3844.78	5200.00	5500.00	7799.00	5200.00	8597.00
66	2032X17.5	46596.00	3844.78	5200.00	5500.00	7799.00	5200.00	8699.00
67	2032X20	52596.00	3844.78	5200.00	5500.00	7799.00	5200.00	8699.00
68	2235X17.5	51996.00	4306.03	5700.00	6000.00	8501.00	5700.00	9349.00
69	2235X20	59995.00	4306.03	5700.00	6000.00	8501.00	5700.00	9499.00
70	2235X22.2	64995.00	4306.03	5700.00	6000.00	8501.00	5700.00	9499.00
71	2540X20	69994.00	4920.00	6500.00	6800.00	9899.00	6599.00	10999.00
72	2540X22.2	74994.00	4920.00	6500.00	6800.00	9899.00	6599.00	10999.00
73	2540X25	84993.00	4920.00	6500.00	6800.00	9899.00	6599.00	10999.00

Note: 1) The above rates are basic rates.

2) GST extra applicable as per GO

10.1 MS SPECIALS AS PER IS 1916

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	Supply and Delivery of MS specials with inside lining/epoxy coating as per IS 13620 -1993 and outside coating with cement mortar 20mm thick as per IS 1916-1989 and IS 7322-1985.	Kg	101.00
2	Supply and Delivery of MS specials as per IS 7322-1985 without inside lining and outside coating.	Kg	92.00
3	Supply and Delivery of MS specials without inside lining and outside coating but with anti rust painting as per IS 14589 -1999.	Kg	95.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

11.0 RCC NON PRESSURE SPUN PIPE AS PER IS 458/2003

RCC non pressure spun pipe with socket and spigot ends as per IS 458/2003 manufactured with sulphate resistant cement with 12 mm HI -alumina lining provided for rubber ring joints.

Sl. No.	Internal Dia.	Unit	Rate for 2019-20 in Rupees		
			NP2 Class	NP3 Class	NP4 Class
1	200mm	One Metre	647.00	686.00	726.00
2	250mm	One Metre	746.00	805.00	845.00
3	300mm	One Metre	873.00	983.00	1083.00
4	350mm	One Metre	1152.00	1690.00	1730.00
5	400mm	One Metre	1430.00	1918.00	1958.00
6	450mm	One Metre	1710.00	2220.00	2423.00
7	500mm	One Metre	2070.00	2515.00	2796.00
8	600mm	One Metre	2216.00	2892.00	3223.00
9	700mm	One Metre	3261.00	4413.00	4565.00
10	800mm	One Metre	3796.00	5276.00	5692.00
11	900mm	One Metre	4189.00	6085.00	6581.00
12	1000mm	One Metre	4967.00	6732.00	7779.00
13	1100mm	One Metre	5921.00	9618.00	10710.00
14	1200mm	One Metre	6794.00	11738.00	12925.00
15	1400mm	One Metre	8127.00	14530.00	16557.00
16	1500mm	One Metre	15975.00	17566.00	18326.00
17	1600mm	One Metre	18583.00	21606.00	22461.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO

11.1 RUBBER GASKETS AS PER IS 5382/1985 (Reaffirmed 1998)

Sl. No.	Internal Dia.	Unit	Rate for 2019-20 in Rupees		
			NP2 Class	NP3 Class	NP4 Class
1	200mm	Each	32.00	37.00	44.00
2	250mm	Each	37.00	44.00	51.00
3	300mm	Each	44.00	51.00	57.00
4	350mm	Each	51.00	63.00	69.00
5	400mm	Each	70.00	84.00	88.00
6	450mm	Each	90.00	100.00	101.00
7	500mm	Each	100.00	120.00	120.00
8	600mm	Each	120.00	150.00	156.00
9	700mm	Each	157.00	183.00	196.00
10	800mm	Each	180.00	215.00	221.00
11	900mm	Each	240.00	270.00	277.00
12	1000mm	Each	300.00	340.00	340.00
13	1100mm	Each	360.00	460.00	460.00
14	1200mm	Each	480.00	576.00	580.00
15	1400mm	Each	600.00	740.00	740.00
16	1500mm	Each	730.00	940.00	940.00
17	1600mm	Each	806.00	1100.00	1100.00

Note : 1) The above rates are basic rates.
2) GST extra applicable as per GO

**12.0 CI D/F SLUICE VALVE WITH CAP/ WHEEL
AS PER IS 14846/2000 PN 1.0 WITH ISI MARKING**

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
1	50 mm	Each	3774.00
2	65mm	Each	4332.00
3	80mm	Each	4472.00
4	100mm	Each	6233.00
5	125mm	Each	7826.00
6	150mm	Each	9224.00
7	200mm	Each	16630.00
8	250mm	Each	24736.00
9	300mm	Each	31863.00
10	350mm	Each	46676.00
11	400mm	Each	63223.00
12	450mm	Each	79797.00
13	500mm	Each	100201.00
14	600mm	Each	139331.00
15	700mm	Each	311685.00
16	750mm	Each	347586.00
17	800mm	Each	424004.00
18	900mm	Each	555976.00
19	1000mm	Each	822149.00
20	1100mm	Each	995160.00
21	1200mm	Each	1171944.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

**12.1 C.I. D/F REFLUX VALVE AS PER I.S. 5312/2004/ PART I/ 84 PN 1.0
WITH BYE-PASS ARRANGEMENTS WITH ISI MARKING**

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
1	50 mm	Each	4211.00
2	65 mm	Each	4693.00
3	80 mm	Each	5698.00
4	100 mm	Each	7360.00
5	125 mm	Each	9323.00
6	150 mm	Each	11138.00
7	200 mm	Each	23453.00
8	250 mm	Each	34575.00
9	300 mm	Each	44888.00
10	350 mm	Each	71075.00
11	400 mm	Each	93383.00
12	450 mm	Each	130894.00
13	500 mm	Each	188532.00
14	600 mm	Each	243643.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

12.2 C.I. DOUBLE AIR VALVE AS PER ISI 14845/2000

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
1	40 mm	Each	3774.00
2	50 mm	Each	4193.00
3	80 mm	Each	7384.00
4	100 mm	Each	9405.00
5	150mm	Each	19006.00
6	200mm	Each	26971.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

12.3 CI SINGLE AIR VALVE AS PER ISI 14845/2000

Sl.No.	Description	Unit	Rates for 2019-20 in Rupees
1	15mm	Each	1159.00
2	25 mm	Each	1667.00
3	40 mm	Each	2083.00
4	50 mm	Each	2309.00
5	80 mm	Each	3093.00
6	100 mm	Each	3367.00
7	150mm	Each	5993.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

12.4 KINETIC AIR VALVES FOR HANDLING MORE VOLUMES OF AIR IN PUMPING MAIN, DOUBLE ORIFICE KINETIC AIR VALVE CONFIRMING TO IS 14845 TAMPER PROOF DESIGN (PN-1)

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	1 No.	11040.00
2	80mm	1 No.	13696.00
3	100mm	1 No.	17189.00
4	150mm	1 No.	28090.00
5	200mm	1 No.	50703.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

12.5 CI SLUICE VALVES NON RAISING SPINDLE TYPES TO PRESSURE RATING OF 1.6 PN TO BE USED IN PUMP HOUSES (LONG BODY/ LONG FACE TO FACE) Conforming to IS.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	100mm	1No.	8465.00
2	125mm	1No.	10484.00
3	150mm	1No.	13504.00
4	200mm	1No.	23335.00
5	250mm	1No.	31439.00
6	300mm	1No.	43391.00
	With spur gear arrangements		
7	350mm	1No.	69567.00
8	400mm	1No.	89755.00
9	450mm	1No.	110916.00
10	500mm	1No.	139195.00
11	600mm	1No.	206285.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

12.6 BUTTERFLY VALVES WITH TOP AND BOTTOM OF S.S. 410 SHAFT, WAFER LINER/ WITH REDUCTION GEAR UNIT (Conforming to BS 5155 & IS 13095/1996)

12.6.1 WAFER LINER

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	100mm	1 No.	2973.00
2	150mm	1 No.	4215.00
3	200mm	1 No.	7149.00
4	250mm	1 No.	13430.00
5	300mm	1 No.	15380.00

12.6.2 D/F GEAR OPERATED

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	400mm	1 No.	61162.00
2	450mm	1 No.	75557.00
3	500mm	1 No.	86348.00
4	600mm	1 No.	113929.00

Conforming to standard BS 5155 Butterfly valve with Body, Disc and retainer of Cast Iron Grade F.260 with EDPM rubber sleeve. Internal hardware shall be confirming to AISI 304. External hardware Carbon Steel shall be confirming to IS 1367. Top and bottom shaft stainless steel to AISI 410. Body and disc should be tested (Hydro test) to 15 kg/sq.cm.

12.7 NON RETURN VALVES

12.7.1 WAFER TYPE (DUAL PLATE CHECK VALVE) CONFORMING TO IS

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	100mm	1 No.	3585.00
2	150mm	1 No.	7482.00
3	200mm	1 No.	14347.00
4	250mm	1 No.	23927.00
5	300mm	1 No.	32600.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

12.7.2 DOUBLE FLANGED (DUAL PLATE CHECK VALVE)

SI.No.	Description	Unit	Rate for 2019-20 in Rupees
1	400mm	1 No.	77411.00
2	450mm	1 No.	83496.00
3	500mm	1 No.	94345.00
4	600mm	1 No.	116586.00
5	700mm	1 No.	166792.00
6	800mm	1 No.	232342.00
7	900mm	1 No.	256603.00
8	1000mm	1 No.	336366.00
9	1100mm	1 No.	361527.00
10	1200mm	1 No.	386688.00

Construction conforming to standard API 594. Body should confirm cast iron Grade FG 260 (IS 210), Disc plates confirming to ASTM A216, hinch pin/ stop pin/ spring should be of SS to AISI 410/304. Body seat should be of EDPM rubber. The body should be tested to 15 kg/ sq.cm and seat should be tested to 10 kg/ sq.cm

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.

2) GST extra applicable as per GO

12.7.3 D/F NON RETURN VALVE (OUT DOOR USE)

CI Single Door/ Multi Door Non return valve conforming to IS 5312/2003(part I & II) to be fixed after Water meter/ Flow recorder on pumping main near Pump house with dash pot arrangement for 90% fast closing & 10% slow closing.

SI.No.	Description	Unit	Rate for 2019-20 in Rupees
1	300mm	1 No.	58721.00
2	350mm	1 No.	89628.00
3	400mm	1 No.	108142.00
4	450mm	1 No.	150135.00
5	500mm	1 No.	196782.00
6	600mm	1 No.	281944.00
7	700/750mm	1 No.	474297.00
8	800mm	1 No.	550619.00
9	900mm	1 No.	1003466.00
10	1000mm	1 No.	1086195.00
11	1100mm	1 No.	1541585.00
12	1200mm	1 No.	1695200.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.

2) GST extra applicable as per GO

12.8 DI SINGLE CHAMBER AIR RELEASE VALVE

Manufacture, Supply and Delivery of Tamper proof DI single chamber air release valves with pressure range from PN 1.0 to 2.5 with body and cover made of Ductile Iron of Grade GGG 40 or equivalent grade conforming to IS 1865 with Food Grade Epoxy Powder coating (EP-P) inside and for outside of colour blue RAL 5005. All internal parts such as float, shell etc., cover bolts, made of Austenitic alloy steel of SS AISI 304/316. The float shall be made of Polytetrafluoroethylene/ Austenitic alloy steel of AISI 304/316. Gaskets and seals of EPDM / Neoprene rubber for TWAD Board works anywhere in Tamil Nadu.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	each	11667.00
2	80mm	each	14833.00
3	100mm	each	16667.00
4	150mm	each	31375.00
5	200mm	each	34250.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.

2) GST extra applicable as per GO

12.9 DI D/F GATE VALVES

Supply and Delivery of DI D/F Gate valves (Soft Seated) resilient seated soft sealing gate valves (sluice valves) with body bonnet of ductile cast iron of grade GGG40 or equivalent grade, wedge fully rubber lined with EPDM, replaceable spindle nut, without gland packing and with 3 O-Ring protection on the shaft and seals of NBR and the valves should be of vacuum tight and 100% leak proof with face to face dimensions as per BS 5163-89/ ISI 14846-2000/ DIN 3202 F 4. All the valves should be with electrostatic powder coating both inside and outside with pocket less straight thro' body passage. All the valves are to be compatible for buried application with pressure rating PN 10/16

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	1 No.	7314.00
2	80mm	1 No.	9370.00
3	100mm	1 No.	12349.00
4	150mm	1 No.	19451.00
5	200mm	1 No.	31122.00
6	250mm	1 No.	44764.00
7	300mm	1 No.	67660.00
8	350mm	1 No.	199812.00
9	400mm	1 No.	214862.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.

2) GST extra applicable as per GO

12.10 DI D/F BUTTERFLY VALVES

Supply and Delivery of DI D/F Butterfly Valves with GGG40 or equivalent grade as per IS 3896 (part 2) 1985 and subsequent revisions double eccentric disc with renewable soft seal on the disc and body seat face of stainless steel / nickel weld overlay microfinished 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

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees	
			PN 10	PN 16
1	400mm	1 No.	145384.00	170109.00
2	450mm	1 No.	186751.00	186751.00
3	500mm	1 No.	188532.00	188532.00
4	600mm	1 No.	247097.00	247097.00
5	700mm	1 No.	403291.00	473606.00
6	800mm	1 No.	508134.00	528834.00
7	900mm	1 No.	653523.00	691608.00
8	1000mm	1 No.	841650.00	866963.00
9	1100mm	1 No.	997015.00	997015.00
10	1200mm	1 No.	1161633.00	1161633.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.

2) GST extra applicable as per GO

12.11 DI Non - Return Valve

Manufacture, Supply and Delivery of DI D/F Slanted seat Swing Check Valve. Body of ductile cast iron GGG-40 or equivalent grade and disc of ductile cast iron GGG-40 or equivalent grade with fully encapsulated EPDM rubber, where both faces can be used. Electrostatic epoxy powder/liquid coating (EP-P) inside and outside color blue RAL 5005 with minimum coating thickness of 250 microns. The EPDM rubber & Epoxy Powder should be approved by W 270. (EP-P) it is a resi-coat powder approved for drinking water application, applied through fusion bonding process by dipping the shot-blasted casted components heated up to 200 deg C). Face to face dimensions as per EN558-1, series 48 and flange connections as per EN 1092-2/IS 1538.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	40mm	1 No.	10298.00
2	50mm	1 No.	10600.00
3	65mm	1 No.	11881.00
4	80mm	1 No.	14738.00
5	100mm	1 No.	12105.00
6	125 mm	1 No.	26494.00
7	150mm	1 No.	33312.00
8	200 mm	1 No.	36204.00
9	250mm	1 No.	92050.00
10	300mm	1 No.	116964.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.

2) GST extra applicable as per GO

12.12 DI Wafer type Butterfly Valve

Manufacturing, supply and delivery of resilient seated wafer type butterfly valve in accordance with EN 593, centric disk mounted in three maintenance-free bearing bushes, tight in both flow directions, Replaceable rubber sleeve with integrated seal for functionally reliable use for flared flanges, welding flanges, PE flanges as well as loose flanges with V-collar, Stable seat due to collar with vulcanized support ring. Vacuum tight upto 1 Torr. Face to face length acc.to 558-1, basic series 20 (DIN 3202/k1). With Electrostatic epoxy powder coating (EP-P) inside and outside color blue RAL 5005 with minimum coating thickness of 250 microns. The EPDM rubber & Epoxy Powder should be approved by W 270.(EP-P it is resi-coat powder approved for drinking water application, applied through fusion bonding technology process by dipping the shot-blasted casted components heated upto 200 deg C).

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	40mm	1 No.	9982.00
2	50mm	1 No.	9982.00
3	65mm	1 No.	10316.00
4	80mm	1 No.	11231.00
5	100mm	1 No.	13175.00
6	125 mm	1 No.	14935.00
7	150mm	1 No.	22687.00
8	200 mm	1 No.	26820.00
9	250mm	1 No.	44783.00
10	300mm	1 No.	74877.00
11	350mm	1 No.	114373.00
12	400mm	1 No.	156100.00
13	450mm	1 No.	261295.00
14	500mm	1 No.	267547.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO.

12.13 DI Disk Check Valve

Manufacture, supply and delivery of DI D/F Slanted seat Tilting Disc Swing Check Valve in single piece body and closed eye disc construction. Hemispherical disc with 59 degree inclination for fast open and closing. Corrosion proof and wear resistant(triple offset) disc face & body seat face, both made of fusion bonded Nickel Chromium weld overlay and microfinished. Body and disc of ductile cast iron GGG-40 or equivalent grade, medium free(dry) shafts of stainless steel and bearings of Zinc-free Bronze, Valve should have provision for internal damping unit for reducing the effects of water hammer/surge, if required at later stage. Electrostatic epoxy powder/liquid coating(EP-P) inside and outside color blue RAL 5005 with minimum coating thickness of 150 microns. The EPDM rubber & Epoxy Powder should be approved by W 270.(EP-P it is a resi-coat powder approved for drinking water application, applied through fusion bonding technology process by dipping the shot-blasted casted components heated upto 200deg C). Face to face dimensions as per EN 558-1 series 14 and flange connections as per EN 1092-2/IS

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees	
			PN 10	PN 16
1	200mm	1 No.	380399.00	380399.00
2	250mm	1 No.	382893.00	382893.00
3	300mm	1 No.	384591.00	384591.00
4	350mm	1 No.	435797.00	435797.00
5	400mm	1 No.	428364.00	428364.00
6	450mm	1 No.	537043.00	572383.00
7	500mm	1 No.	522382.00	576800.00
8	600mm	1 No.	711154.00	723012.00
9	700mm	1 No.	1567774.00	1604457.00
10	800mm	1 No.	1822383.00	1891884.00
11	900mm	1 No.	2075182.00	2163483.00
12	1000mm	1 No.	2538996.00	2571235.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

12.14 DI Diaphragm Type Flow Control Valve

12.14.1 DI Altitude Control Valve (PN10/16) with the function to prevent water level in a tank from exceeding a set level. The set level can be changed as per the requirement.

"Manufacture supply and delivery of DI D/F Diaphragm type own medium controlled Altitude Control valve with cast body of ductile iron grade GGG-40 or equivalent grade or as per IS 3896-Part-2-1985 customized control cylinder for linear control behaviour or equivalent, performed diaphragm and pull out safe profile sealing ring of EPDM, threaded inserts (CORFIX - to prevent the coating from coming off in the connections area as well as corrosion and incrustations in the control circuit) or equivalent. Flange connection dimensions according to EN 1092, Part 2/ ISO 7005[DIN]/ IS 1538, all parts (Epoxy coating, and diaphragm) in contact with medium are as per KTW and DVGW certified (harmless)/WRAS & NSF approved. The EPDM rubber & Epoxy coating (EP-P) should be approved by W270. (EP-P)/WRAS & NSF."

Pilot valve system having Stainless Steel / Brass fittings as per standard parts according to DIN EN 12 266-1 with all the external control tubing of SS 304 / copper / reinforced plastic rated PN16 Tightness to DIN EN 12 266-1, leakage rate A (or) equivalent and the needle valve / speed control device should be provided to vary opening speed of the main diaphragm with self-cleaning filter to avoid possibility of dirt build up inside the control tubing.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	1 No.	97685.00
2	65mm	1 No.	100165.00
3	80mm	1 No.	110349.00
4	100mm	1 No.	137538.00
5	150mm	1 No.	176441.00
6	200 mm	1 No.	279681.00
7	250mm	1 No.	335798.00
8	300mm	1 No.	533148.00
9	350mm	1 No.	790866.00
10	400mm	1 No.	1312549.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

Note:

- EN** - European standard - Sets standards for rubber materials for seals and diaphragms
- DIN** - German national standard - Sets standards for rubber materials for seals and diaphragms
- KTW** - (Germany) Guideline of the Federal Environmental Agency: Includes a list of approved starting elastomers, test methods and limits for values obtained.
- DVGW** - (German Association for Gas and Water) worksheet W 270- Sets tests for microbial growth enhancement of non-metallic materials In contact with drinking water.
- WRAS** - Water Regulations Advisory Scheme: Two tests related to odour, flavor and taste of water and three tests that examine leachable chemicals and growth of microorganisms.
- NSF** - National Science Foundation (**NSF**) **ANSI 61** (USA): Defines the levels of contaminants and impurities that can be leached from elastomer components.

12.14.2 DI Pressure Reducing Valve (PN10/16) with the function to reduce downstream pressure to set point irrespective of upstream fluctuations. The downstream pressure set point can be changed as per the requirement.

"Manufacture supply and delivery of DI D/F Diaphragm type own medium controlled Pressure Reducing valve with cast body of ductile iron grade GGG-40 or equivalent grade or as per IS 3896-Part-2-1985 customized control cylinder for linear control behaviour or equivalent, performed diaphragm and pull out safe profile sealing ring of EPDM, threaded inserts (CORFIX - to prevent the coating from coming off in the connections area as well as corrosion and incrustations in the control circuit) or equivalent. 2 pressure gauges for operator-friendly control to determine the actual inlet and outlet pressure connected directly to the valve. Flange connection dimensions according to EN 1092, Part 2/ ISO 7005[DIN]/ IS 1538, all parts (Epoxy coating, and diaphragm) in contact with medium are as per KTW and DVGW certified (harmless)/ WRAS & NSF approved. The EPDM rubber & Epoxy coating (EP-P) should be approved by W270.(EP-P)/ WRAS & NSF."

Pilot valve system having Stainless Steel / Brass fittings with spring of SS 304 as per standard parts according to DIN EN 12 266-1 with all the external control tubing of SS 304 / Copper/ reinforced plastic rated PN16, Tightness to DIN EN 12 266-1, leakage rate A (or) equivalent and the needle valve/ speed control device should be provided to vary opening speed of the main diaphragm with self-cleaning filter to avoid possibility of dirt build up inside the control tubing.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	1 No.	60548.00
2	65mm	1 No.	61475.00
3	80mm	1 No.	74570.00
4	100mm	1 No.	85818.00
5	150mm	1 No.	145420.00
6	200 mm	1 No.	202100.00
7	250mm	1 No.	266220.00
8	300mm	1 No.	445616.00
9	350mm	1 No.	668491.00
10	400mm	1 No.	1254491.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

12.14.3 DI Flow rate Limit control Valve (PN10/16) with the function to limit the flow rate to a set point. In case the downstream demand increases beyond the set limit, the valve closes down to bring the flow back to set limit. The valve shall have an orifice plate and the orifice diameter is designed based on the set point as per the requirement and installed downstream of the control valve.

"Manufacture supply and delivery of DI D/F Diaphragm type own medium controlled Flow rate Limit Control valve with cast body of ductile iron grade GGG-40 or equivalent grade or as per IS 3896-Part-2-1985 customized control cylinder for linear control behaviour or equivalent, performed diaphragm and pull out safe profile sealing ring of EPDM, threaded inserts (CORFIX - to prevent the coating from coming off in the connections area as well as corrosion and incrustations in the control circuit) or equivalent. Flange connection dimensions according to EN 1092, Part 2/ ISO 7005[DIN]/ IS 1538, all parts (Epoxy coating, and diaphragm) in contact with medium are as per KTW and DVGW certified (harmless)/WRAS & NSF approved. The EPDM rubber & Epoxy coating (EP-P) should be approved by W270. (EP-P)/ WRAS & NSF."

Pilot valve system having Stainless Steel / Brass fittings with spring of stainless steel 304 as per standard parts according to DIN EN 12 266-1, orifice plate shall be as per the set point of flow rate and all the external control tubing of SS 304 / Copper/ reinforced plastic rated PN16, Tightness to DIN EN 12 266-1, leakage rate A (or) equivalent and the needle valve/ speed control device should be provided to vary opening speed of the main diaphragm with self-cleaning filter to avoid possibility of dirt build up inside the control tubing.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	1 No.	78556.00
2	65mm	1 No.	80464.00
3	80mm	1 No.	94763.00
4	100mm	1 No.	102468.00
5	150mm	1 No.	175466.00
6	200 mm	1 No.	234679.00
7	250mm	1 No.	301025.00
8	300mm	1 No.	487569.00
9	350mm	1 No.	713200.00
10	400mm	1 No.	1296294.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.

2) GST extra applicable as per GO

12.14.4 DI Pressure Sustaining / Relief Valve (PN10/16) with the function to relieve excess pressure in the downstream pressure to set point irrespective of upstream fluctuations. The downstream pressure set point can be changed as per the requirement.

“Manufacture supply and delivery of DI D/F Diaphragm type own medium controlled Pressure Sustaining / Relief valve with cast body of ductile iron grade GGG-40 or equivalent grade or as per IS 3896-Part-2-1985 customized control cylinder for linear control behaviour or equivalent, performed diaphragm and pull out safe profile sealing ring of EPDM, threaded inserts (CORFIX - to prevent the coating from coming off in the connections area as well as corrosion and incrustations in the control circuit) or equivalent. 2 pressure gauges for operator-friendly control to determine the actual inlet and outlet pressure connected directly to the valve. Flange connection dimensions according to EN 1092, Part 2/ ISO 7005[DIN]/ IS 1538, all parts (Epoxy coating, and diaphragm) in contact with medium are as per KTW and DVGW certified (harmless)/ WRAS & NSF approved. The EPDM rubber & Epoxy coating (EP-P) should be approved by W270.(EP-P)/ WRAS & NSF.”

Pilot valve system having Stainless Steel / Brass fittings with spring of stainless steel 304 as per standard parts according to DIN EN 12 266-1 with all the external control tubing of SS 304/ Copper/ reinforced plastic rated PN16, Tightness to DIN EN 12 266-1, leakage rate A (or) equivalent and the needle valve/ speed control device should be provided to vary opening speed of the main diaphragm with self-cleaning filter to avoid possibility of dirt build up inside the control tubing.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	1 No.	61905.00
2	65mm	1 No.	64385.00
3	80mm	1 No.	74570.00
4	100mm	1 No.	85818.00
5	150mm	1 No.	145420.00
6	200 mm	1 No.	202100.00
7	250mm	1 No.	265847.00
8	300mm	1 No.	455390.00
9	350mm	1 No.	674229.00
10	400mm	1 No.	1254491.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.

2) GST extra applicable as per GO

12.14.5 DI Pump control Valve (PN10/16) with the function to open / close the pump discharge to the downstream network gradually the start-up / shut-off of a pump to protect the pumping assembly.

"Manufacture supply and delivery of DI D/F Diaphragm type own medium controlled Pump Control Valve with cast body of ductile iron grade GGG-40 or equivalent grade or as per IS 3896-Part-2-1985 customized control cylinder for linear control behaviour or equivalent, performed diaphragm and pull out safe profile sealing ring of EPDM, threaded inserts (CORFIX - to prevent the coating from coming off in the connections area as well as corrosion and incrustations in the control circuit) or equivalent. Flange connection dimensions according to EN 1092, Part 2/ ISO 7005[DIN]/ IS 1538, all parts (Epoxy coating, and diaphragm) in contact with medium are as per KTW and DVGW certified (harmless)/WRAS & NSF approved. The EPDM rubber & Epoxy coating (EP-P) should be approved by W270.(EP-P)/ WRAS & NSF."

Pilot valve system having Stainless Steel / Brass fittings as per standard parts according to DIN EN 12 266-1 and 3 way NO 24 V AC 50/60 Hz Solenoid, all the external control tubing of SS 304/ Copper/ reinforced plastic rated PN16 with Position indicator, Tightness to DIN EN 12 266-1, leakage rate A (or) equivalent and the needle valve/speed control device should be provided to vary opening speed of the main diaphragm with self-cleaning filter to avoid possibility of dirt build up inside the control tubing.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	1 No.	105035.00
2	65mm	1 No.	105487.00
3	80mm	1 No.	117700.00
4	100mm	1 No.	124586.00
5	150mm	1 No.	234587.00
6	200 mm	1 No.	284657.00
7	250mm	1 No.	346597.00
8	300mm	1 No.	545546.00
9	350mm	1 No.	674229.00
10	400mm	1 No.	1254491.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

12.14.6 DI Pressure Reducing and Flow Limit Control Valve (PN10/16) with the function to reduce higher upstream pressure into a preset lower downstream pressure and to not allow flow rate in the line to exceed beyond the defined set point. The flow orifice diameter is designed based on the set point as per the design requirement. The set point can be changed to a maximum of +10%.

"Manufacture supply and delivery of DI D/F Diaphragm type own medium controlled Pressure Reducing and flow limit control valve with cast body of ductile iron grade GGG-40 or equivalent grade or as per IS 3896-Part-2-1985 customized control cylinder for linear control behaviour or equivalent, performed diaphragm and pull out safe profile sealing ring of EPDM, threaded inserts (CORFIX - to prevent the coating from coming off in the connections area as well as corrosion and incrustations in the control circuit) or equivalent. 2 pressure gauges for operator-friendly control to determine the actual inlet and outlet pressure connected directly to the valve. Flange connection dimensions according to EN 1092, Part 2/ ISO 7005[DIN]/ IS 1538, all parts (Epoxy coating, and diaphragm) in contact with medium are as per KTW and DVGW certified (harmless)/WRAS & NSF approved. The EPDM rubber & Epoxy coating (EP-P) should be approved by W270.(EP-P)/ WRAS & NSF."

Pilot valve system having Stainless Steel / Brass fittings with spring of stainless steel 304 as per standard parts according to DIN EN 12 266-1 and Stainless steel 316 orifice plate shall be as per the set point of flow rate, all the external control tubing of SS 304 / Copper/ reinforced plastic rated PN16, Tightness to DIN EN 12 266-1, leakage rate A (or) equivalent and the needle valve/ speed control device should be provided to vary opening speed of the main diaphragm with self-cleaning filter to avoid possibility of dirt build up inside the control tubing.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	1 No.	103356.00
2	65mm	1 No.	111944.00
3	80mm	1 No.	125448.00
4	100mm	1 No.	133375.00
5	150mm	1 No.	211134.00
6	200 mm	1 No.	267814.00
7	250mm	1 No.	331934.00
8	300mm	1 No.	521193.00
9	350mm	1 No.	757478.00
10	400mm	1 No.	1327201.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

12.14.7 DI Altitude Control and Flow Control Valve (PN10/16) with the function to ensure that water in tank does not exceed a certain level and the same time not allow flow rate to exceed set point. The Hydraulic Valve trim connection shall have two metal points, one for Altitude control and Flow-rate control function. The valve shall use an orifice plated on downstream side to limit the flow rate. The set level can be changed to a maximum of +10%.

"Manufacture supply and delivery of DI D/F Diaphragm type own medium controlled Altitude Control and Flow Control Valve with cast body of ductile iron grade GGG-40 or equivalent grade or as per IS 3896-Part-2-1985 customized control cylinder for linear control behaviour or equivalent, performed diaphragm and pull out safe profile sealing ring of EPDM, threaded inserts (CORFIX - to prevent the coating from coming off in the connections area as well as corrosion and incrustations in the control circuit) or equivalent. Flange connection dimensions according to EN 1092, Part 2/ ISO 7005[DIN]/ IS 1538, all parts (Epoxy coating, and diaphragm) in contact with medium are as per KTW and DVGW certified (harmless)/WRAS & NSF approved. The EPDM rubber & Epoxy coating (EP-P) should be approved by W270.(EP-P)/ WRAS & NSF."

Pilot valve system having Stainless Steel / Brass fittings with spring of SS 304 for altitude pilot as per standard parts according to DIN EN 12 266-1, the stainless steel 316 of orifice plate and dimension of orifice as per the flow rate set point, all the external control tubing of SS 304 / copper / reinforced plastic rated PN16, Tightness to DIN EN 12 266-1, leakage rate A (or) equivalent and the needle valve / speed control device should be provided to vary opening speed of the main diaphragm with self-cleaning filter to avoid possibility of dirt build up inside the control tubing.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	1 No.	129104.00
2	65mm	1 No.	131309.00
3	80mm	1 No.	143511.00
4	100mm	1 No.	150360.00
5	150mm	1 No.	219478.00
6	200 mm	1 No.	269861.00
7	250mm	1 No.	326856.00
8	300mm	1 No.	495086.00
9	350mm	1 No.	705117.00
10	400mm	1 No.	1211539.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.

2) GST extra applicable as per GO

12.15 DI Plunger type flow control Valve

"Manufacturing, supply and delivery of DI D/F Plunger type(Control valve) with one piece body of ductile cast iron of grade GGG-40, all internal parts of stainless steel. Piston guides of bronze welded overlay & micro-finished and bearing bush of zinc free Bronze. Valve/profile sealing seat shall be in the no-flow zone. Double sealing effect between the body and the plunger shall be by Quadring Seal (twist free operation). The valve shall be designed to operate smoothly throughout the specified flow range without cavitation. Corrosion protected medium free bearing in the body by way of double O-ring seal and encapsulated shaft seal. There shall be no obstacles in the main flow passage except the plunger and the attached control cylinders. Plunger shall be by means of stainless steel crank drive mechanism. Face-to-face dimensions EN558-1 basic series 15 and 1.5X DN from DN500 and flange connections as per EN1092-2/ISO 7005[DIN]".

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	150mm	1 No.	481058.00
2	200mm	1 No.	685418.00
3	250mm	1 No.	830341.00
4	300mm	1 No.	1084390.00
5	400 mm	1 No.	1718974.00
6	450mm	1 No.	2346954.00
7	500 mm	1 No.	2992117.00
8	600mm	1 No.	3883201.00
9	700mm	1 No.	4534731.00
10	800mm	1 No.	5435703.00
11	900mm	1 No.	7573788.00
12	1000mm	1 No.	8816497.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

12.16 DI Surge Control Valve

"Manufacturing, supply and delivery of Surge anticipating Relief valves against power failure surges or pressure waves caused by velocity changes, quick opening relief easily adjustable pressure setting. The valve should remain closed when line pressure is between the set-points of the two pilots. The valve should open initially when line pressure drops below the setting of the low-pressure pilot to anticipate surges associated with a pump stopping. The valve will also continue to react and remain open when the return high-pressure wave is above the setting of the high-pressure pilot or open when inlet pressure exceeds a pre-determined set-point at which time the valve opens quickly. With high speed discharge, with flange dimension to EN 1092-2/ ISO 7005[DIN]. Body and cover in ductile cast iron of Grade GGG 40 or equivalent grade. All internal parts & all cover bolts of austenitic alloy steel and gaskets and seals of EPDM of grade W 270(approved for drinking water) with Electrostatic epoxy powder coating (EP-P) inside and outside color blue RAL 5005 with minimum coating thickness of 250 microns".

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	50mm	1 No.	92556.00
2	80mm	1 No.	101170.00
3	100mm	1 No.	128235.00
4	150mm	1 No.	182465.00
5	200 mm	1 No.	268258.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

12.17 OHT FLOW CONTROL VALVE

Supply and delivery of the following sizes of OHT flow control valve with female BSP threaded ends, (20mm length) with Stainless Steel Body as per ANSI 202 Grade, Plug, Flange – Nylon 66, (with life cycle test certificate from FCRI/NABL accredited lab, Working Pressure 10 KSC, FCRI, Palgaut pressure test and flow test to be furnished) Triangular notch type flow control path with opening reference scale arrangements for flow notch and Upstream & Downstream pressure checking spring loaded mouth arrangements.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
a.	40mm (1 lpm to 400lpm adjustable type arrangements)	Each	5059.00
b	100mm (20 lpm to 2000 lpm adjustable type arrangements)	Each	18674.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

13.0 SALT GLAZED STONEWARE PIPE AS PER IS 651/2007 of 600MM length

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees	
			SP1 Class	SP2 Class
1	100mm	Each	106.00	115.00
2	150mm	Each	185.00	200.00
3	200mm	Each	280.00	305.00
4	250mm	Each	455.00	495.00
5	300mm	Each	710.00	775.00

13.1 SALT GLAZED STONEWARE PIPE AS PER IS 651/2007 of 1000MM length with Rubber Gasket

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees	
			SP1 Class	SP2 Class
1	150mm	Each	440.00	502.00
2	200mm	Each	660.00	720.00
3	250mm	Each	1238.00	1345.00

13.2 SALT GLAZED STONEWARE PIPE AS PER IS 651/2007 of 1200MM length with Rubber Gasket

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees	
			SP1 Class	SP2 Class
1	150mm	Each	557.00	608.00
2	200mm	Each	794.00	865.00
3	250mm	Each	1500.00	1633.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges to stockyard anywhere in Tamilnadu.
 - 2) Unloading, stacking at stock yard and Conveyance from stock yard to site are extra.
 - 3) GST extra applicable as per GO

14.0 SULPHATE RESISTANT CEMENT AS PER IS 12330/1988

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	Sulphate Resistant Cement as per IS 12330/1988 and as amended from time to time.	MT	5906.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

15.0 FIBER REINFORCED CONCRETE FRAME AND COVER AS PER IS 12592/ 2002, PART 1 & 2

Sl.No.	Description	Rate for 2019-20 in Rupees	
	Supply and delivery of following sizes of FRC Manhole Covers / Frames to stores on as per IS 12592:2002 to its latest revision with reinforcement details for covers and frames.	Heavy duty	Extra Heavy duty
1	450mm dia FRC manhole cover to suit 450 mm clear opening manhole frame	763.00	839.00
2	450mm dia FRC manhole frame to have clear opening of 450mm dia to suit 450mm dia FRC Cover	953.00	1050.00
3	600mm dia FRC manhole cover to suit 600 mm clear opening manhole frame	984.00	1082.00
4	600mm dia FRC manhole frame to have clear opening of 600mm dia to suit 600mm dia FRC Cover	1405.00	1546.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

16.0 WATER METER CONFORMING TO ISO 4064 & DIRT BOX STRAINER (NON DOMESTIC PURPOSE)

Supply and delivery of Woltman model with removal mechanism water meters (non-domestic use) conforming to ISO 4064 part I, II,III class B or IS 779 and IS 2373 with life cycle test certificate from FCRI/NABL accredited lab. The water meters shall have magnetic drivers or mechanical drivers and shall be versatile for installation in any position . The meters shall be hydrodynamically, hydrostatically balanced. The runner, runner chamber, pointers of the meter shall be as per ISO 4064 class B specification. Dry dial excavated counter housing fully protected against flooding ensuring easy reading in all climates.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees		
			Water meter	Dirt Box	Erection Charges
1	50mm	Each	8893.00	2779.00	2820.00
2	80mm	Each	11761.00	4501.00	3518.00
3	100mm	Each	14884.00	5519.00	5476.00
4	150mm	Each	24255.00	9176.00	6440.00
5	200mm	Each	27308.00	11096.00	8023.00
6	250mm	Each	59535.00	23849.00	9096.00
7	300mm	Each	99225.00	42485.00	9745.00
8	400mm	Each	176100.00	70719.00	9923.00
9	500mm	Each	204936.00	102863.00	9945.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO
3) Erection charges includes earth work excavation,labour charges, cutting and threading, conveyance,welding and hire charges for tools and plants ets., complete.

16.2 FULL BORE ELECTROMAGNETIC FLOW METER

Electromagnetic Flow Meter conforming to ISO 17025 Standard shall be a velocity sensing Electromagnetic type, microprocessor based signal converter, sealed housing, flanged tube meter for 1.0 Mpa working pressure, manufactured to highest standard available for mag-meters, equipped with minimum six digit digital totalizers, reading in units of kiloliters and shall be accurate within 0.5% of Measured value, shall operate within a range of 0.3m/sec to 4 m/sec and be constructed as follows: Meter tube (Sensor) shall be fabricated from stainless steel tube and use class PN10 flat face carbon street flanges in accordance with IS 1538. These flanges shall be welded to the flow tube. The internal and external of the meter tube shall be blasted to near white and lined with hard rubber /Polyurethane/PTFE preferably by SBR or EPDM. Meter tube shall have a constant nominal inside diameter offering no obstruction to the flow. The accuracy should be inclusive of linearity, hysteresis, repeatability, temperature and pressure effects. Coil Housing shall be fabricated from stainless steel/SS304/Die cast Aluminium/Carbon Steel with Anticorrosive paint for corrosion resistance and welded to the tube providing a completely sealed environment for all coils, electrode connections and wiring harness capable of submerged or buried operation. Signal Converter shall be pulsed DC coil

excitation type with auto zeroing. The signal converter shall be remotely mounted away from the meter. The converter shall indicate direction of flow and provide a flow rate indication and a total of flow volume for both forward and reverse directions. The converter shall provide an isolated 4-20 mA output into minimum 500-ohm load and a frequency output of a maximum of 0-10 KHZ and a scaled pulse output. The microprocessor based signal converter shall have a self-diagnostic test mode and a backlit display that continuously displays "Rate of Flow" and "Total Volume." Converter shall be supplied with a programmable low flow drop out and empty pipe zero return. The signal converter housing should be die-cast aluminium with glass window. The converter cum transmitter should be fully programmable from the front facia. The programming should be user friendly, self-prompting menu driven. Flow meter test calibration certificate should be provided with life cycle test certificate from FCRI/NABL accredited lab.

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	10MM	1 No.	54550.00
2	25 MM	1 No.	44500.00
3	50 MM	1 No.	49500.00
4	80 MM	1 No.	78000.00
5	100 MM	1 No.	95734.00
6	125 MM	1 No.	100200.00
7	150MM	1 No.	112100.00
8	200MM	1 No.	139200.00
9	250MM	1 No.	172700.00
10	300 MM	1 No.	196786.00
11	350MM	1 No.	243700.00
12	400MM	1 No.	295400.00
13	450MM	1 No.	340900.00
14	500 MM	1 No.	389800.00
15	600MM	1 No.	447200.00
16	700 MM	1 No.	522100.00
17	800MM	1 No.	584500.00
18	900 MM	1 No.	657500.00
19	1000 MM	1 No.	831000.00
20	1200 MM	1 No.	1193684.00
21	1400MM	1 No.	1429800.00
22	1600MM	1 No.	1627000.00
23	1800 MM	1 No.	2160000.00
24	2000 MM	1 No.	3102000.00
25	2200 MM	1 No.	3247000.00
26	2400MM	1 No.	3573000.00
27	2600 MM	1 No.	3986500.00
28	2800 MM	1 No.	4426000.00
29	3000 MM	1 No.	4763000.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

17.0 HDPE TANK

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	Supply and delivery and fixing of HDPE tank as per IS 12701 / 1996 including loading, unloading, transportation and labour charges for fixing of the GI pipes and specials for pipe connection works including cutting, threading and fixing charges etc.,		
	200 litres	1 No.	1642.00
	500 litres	1 No.	3953.00
	1000 litres	1 No.	7905.00
	2000 litres	1 No.	18480.00
	5000 litres	1 No.	43512.00
	10000 litres	1 No.	92400.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

18.0 MS KIOSK

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	Supply and delivery of MS Kiosk of size 0.75m x 0.45m x 0.75m made up of MS angle of size 50mm x 50mm x 4mm allround covered with 16 gauge MS sheet and kiosk door made up of MS plates of size 25 mm x 3 mm including cutting, welding, grinding, locking arrangements and labour charges etc.,	1 No	8230.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

19.0 MS LADDER

SI No.	Description	Unit	Rate for 2019-20 in Rupees
1	Supply and Delivery and fixing of outside MS Ladder of 45cm clear wide made out of 50 mm x 50mm x 6mm MS angle for sides and steps in 16 mm MS plain rods fixed at 30cm C/C welded jointed etc ., providing with suitable side supports, clamps and locking arrangements provided with two coats of approved enamel paint over one coat of redoxide paint , for providing access to roof top of OHT of suitable inclined length, including bottom anchorage and transportation and as directed by TWAD Board officers. The rate includes concrete bed block in CC 1:2:4 using 20mm HBGS at top and bottom of suitable size with necessary anchor bolts.		
	For OHT Capacities		
a	1. 10000 litres with - 7.5m staging height	Each	23830.00
b	2. 20000 litres with - 7.5m staging height	Each	23830.00
2	Fabrication, supply, delivery and fixing of outside MS Ladder of 45cm clear wide made out of 50 mm x 50mm x 6mm MS angle for both sides and for steps at 30cm C/C welded jointed etc ., for I staging from GL to 1st level brace (weight 4.5kg/m) IInd and IIIrd staging upto floor slab and IVth staging from floor slab to roof top. Supply, delivery and fixing of 32 mm GI pipes medium for hand rails from I stage to IVth stage. RCC M30 Grade mix for Landing slab 5 nos. at Ground Level- 1No. and above Ground Level - 4Nos. Supply and fixing of 32mm GI pipe medium for hand rails for the Landing slab. Supplying and fixing of MS Base plate of 100mm X 100mm X 6mm thick for fixing Anchore fastener bolt for fixing of hand rails at Landing slab and MS Ladder providing locking arrangements with two coats of approved enamel paint over one coat of red oxide paint as per approved Type Design and as directed by TWAD board officers.		
	For OHT Capacities		
a	30000 litres capacity at 12.0m staging height	Each	116788.00
b	40000 litres capacity at 12.0m staging height	Each	116788.00
c	50000 litres capacity at 12.0m staging height	Each	116788.00
d	60000 litres capacity at 12.0m staging height	Each	116788.00
e	100000 litres capacity at 12.0m staging height	Each	116788.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

20.0 MS DOOR / WINDOW/VENTILATOR

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	Supply and Delivery Fabrication of MS doors and windows with outer frame and shutter frame in MS angle of size 40mm x 40mm x 6 mm with MS flat 25mm x 25mm x 6mm and MS sheet of 18 gauge including ventilating arrangements using 20mm square MS rods with locking arrangements including two coats of approved enamel paint over coat of red oxide including cost of angles, plates, sheets, fabrication charges, cost of hold fast and transportation charges etc., complete.		
i	Fully panelled Double leaf - Door	1.00 x 2.50 m	6710.00
ii.	Fully panelled Double leaf - Door	1.00m x 2.10 m	5852.00
iii.	Fully panelled Double leaf - Door	1.00m x 2.00 m	4288.00
iv.	Fully panelled Single leaf - Door	0.75 m x 2.10 m	3583.00
v	Fully panelled Single leaf - Door	0.90 m x 2.00 m	3825.00
vi.	Fully panelled Single leaf - Door	0.90 m x 2.10 m	4237.00
vii	Fully panelled Single leaf - Door	1.00 m x 2.00 m	3986.00
viii	Fully panelled Double leaf - Window (without Ventilator)	1.20 m x 0.90 m	3179.00
ix	Fully panelled Double leaf - Window (without Ventilator)	0.60 m x 0.90 m	2321.00
x	Ventilator	0.45 m x 0.60 m	1395.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

21. WATER DISINFECTION EQUIPMENT USING SILVER-IONIZATION PROCESS
(DELETED)

21.1 REPLACEMENT ELECTRODE FOR WATER DISINFECTION EQUIPMENT USING SILVER IONIZATION

Supply and delivery of electrode assembly suitable for water disinfection equipment using silver ionization process using pure silver metal electrode and fixed on PVC/ Nylon sheets and nuts with electrical leads for the following capacities. The supply should be with the quality test certificate from approved organisations.

Sl. No.	Capacity LPH	Life of electrodes in million litre at dosage		Rate for 2019-20 in Rupees
		0.01mg/lt	0.005mg/lt	
1	1000			2318.00
2	2000			3864.00
3	3000	6	12	5893.00
4	5000	8	16	6547.00
5	10000	9	18	7200.00
6	15000	15	30	9821.00
7	25000	30	60	25872.00
8	50000	60	120	52365.00
9	100000	120	240	104730.00
10	200000	240	480	209459.00
11	300000	360	720	313598.00
12	400000	480	960	418920.00
13	500000	600	1,200	523650.00

Note :

- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
- 2) GST extra applicable as per GO

21.2 ELECTRO CHLORINATOR BASED ON COMMON SALT

Sl.No.	Capacity in litres per day	Rate for 2019-20 in Rupees.
1	50000	48720.00
2	100000	61698.00
3	150000	83431.00
4	200000	95275.00
5	250000	115361.00
6	300000	127720.00
7	350000	143321.00
8	400000	150380.00
9	450000	159650.00
10	500000	161195.00
11	1000000	395417.00
12	2000000	580508.00
13	3000000	762200.00
14	4000000	937300.00
15	5000000	1044715.00
16	6000000	1356656.00
17	7000000	1461618.00
18	8000000	1614009.00
19	9000000	1792199.00
20	10000000	2032189.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

22.0 PROVIDING EPOXY COATING TO REINFORCEMENT STEEL BARS

SI No.	Description	unit	Rate for 2019-20 in Rupees.
	Providing Fusion Bonded Epoxy coating not less than 175microns thickness and upto 300 microns to reinforcement of all diameters as per IS 13620/1993 including testing of coating at plant.The cost is inclusive of cost on account of careful handling, PVC coated binding wires, touchup material supplied by coating agency, repair work, loading, unloading and strengthening of bent rods etc., complete as per specification and as directed by the Engineer in charge.		
a.	for 8mm to 16mm	MT	14154.00
b.	for 20mm to 32mm	MT	10731.00

- Note :
- 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
 - 2) GST extra applicable as per GO

23.0 MECHANICAL JOINT COLLARS

SI No.	Description	Unit	Rate for 2019-20 in Rupees.
	Supply and Delivery of MJ Collars.		
1	100mm	Each	2491.00
2	150mm	Each	3962.00
3	200mm	Each	5171.00
4	250mm	Each	7198.00
5	300mm	Each	9344.00
6	350mm	Each	13340.00
7	400mm	Each	15891.00
8	450mm	Each	18380.00
9	500mm	Each	23464.00
10	600mm	Each	29942.00

Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.
2) GST extra applicable as per GO

24.0 STAINLESS STEEL CLAMP

Supply and delivery of Leak Arresting Flexible SS Clamps of Wrap Around Single Section type upto 500 mm diameter and Maxi Range double section type beyond 500 mm OD of all rigid pipe sections. The Clamps made of stainless steel SS304 metallic body of 0.8 to 1.0mm maximum thickness pasted with Waffle gaskets of Natural / Nitrile / EPDM grade (BS EN681-1) and fitted with self stabilizing Finger type clamps of 200 mm length SG grade malleable cast iron duly powder coated (BS 2789 grade 400/12) and connected through fasteners of EN8 material with Zinc Coating (BS 970). Suitable width of the clamps to be decided by the engineer incharge at site depending on the nature of pipe crack.

SI No.	Description	Unit	Rate for 2019-20 in Rupees.				
			400 MM Width	600 MM Width	800 MM Width	1000MM Width	1200 MM Width
I	Suitable for AC Pipes						
	Class 10						
1	100NB	1No.	4830	7935	10580	13230	15870
2	150NB	1No.	5880	9660	12880	16100	19320
3	200NB	1No.	6825	11215	14950	18690	22430
4	250NB	1No.	7718	12680	16910	21140	25360
5	300NB	1No.	8295	13630	18170	22720	27260
6	350NB	1No.	9135	15010	20010	29020	30020
7	400NB	1No.	9818	16130	21510	26890	32260
8	450NB	1No.	10920	17940	23920	29900	35880
9	500NB	1No.	12930	19400	25860	32330	38800
	Class 15						
1	100NB	1No.	5040	8280	11040	13800	16560
2	150NB	1No.	6090	10010	13340	16680	20010
3	200NB	1No.	7088	11650	15530	19410	23290
4	250NB	1No.	7928	13030	17370	21710	26050
5	300NB	1No.	8558	14060	18750	23440	28120
6	350NB	1No.	9345	15360	20470	25590	30710
7	400NB	1No.	10028	16480	21970	27460	32950
8	450NB	1No.	11235	18460	24610	30770	36920
9	500NB	1No.	13230	19850	26460	33100	39700
	Class 20						
1	100NB	1No.	5355	8800	11730	14670	17600
2	150NB	1No.	6300	10350	13800	17250	20700
3	200NB	1No.	7350	12080	16100	20130	24150
4	250NB	1No.	8190	13460	17940	22430	26910
5	300NB	1No.	8925	14670	19550	24440	29330
6	350NB	1No.	9555	15700	20930	26170	31400

SI No.	Description	Unit	Rate for 2019-20 in Rupees.				
			400 MM Width	600 MM Width	800 MM Width	1000MM Width	1200 MM Width
7	400NB	1No.	10343	17000	22670	28320	33990
8	450NB	1No.	11550	18980	23300	31630	37950
9	500NB	1No.	13450	20200	26900	33630	40350
10	600NB	1No.	-	27500	36700	45850	55000
11	700NB	1No.	-	28500	38000	47500	76000
II Suitable for Cast Iron or Ductile Iron Pipes							
a Suitable for MS/CI/DI Pipes - Single section SS Clamp							
1	4" Dia	1No.	4620	7590	10120	12650	15180
2	6" Dia	1No.	5460	8970	11960	14950	17940
3	8" Dia	1No.	6458	10610	14150	17690	21220
4	10" Dia	1No.	7455	12250	16330	20420	24500
5	12" Dia	1No.	7980	13110	17480	21850	26220
6	14" Dia	1No.	8820	14490	19320	24150	28980
7	16" Dia	1No.	9398	15440	20590	25740	30880
8	18" Dia	1No.	10238	16820	22430	28040	33640
9	20" Dia	1No.	11235	18460	24610	30770	36920
b Suitable for MS/CI/DI Pipes - Double section SS Clamp							
1	550 nb	1No.	-	21840	33120	41400	49680
2	900 nb	1No.	-	26220	34960	43700	52440
3	650 nb	1No.	-	27140	36230	45260	54280
4	700 nb	1No.	-	28520	38070	47560	57040
5	750 nb	1No.	-	29440	39280	49110	58880
6	800 nb	1No.	-	30480	40710	50830	60950
7	850 nb	1No.	-	37950	50600	63250	75900
8	900 nb	1No.	-	39100	52160	65210	78200
9	1000 nb	1No.	-	42780	57040	71300	85560
10	1100 nb	1No.	-	51750	69000	86250	103500
11	1200 nb	1No.	-	57500	76710	95860	115000
III Suitable for PSC Pipes							
a PSC Pipes - Wrap around single section							
1	300 NB	1No.	9240	15180	20240	25300	30360
2	350 NB	1No.	10080	16560	22080	27600	33120
3	400 NB	1No.	10920	17940	23920	29900	35880
4	450 NB	1No.	11655	19150	25530	31920	38300
5	500 NB	1No.	12600	20700	27600	34500	41400

SI No.	Description	Unit	Rate for 2019-20 in Rupees.				
			400 MM Width	600 MM Width	800 MM Width	1000MM Width	1200 MM Width
b PSC Pipes - Double section SS Clamp							
1	600 nb	1No.	-	28520	38070	47560	57040
2	700 nb	1No.	-	29440	39280	49110	58880
3	800 nb	1No.	-	33580	44850	56010	67160
4	900 nb	1No.	-	-	58650	73320	87930
5	1000 nb	1No.	-	-	64400	80500	96600
6	1100 nb	1No.	-	-	71300	89130	106950
7	1200 nb	1No.	-	-	80500	100630	120750
c PSC Pipes - Maxi RangeTriple section SS Clamp							
1	1300 nb	1No.	-	-	96600	120750	144900
2	1400 nb	1No.	-	-	110000	137500	165000
3	1500 nb	1No.	-	-	124000	155000	186000
IV Suitable for HDPE Pipes							
a Wrap around single section SS Clamp							
1	110mmOD	1No.	4515	7420	9900	12380	14850
2	140mmOD	1No.	4935	8110	10820	13530	16230
3	160mmOD	1No.	5250	8690	11500	14380	17380
4	180mmOD	1No.	5775	9490	12600	15830	18890
5	200mmOD	1No.	6300	10350	13800	17250	20700
6	225mmOD	1No.	6825	11220	14960	18700	22440
7	250mmOD	1No.	7140	11730	15640	19550	23460
8	280mmOD	1No.	7613	12510	16680	20850	25020
9	315mmOD	1No.	7875	12940	17260	21575	25880
10	355mmOD	1No.	8400	13800	18400	23000	27600
11	400mmOD	1No.	8925	14670	19560	24450	29340
12	450mmOD	1No.	9975	16390	21860	27330	32780
13	500mmOD	1No.	10815	17770	23700	29630	35540
b Maxi Range Double section SS Clamp							
1	566mmOD	1No.	15120	26340	35120	43900	52680
2	1000 mm OD	1No.	-	-	60000	75000	90000

Note :

- 1) The above rates are basic rates
- 2) Transportation charges extra
- 3) GST extra applicable as per GO

III (B) RATES FOR PUMP SETS

For individual specifications for various items regarding pump sets & Electrical Equipments, the specifications already given in the Manual for Pump sets should be followed.

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**1.0 CENTRIFUGAL MONOBLOCK PUMPSET AS PER IS9079/1989 WITHOUT
PANEL BOARD THREE PHASE.**

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2.0. SINGLE PHASE SUBMERSIBLE PUMPSET AS PER IS 8034/2002 WITHOUT PANEL BOARD

Supply and delivery of clear water vertical wet type submersible pump conforming to IS 8034/2002 and as amended thereafter and BEE 3 Star Rated capable of discharging noted LPM against head of water column due to all causes. The pump shall be with stainless steel shaft and dynamically balanced bronze or Cast SS impeller, brass screws and CI FG 200 grade pump bowl/diffuser with ISI mark. The pump shall be directly coupled to a continuous rated two pole suitable wet type vertical squirrel cage induction motor suitable for operation in AC single phase 230 V+/- 10%, 50HZ+/-5%

Sl.No.	Duty lpmxm	Unit	Rate for 2019-20 in Rupees
1	15x40	1 No	17883
2	15x50	1 No	17883
3	15x60	1 No	18594
4	15x70	1 No	21484
5	15x80	1 No	21484
6	15x90	1 No	21484
7	15x100	1 No	24510
8	15x125	1 No	27844
9	15X150	1 No	29975
10	20x40	1 No	18594
11	20x50	1 No	18594
12	20x60	1 No	18594
13	20x70	1 No	21484
14	20x80	1 No	21484
15	20x90	1 No	21882
16	20x100	1 No	26096
17	20X125	1 No	27844
18	20X150	1 No	29800

- Note:
- 1) The above rates are basic rates only.
 - 2) GST extra applicable as per GO.
 - 3) Duty of the Pumpset is the criteria for the rates.

3.0. THREE PHASE SUBMERSIBLE PUMPSET SUITABLE FOR 100MM DIA BOREWELL AS PER IS 8034/2002 WITHOUT PANEL BOARD

Supply and delivery of clear water vertical wet type submersible pump suitable for 100mm dia borewell conforming to IS 8034/2002 as amended thereafter and BEE 3 Star Rated capable of discharging noted LPM against head of water column due to all causes. The pump shall be with stainless steel shaft and dynamically balanced bronze or Cast SS impeller, brass screws and CI FG 200 grade pump bowl/diffuser with ISI mark. The pump shall be directly coupled to a continuous rated two pole suitable wet type vertical squirrel cage induction motor as per IS 9283 /1995 and as amended there after, suitable for operation in AC three phase 415 V+/- 10 %, 50 HZ +/- 5 %

Sl.No.	Duty lpmxm	Unit	Rate for 2019-20 in Rupees
1	30x40	1 No	18207
2	30x50	1 No	18314
3	30x60	1 No	19171
4	30x70	1 No	20242
5	30x80	1 No	23134
6	30x90	1 No	25169
7	30x100	1 No	25169
8	30x125	1 No	27632
9	40x40	1 No	18100
10	40x50	1 No	19064
11	40x60	1 No	19064
12	40x70	1 No	24847
13	40x80	1 No	25918
14	40x90	1 No	27953
15	40x100	1 No	27953

- Note:
- 1) The above rates are basic rates only.
 - 2) GST extra applicable as per GO.
 - 3) Duty of the Pumpset is the criteria for the rates.

3.1. THREE PHASE SUBMERSIBLE PUMPSET SUITABLE FOR 150MM DIA BOREWELL AS PER IS 8034/2002 WITHOUT PANEL BOARD

Supply and delivery of clear water vertical wet type submersible pumpset suitable for 150mm dia borewell conforming to IS 8034/2002 as amended thereafter and BEE 3 Star Rated capable of discharging noted LPM against head of water column due to all causes. The pump shall be with stainless steel shaft and dynamically balanced bronze or Cast SS impeller, brass screws and CI FG 200 grade pump bowl/diffuser with ISI mark. The pump shall be directly coupled to a continuous rated two pole suitable wet type vertical squirrel cage induction motor as per IS 9283 /1995 as amended there after, suitable for operation in AC three phase 415 V+/-10%, 50HZ +/- 5 %

Sl.No.	Duty lpm x m	Unit	Rate for 2019-20 in Rupees
1	50x40	1 No	25507
2	50x50	1 No	28107
3	50x60	1 No	28706
4	50x75	1 No	31437
5	50x100	1 No	38495
6	50x125	1 No	41117
7	50x175	1 No	52204
8	50x200	1 No	57864
9	50x225	1 No	62300
10	50x250	1 No	73479
11	50x275	1 No	80222
12	75x40	1 No	27233
13	75x50	1 No	28107
14	75x60	1 No	29488
15	75x75	1 No	33626
16	75x100	1 No	41076
17	75x125	1 No	43538
18	75x150	1 No	51971
19	75x175	1 No	51971
20	75x200	1 No	56838
21	75x225	1 No	59826
22	75x250	1 No	73479
23	75x275	1 No	80222
24	100x30	1 No	25507

Sl.No.	Duty lpm x m	Unit	Rate for 2019-20 in Rupees
25	100x40	1 No	27233
26	100x50	1 No	29777
27	100x60	1 No	31437
28	100x75	1 No	37068
29	100x100	1 No	43833
30	100x125	1 No	50355
31	100x175	1 No	50355
32	100x200	1 No	54959
33	100x225	1 No	71576
34	100x250	1 No	80222
35	125x25	1 No	25753
36	125x40	1 No	27233
37	125x50	1 No	29592
38	125x60	1 No	32741
39	125x75	1 No	34577
40	125x100	1 No	42004
41	125x125	1 No	47327
42	125x200	1 No	64390
43	125x225	1 No	68478
44	150x25	1 No	25753
45	150x40	1 No	27233
46	150x50	1 No	28107
47	150x60	1 No	32741
48	150x75	1 No	36350
49	150x100	1 No	42711
50	150x125	1 No	47263
51	175x40	1 No	27233
52	175x50	1 No	32556
53	175x60	1 No	33483
54	175x75	1 No	33483
55	175x100	1 No	39992
56	200x25	1 No	25753
57	200x40	1 No	27233
58	200x50	1 No	31494

Sl.No.	Duty lpm x m	Unit	Rate for 2019-20 in Rupees
59	200x60	1 No	37068
60	200x75	1 No	37068
61	200x100	1 No	46911
62	200x125	1 No	54040
63	250x40	1 No	27233
64	250x50	1 No	33483
65	250x60	1 No	34027
66	250x75	1 No	44378
67	250x100	1 No	54042
68	250x125	1 No	63151
69	300x40	1 No	29413
70	300x50	1 No	34310
71	300x60	1 No	46214
72	300x75	1 No	51503
73	300x100	1 No	54607
74	350x40	1 No	34310
75	350x50	1 No	38721
76	350x60	1 No	46214
77	350x75	1 No	54040
78	350x100	1 No	60190
79	400x40	1 No	40525
80	400x50	1 No	49030
81	400x60	1 No	47599
82	400x75	1 No	63431
83	500x40	1 No	43451
84	500x50	1 No	47599
85	500x75	1 No	63431
86	600x40	1 No	44946
87	600x50	1 No	60571
88	600x75	1 No	69787

Note: 1) The above rates are basic rates only.
2) GST extra applicable as per GO.
3) Duty of the Pumpset is the criteria for the rates.

4.0 OPENWELL SUBMERSIBLE PUMPSET AS PER IS 14220/2002 WITHOUT PANEL BOARD

Supply and delivery of Open well Submersible pump set conforming to IS 14220 /2002 and as amended thereafter and BEE 3 Star Rated capable of discharging the following duties due to all causes. The pump shall be with stainless steel shaft and dynamically balanced bronze mixed type impeller, CI FG 200 grade casing and brass screws and rotor shall be of copper rod as per IS 613/1984 with ISI mark. The pump suitable for installation in sump with 1.1KV grade 3 core suitable copper flat submersible cable to a length of 15m with necessary cable joints. The non-return valve located at the top of the pump in the discharge outlet connection is to be designed with minimum friction. The pump should be directly coupled to 2880 RPM, three phase, 50 Hz (± 5), 415V+6% & 415V-15% squirrel cage induction motor suitable for DOL upto 5 HP , Fully Automatic Air break Star Delta up to 20 HP and Auto Transformer starter for above 20 HP starting and for continuous operation.

Sl.No.	Duty lpm x m	Unit	Rate for 2019-20 in Rupees
1	50x25	1 No	22167
2	50x40	1 No	22198
3	50x50	1 No	26322
4	50x60	1 No	32922
5	50x75	1 No	44640
6	50x100	1 No	45168
7	50x125	1 No	71116
8	75x25	1 No	22198
9	75x40	1 No	24890
10	75x50	1 No	28200
11	75x60	1 No	32922
12	75x75	1 No	44640
13	75x100	1 No	45170
14	75x125	1 No	66565
15	75x150	1 No	89730
16	100x25	1 No	23993
17	100x40	1 No	28200
18	100x50	1 No	29643
19	100x60	1 No	44641
20	100x75	1 No	45169
21	100x100	1 No	45169
22	100x125	1 No	71224
23	125x25	1 No	24640

Sl.No.	Duty lpm x m	Unit	Rate for 2019-20 in Rupees
24	125x40	1 No	29590
25	125x50	1 No	34870
26	125x75	1 No	44641
27	125x100	1 No	45169
28	125x125	1 No	71224
29	150x25	1 No	25210
30	150x40	1 No	29590
31	150x50	1 No	29643
32	150x60	1 No	44640
33	150x75	1 No	44640
34	150x100	1 No	45170
35	150x125	1 No	75636
36	175x25	1 No	24860
37	175x40	1 No	29590
38	175x50	1 No	34870
39	175x60	1 No	44641
40	175x75	1 No	44641
41	175x100	1 No	61649
42	200x25	1 No	24860
43	200x40	1 No	29590
44	200x50	1 No	29643
45	200x60	1 No	44641
46	200x75	1 No	49060
47	200x100	1 No	61649
48	200x125	1 No	89518
49	250x25	1 No	25210
50	250x40	1 No	29643
51	250x50	1 No	36675
52	250x60	1 No	44641
53	250x75	1 No	61649
54	250x100	1 No	65294
55	250x125	1 No	85057

Sl.No.	Duty lpm x m	Unit	Rate for 2019-20 in Rupees
56	300x25	1 No	25210
57	300x40	1 No	29643
58	300x50	1 No	34870
59	300x60	1 No	49060
60	300x75	1 No	61649
61	300x100	1 No	65294
62	350x25	1 No	27170
63	350x40	1 No	40215
64	350x50	1 No	43372
65	350x60	1 No	50445
66	350x75	1 No	61649
67	350x100	1 No	65294
68	400x25	1 No	29643
69	400x40	1 No	40375
70	400x50	1 No	43372
71	400x60	1 No	51872
72	400x75	1 No	64127
73	500x25	1 No	29643
74	500x40	1 No	40375
75	500x50	1 No	43372
76	500x75	1 No	64814
77	600x25	1 No	29590
78	600x40	1 No	44198
79	600x50	1 No	52859
80	600x75	1 No	64814
81	700x40	1 No	49400
82	700x60	1 No	66538
83	700x80	1 No	66538
84	700x100	1 No	66538
85	800x40	1 No	49400
86	800x60	1 No	66538
87	800x80	1 No	66538

Sl.No.	Duty lpm x m	Unit	Rate for 2019-20 in Rupees
88	800x100	1 No	66538
89	900x40	1 No	66538
90	900x60	1 No	66538
91	900x80	1 No	66538
92	900x100	1 No	66538
93	1000x40	1 No	75350
94	1000x60	1 No	75350
95	1000x80	1 No	89131
96	1000x100	1 No	142902
97	1250x40	1 No	85188
98	1250x60	1 No	101573
99	1250x80	1 No	158683
100	1250x100	1 No	158683
101	1500x40	1 No	96214
102	1500x60	1 No	140560
103	1500x80	1 No	164276
104	1500x100	1 No	204916
105	2000x40	1 No	113703
106	2000x60	1 No	164276
107	2000x80	1 No	164276
108	2000x100	1 No	164276
109	2500x40	1 No	160350
110	2500x60	1 No	Deleted
111	2500x80	1 No	Deleted
112	2500x100	1 No	Deleted

Note: 1) The above rates are basic rates only.
2) GST extra applicable as per GO.
3) Duty of the Pumpset is the criteria for the rates.

5.0.RATES FOR HORIZONTAL SPLIT CASING CENTRIFUGAL PUMP (1500 RPM) conforming to IS 1520

Supply and delivery of Horizontal split casing centrifugal pump conforming to IS 1520 and as amended thereafter with CI casing and split glands, stainless steel shaft, hydraulically and dynamically balanced bronze impellers capable of discharging required quantity of water against a total head noted below due to all causes and with the accessories such as G.M air release cock, Grease cup, G.I priming funnel, M.S lifting hook, drip water G.I pipe connections, leading to the outside of pump house rubber water deflector, double flap foot valve, G.M strainer including unique tyre type coupling, common M.S fabricated base to mount pump and motor and other standard fittings etc complete. Pump shall be capable of discharging the specified quantity at the head noted at the minimum NPSH at site conditions. The shut off head shall be atleast 25% over and above the head at duty point. The pump shall be suitable for operation in AC three phase , 415 V , 50 Hz , 1500 RPM.

SI.No.	Capacity in LPM	Rate for 2019-20 in Rupees										Rs. in Lakhs.			
		Head in Metres													
		25	30	35	40	45	50	55	60	70	80	90			
1	1500	3.17	3.03	3.68	3.73	3.76	4.53	4.80	4.82	5.13	5.13	5.71			
2	2500	3.17	3.17	3.78	3.89	4.64	4.64	4.88	5.16	5.76	5.97	5.97			
3	3000	3.17	3.17	3.97	4.02	4.88	4.88	4.64	5.16	6.16	6.16	6.21			
4	3500	3.17	3.17	3.97	4.02	4.88	5.57	6.01	6.32	6.57	6.57	6.57			
5	4000	3.67	3.67	4.02	4.02	4.94	5.64	6.27	6.43	6.57	6.57	6.57			
6	5000	4.01	4.01	4.12	4.24	5.74	5.98	6.54	6.77	6.98	7.02	7.03			
7	6000	4.01	4.01	5.56	5.69	6.03	6.45	6.83	7.59	7.95	8.09	8.36			
8	7000	5.13	5.45	5.64	5.86	6.31	6.57	7.06	7.75	7.99	8.92	9.10			
9	8000	5.27	5.45	5.69	6.27	6.57	6.92	7.06	7.40	11.55	11.84	12.42			
10	9000	5.27	5.64	5.83	6.57	6.77	6.92	7.06	7.17	12.11	13.26	14.28			
11	10000	5.27	5.64	5.91	6.60	6.94	7.22	7.22	12.51	16.00	16.67	16.78			
12	15000	6.49	6.68	6.51	8.02	8.41	8.86	10.43	13.83	16.65	16.65	16.78			
13	20000	7.12	7.26	7.27	14.09	14.48	15.89	18.14	18.14	18.52	18.63	19.14			
14	25000	16.41	16.67	17.14	17.38	17.82	17.84	18.55	18.55	19.14	19.54	19.48			
15	30000	17.75	18.42	19.29	19.58	19.76	20.33	20.26	23.14	26.12	27.07	27.83			

Note: 1) The above rates are basic rates inclusive of MS base plate, flexible tyre coupling and foundation bolts.

2) GST extra applicable as per GO

3) Efficiency may be taken from universal curve for calculation of motor HP, otherwise manufacturers may be consulted for efficiency curve.

4) NPSH requirement should be assessed and sump should be designed accordingly.

6.0. HORIZONTAL SQUIRREL CAGE MOTOR 1500 RPM

AC three Phase /415 V/ Horizontal SPDP 4 Pole Squirrel cage Induction motor for HSC Centrifugal pumps

Supply and delivery of AC three Phase 4 pole Horizontal squirrel cage Induction motor confirming to IS 325/1996 and as amended thereafter with Class F insulation to suit the speed of pump and suitable for operation with continuous S1 rated, 415V +/- 10 %, 50 HZ +/- 5% supply , TEFC (upto 20 HP), SPDP (above 20 HP). The motor offered should be of energy efficient motors.

Sl.No	KW	HP	Rate for 2019-20 in Rupees
1	9.3	12.5	89786
2	11	15	95319
3	15	20	112267
4	18.5	25	153355
5	22	30	168410
6	30	40	190590
7	37	50	238873
8	45	60	288939
9	55	75	294936
10	75	110	447904
11	90	120	471899
12	110	150	588805
13	125	170	757838
14	132	180	801828
15	150	200	808827
16	160	215	881811
17	180	240	881811
18	187	250	917803
19	200	270	985788
20	220	300	1295722
21	250	335	1475276
22	280	375	2035563
23	300	400	2349496

- Note:
- 1) The above rates are basic rates inclusive of handling charges.
 - 2) GST extra applicable as per GO

7.0. HORIZONTAL SQUIRREL CAGE MOTOR 1000 RPM

AC three Phase /415 V/ Horizontal SPDP 6 Pole Squirrel cage Induction motor for HSC Centrifugal pumps

Supply and delivery of AC three Phase 6 pole Horizontal squirrel cage Induction motor confirming to IS 325/1996 and as amended thereafter with Class F insulation to suit the speed of pump and suitable for operation with continuous S1 rated, 415 V +/- 10 %, 50 HZ +/- 5% supply , TEFC (upto 20 HP), SPDP (above 20 HP). The motor offered should be of energy efficient motors.

Sl.No	KW	HP	Rate for 2019-20 in Rupees
1	9.3	12.5	87122
2	11	15	91548
3	15	20	129022
4	18.5	25	152372
5	22	30	196127
6	30	40	244639
7	37	50	305785
8	45	60	376693
9	55	75	431563
10	75	110	518002
11	90	120	587592
12	110	150	754945
13	125	170	898223
14	132	180	898223
15	150	200	958804
16	160	215	1034035
17	180	240	1447122
18	187	250	1470268
19	200	270	1591380
20	220	300	1825924
21	250	335	2044126

Note: 1) The above rates are basic rates inclusive of handling charges.
2) GST extra applicable as per GO

**8.0. VERTICAL TURBINE PUMP (WATER LUBRICATED) CONFIRMING TO IS1710/1989 (REAFFIRMED 2009)
1500 RPM SUITABLE FOR VERTICAL HOLLOW SHAFT SQUIRREL CAGE**

Supply and delivery of Vertical water/oil lubricated statically, dynamically, hydraulically balanced turbine pump capable of discharging the following duty condition as given below due to all causes with surface discharge head confirming to IS 1710 and as amended as on date with accessories as per IS 5120/1977 (Reaffirmed 2011) and as amended thereafter to suit the site condition. The speed, Number of stages, sizes of column pipes and line shaft indicated is based on site condition prevailing during investigation. The pump should be supplied with non reversible ratchet pin housing safety clutch, suction strainer etc. The Pump Bowl assembly shall be with bronze impeller running at 1450 RPM. The pump includes suitable head shaft, suitable 1.5 metre long SS line shaft required Nos. to suit the well depth, Rubber line shaft bearing of required Nos., C.I Bearing retainer of required Nos., 100 litre HDPE Pre- lubricating tank with 20mm PVC Rigid pipe connection along with GM gate valves, Suitable ERW column pipe of each 1.5m long of required Nos. to suit the well depth, Suction bell mouth of suitable size, M.S. clamps suitable for column pipe/line shaft - 2 set and Spanner - 1 set etc complete

Sl.No.	Capacity in LPM	Rate for 2019-20 in Rupees										Rs. in Lakhs.			
		Head in Metres													
		15m	20m	30m	40m	50m	60m	70m	80m	90m	100m				
1	1500	3.12	3.12	3.33	3.33	3.45	3.55	3.74	3.74	4.15	4.36				
2	2000	6.24	6.60	7.38	8.20	9.13	9.80	10.16	10.37	10.58	11.32				
3	3000	8.06	8.24	8.74	9.71	10.75	11.19	11.63	11.63	11.63	11.69				
4	4000	8.82	9.12	11.34	11.52	11.69	11.69	12.05	12.83	13.20	13.20				
5	5000	10.65	10.96	11.52	12.31	12.71	13.02	13.56	13.78	13.97	14.35				
6	6000	10.96	10.96	11.68	12.27	13.02	13.02	13.56	13.78	13.98	14.35				
7	7000	10.96	10.96	11.68	12.27	13.02	13.02	13.56	13.78	13.98	14.35				
8	8000	11.68	11.91	12.27	12.84	13.20	13.20	13.98	13.98	13.98	14.35				
9	10000	11.68	11.91	12.38	12.84	13.20	13.56	13.98	13.98	14.35	14.35				
10	15000	12.80	13.09	13.20	13.56	14.37	14.35	14.71	15.49	15.84	16.20				
11	20000	14.57	15.04	15.65	16.23	16.64	18.61	20.46	20.85	24.03	28.94				
12	25000	15.08	15.45	16.04	16.54	17.02	18.96	20.85	21.34	24.52	29.83				
13	30000	25.68	26.89	27.88	29.76	30.05	31.65	32.03	35.61	36.05	39.86				

Note:

1) The above rates are basic rates inclusive of transportation and handling charges

2) GST extra applicable as per GO

3) Multiply with 1.15 for oil lubricated pumps (for raw water)

4) Rates given are with suspension length of 7m, bronze impeller, SS 401 shaft, MS column pipe, discharge case & CI bell mouth.

5) Add 7.5% extra for each 1.5 m length column pipe assembly in the above rate.

9.0 VERTICAL HOLLOW / SOLID SHAFT MOTORS FOR TURBINE PUMP

AC three Phase /415 V/ Vertical Hollow / Solid Shaft TEFC & SPDP 4 Pole Squirrel cage Induction Motor 1500RPM

Supply and delivery of vertical Hollow / Solid shaft Squirrel cage induction motor (IS 325) suitable for the above pump continuous rated TEFC/SPDP type with Class 'F' insulation for operation in AC, three Phase/50 HZ ($\pm 5\%$), 415V ($\pm 10\%$) running with a speed of pump noted above and with inbuilt thrust bearing assembly capable of taking up the entire load and non - reverse ratchet assembly etc., complete. The motor rating noted above is the minimum and shall be such that it should never be over loaded when the pump works at MWL condition and shall be 10% over and above the maximum HP absorbed by the pump. The motor offered should be energy efficient motors to have maximum efficiency at high power factor. Separate thrust bearing assembly could also be supplied to take up the down load.

Sl.No	KW	HP	Rate for 2019-20 in Rupees
	TEFC MOTORS		
1	18.5	25	107936
2	22	30	118732
3	30	40	137365
4	37	50	179798
5	45	60	217233
	SPDP MOTORS		
6	55	75	340114
7	75	100	448770
8	90	120	468044
9	110	150	603128
10	125	170	623300
11	132	180	698943
12	150	200	787391
13	160	215	946043
14	180	240	986386
15	187	250	993446
16	200	270	1099347
17	220	300	1149776
18	250	335	1230462
19	280	375	1437972
20	300	400	1630185
21	380	520	1800639
22	400	540	2130665

Note: 1) The above rates are basic rates inclusive of handling charges.
2) GST extra applicable as per GO

10.0 Iron core Oil Cooled Transformer with Copper Winding Conforming to IS 1180 (Part 1) of 2014.

Supply and delivery of 11 KV/433 Volts, 22 KV/433 Volts and 11 /22 KV/ 433 Volts, three Phase 50 Hz double wound oil immersed natural air cooled, core type continuous rating, outdoor distribution power transformer with copper winding for voltage ratio 22-11 KV/433 volts between phases with neutral brought out at LV side. The transformer shall be contained in a mild steel plain & radiator cooled tank, conforming to IS 1180 (Part I) of 2014. with off-load tap switch for $\pm 10\%$ on LV side and $\pm 5\%$ on H.V. side. The transformer shall be supplied with first filling of oil and consisting of all the fittings and accessories such as Inspection cover, Oil level indicator with minimum and filling level markings, Externally operated off circuit tap changing switch with locking device & keys, H.V. Terminals- Bushings, L.V. Terminals cable box Rating plate, Two earthing terminals, two lifting hooks etc complete as per IS 1180 (Part I) of 2014 and as amended thereafter.

Sl.No	Rating in KVA	Rate for 2019-20 in Rupees		
		11KV/433V	22 KV/433 V	11KV/22KV /433V
1	63	143969	152967	170964
2	100	165984	174720	192192
3	150	294536	311933	358723
4	160	242948	265443	287939
5	200	269942	265443	287939
6	250	331968	377919	404914
7	315	386917	413912	449904
8	400	431908	476898	521889
9	500	497952	535807	594047
10	630	559103	594047	663935
11	750	663935	687232	821183
12	800	687232	716351	859621
13	1000	768767	803711	964453

- Note :
- 1) The above rates are basic rates inclusive of transportation and handling charges.
 - 2) GST extra applicable as per GO

11.0. SINGLE PHASE PANEL BOARD WITH TWO LEVEL GUARD AND AUTO START

Supply and delivery of direct online starter confirming to IS13947, IEC60947-1 suitable KW rating for operation in AC/single Phase/50Hz($\pm 5\%$) and 230 V($\pm 10\%$) including Ammeter, Voltmeter, Thermal Overload relay, 16 amps 2 pole Magnetic Contactor with under Voltage protection, Indication lamp, starting capacitor, running capacitor and On/Off Push button switches, 5 way connector, wiring with 1 sq. mm/1.5 sq. mm copper PVC insulated cable, powder coated vermin proof box including the capacitor (the cost of capacitor is to be taken separately).

Sl. No.	HP	Unit	Rate for 2019-20 in Rupees
1	1	1 No.	5280.00
2	1.5	1 No	5500.00
3	2	1 No	6376.00

- Note:
- 1) The rate are basic rates inclusive of two level guard worth Rs.550/- and auto start facility worth Rs. 400/-
 - 2) Timer is not recommended for this panel board.
 - 3) Panel board should be provided as per specification given in Board circular No. 23/DCE/QATA/2004/Dt. 23.8.2004
 - 4) GST extra applicable as per GO

11.1. THREE PHASE PANEL BOARD-D.O.L WITH TWO LEVEL GUARD AND AUTO START

Supply and delivery of direct online starter confirming to IS13947, IEC 60947-1 suitable KW rating for operation in AC/three Phase/50HZ($\pm 5\%$) and 415 V($\pm 10\%$) including Ammeter, Voltmeter, Thermal Overload relay, 16 amps 2 pole Magnetic Contactor with under Voltage protection, Indication lamp, starting capacitor, running capacitor and On/Off Push button switches, 5 way connector, wiring with 1 sq. mm/1.5 sq. mm copper PVC insulated cable, powder coated vermin proof box including the capacitor (the cost of capacitor is to be taken separately).

Sl. No.	HP	Unit	Rate for 2019-20 in Rupees
1	1	1 No.	12387.00
2	2	1 No	12387.00
3	3	1 No	12650.00
4	4	1 No.	12650.00
5	5	1 No	13006.00
6	6	1 No	13006.00

- Note :
- 1) The rate are basic rates inclusive of two level guard worth Rs.550/- and auto start facility worth Rs. 400/-
 - 2) For Timer facility if necessary Rs.4000/- may be added as extra.
 - 3) Panel board should be provided as per specification given in Board circular No. 23/DCE/QATA/2004/Dt. 23.8.2004
 - 4) GST extra applicable as per GO

11.2 THREE PHASE PANEL BOARD-STAR DELTA WITH TWO LEVEL GUARD AND AUTO START

Supply and delivery of Star-Delta starter confirming to IS13947, IEC 60947-1 suitable KW rating for operation in AC/ three Phase/50Hz (+/- 5%) and 415V (+/- 10%) including 3 pole magnetic contactor with under voltage release - 3 nos., CT operated Ammeter(65 mm dia) with suppressed scale, Voltmeter (65mm dia), Voltmeter selector switch, Minature circuitr breaker, Thermal Overload relay, Air Break contactors suitable for next Standard higher KW rating, Single phasing preventor, dry running preventor and On/Off Push button switches, wiring with 1 sq.mm/4 sq. mm copper pvc insulated cable, powder coated vermin proof box, including the capacitor(the cost of capacitor is to be taken separately).

Sl. No.	HP	Unit	Rate for 2019-20 in Rupees
1	6	1 No.	15575
2	7.5	1 No	16352
3	10	1 No	19807
4	12.5	1 No.	20633
5	15	1 No	21483
6	20	1 No	21483
7	25	1 No	21483

- Note :
- 1) The rate are basic rates inclusive of two level guard worth Rs.550/- and auto start facility worth Rs. 400/-
 - 2) For Timer facility if necessary Rs. 4000/- may be added as extra.
 - 3) Panel board should be provided as per specification given in Board circular No. 23/DCE/QATA/2004/Dt. 23.8.2004
 - 4) GST extra applicable as per GO

11.3 DOL STARTER WITH SINGLE PHASING PREVENTOR WITH ANALOG AMMETER AND VOLTMETER CONFORMING TO IS13947, IEC60947-1 WITH AUTO RESTART FACILITY FOR PUMP HOUSES WHERE PANEL BOARDS ARE AVAILABLE

Supply and delivery of direct online starter confirming to IS13947, ICE 60947-1 suitable KW rating for operation in AC/ three Phase/50HZ(+/- 5%) and 415V (+/- 10%) including Ammeter, Overload relay, under Voltage release with no Volt coil, Air Break contactors suitable for next Standard higher KW rating, Single phase preventor, dry running preventor and On/ Off Push button switches, including the capacitor(the cost of capacitor is to be taken separately).

Upto 5 HP - Rs. 4711/- each.

- Note :
- 1) The above rate is basic rate only.
 - 2) GST extra applicable as per GO

11.4 FLEX COMPENSATED MAGNETIC AMPLIFIER SOFT STARTER SUITABLE FOR L.T.SQUIRREL CAGE MOTOR

Supply and delivery of floor mounted type FCMA Air/ Oil Cooled soft starter suitable for the LT motor offered for operation in AC three Phase 50Hz (+/- 5%), 415V(+/-10%) including line contactors suitable for next standard higher KW rating, Over load relay, instrument panel with frequency meter, Ammeter, Voltmeter, indicating lamp 6Nos, LED ON/OFF type and Start / Stop push button.

Sl. No.	KW	Unit	Rate for 2019-20 in Rupees
1	30 to 37	1 No	171498
2	38 to 75	1 No	305760
3	76 to 135	1 No	426297
4	136 to 160	1 No	482160
5	161 to 250	1 No	720301
6	251 to 300	1 No	844760
7	301 to 500	1 No	1188044
8	501 to 750	1 No	1557220

- Note:
- 1) The above rates are basic rates only
 - 2) DOL starters are to be adopted up to 6 HP
 - 3) Air break fully automatic star delta starters are suggested for above 6 HP upto 20HP except submersible pumpsets for which fully automatic ATS starters are to be adopted
 - 4) FCMA soft starter are to be adopted for 100 HP and above.
 - 5) GST extra applicable as per GO

11.5 FLEX COMPENSATED MAGNETIC AMPLIFIER SOFT STARTER SUITABLE FOR H.T.SQUIRREL CAGE MOTOR

Supply and delivery of suitable KW indoor automatic air cooled dust and vermin proof FCMA Soft Starter for the operation in 3.3 KV three Phase 50 Hz, AC supply termination with phase segregated neutral terminal box of the motor , housed in 14 SWG sheet steel enclosure, painted with epoxy or polyurethane , 230V AC 10 Amps control supply , Class B insulation, 300 mm height fabricated pedestal (to prevent water ingress for starter panel) and condensation heater with switch with thermostat, interlocking with running motor with built in facility for run mode/by pass etc. complete. The starter may be provided with contactors suitable for next standard higher KW rating, Over load relay, instrument panel with frequency meter, Ammeter, Voltmeter, indicating lamp 6 Nos, LED ON/OFF type and Start / Stop push button.

Sl. No.	KW	Unit	Rate for 2019-20 in Rupees
1	250	1 No	701644
2	300	1 No	739039
3	350	1 No	794444
4	400	1 No	831545
5	500	1 No	867937
6	600	1 No	976079
7	700	1 No	1074088
8	800	1 No	1200497
9	900	1 No	1302417
10	1000	1 No	1424687

- Note:
- 1) The above rates are basic rates only
 - 2) DOL starters are to be adopted up to 6 HP
 - 3) Air break fully automatic star delta starters are suggested for above 6 HP upto 20HP except submersible pumpsets for which fully automatic ATS starters are to be adopted
 - 4) FCMA soft starter are to be adopted for 100 HP and above.
 - 5) GST extra applicable as per GO

11.6 FULLY AUTOMATIC AIR BREAK STAR DELTA STARTER WITH SINGLE PHASE PREVENTOR WITH AMMETER CONFIRMING TO IS13947, IEC 60947-1 WITH AUTO RESTART FACILITY FOR PUMP HOUSES WHERE PANEL BOARDS ARE AVAILABLE

Supply and delivery of Star-Delta starter where panel boards are available confirming to IS13947, IEC 60947-1 suitable KW rating for operation in AC/ three Phase/50Hz(+/- 5%) and 415V (+/-10%) including 3 pole magnetic contactor with under voltage release - 3 Nos., CT operated Ammeter(65 mm dia) with suppressed scale, Voltmeter (65mm dia), Voltmeter selector switch, Minature circuit breaker, Thermal Overload relay, Air Break contactors suitable for next Standard higher KW rating, Single phasing preventor, dry running preventor and On/Off Push button switches, wiring with 1 sq.mm/4 sq. mm copper pvc insulated cable, powder coated vermin proof box, including the capacitor(the cost of capacitor is to be taken separately).

Sl. No.	KW Rating	HP	Unit	Rate for 2019-20 in Rupees
1	7.5	10	1 No	15658
2	11	15	1 No	15658
3	15	20	1 No	16884
4	18.5	25	1 No	16884
5	22	30	1 No	27556
6	30	40	1 No	31565
7	37	50	1 No	35998

Note: 1) The above rates are basic rates inclusive of handling charges.
2) GST extra applicable as per GO

11.7 FULLY AUTOMATIC AIR BREAK AUTO TRANSFORMER STARTER WITH SINGLE PHASING PREVENTOR WITH AMMETER CONFIRMING TO IS 8544 PART IV WITH AUTO RESTART FACILITY

Supply and delivery of Fully Automatic Auto Transformer Starter suitable for the motor offered. Floor mounting type air/ oil cooled Auto Transformer Starter with tapings at 50%, 65%, 80%, housed in robust steel chamber with arc and main contacts confirming to IS 8544 Part IV and as amended thereafter for operation in AC three Phase 50 Hz (+/- 5%), 415V (+/- 10%) with the following components etc. under voltage release with no volt coil, over load relay with dash pot arrangements, single phasing preventor, LED ON/ OFF switches, Mounted Ammeter, Earth leakage relay, contactor assembly suitable for next standard KW rating, incoming and outgoing cable entry provisions, transformer tank including first filling of oil etc.

Sl.No.	KW Rating	HP	Unit	Rate for 2019-20 in Rupees
1	5.5	7.5	1 No	28011
2	7.5	10	1 No	28011
3	9	12.5	1 No	32220
4	11	15	1 No	33564
5	15	20	1 No	67126
6	22	30	1 No	85799
7	30	40	1 No	96518
8	37	50	1 No	111336
9	45	60	1 No	124257
10	60	80	1 No	171863
11	75	100	1 No	188285

Note: 1) The above rates are basic rates inclusive of handling charges.
2) GST extra applicable as per GO

12.0. L.T. CABLES 3,3.5,4 CORE 1.1 KV GRADE ARMoured ALUMINIUM CONDUCTOR CROSS LINKED POLY ETHYLENE INSULATED PVC SHEATHED CABLES CONFIRMING TO IS 7098 (PART I)/1988 AND AS AMENDED THEREAFTER WITH ISI MARKING

Sl.No	Description	Unit	Rate for 2019-20 in Rupees		
			3 Core	3.5 Core	4 Core
1	4 sq.mm	metre	71.50	—	145.00
2	6 sq.mm	metre	87.00	—	153.00
3	10 sq.mm	metre	98.00	—	168.00
4	16 sq.mm	metre	103.00	—	219.00
5	25 sq.mm	metre	129.00	267.75	—
6	35 sq.mm	metre	158.00	315.00	—
7	50 sq.mm	metre	210.00	411.60	—
8	70 sq.mm	metre	277.00	527.10	—
9	95 sq.mm	metre	362.00	680.40	—
10	120 sq.mm	metre	436.00	832.65	—
11	150 sq.mm	metre	531.00	985.95	—
12	185 sq.mm	metre	655.00	1208.55	—
13	240 sq.mm	metre	827.00	1525.65	—
14	300 sq.mm	metre	1004.00	1872.15	—
15	400 sq.mm	metre	1285.00	2395.05	—

Note: 1) The above rates are basic rates only.
2) GST extra applicable as per GO

12.1. PVC INSULATED AND SHEATHED 3 CORE FLAT TYPE COPPER CABLE CONFIRMING TO IS 694/1990 AND AS AMENDED THEREAFTER.

Sl.No	Description	Unit	Rate for 2019-20 in Rupees
1	1.5 sq.mm	metre	69
2	2.5 sq.mm	metre	108
3	4.0 sq.mm	metre	161
4	6.0 sq.mm	metre	217
5	10.0 sq.mm	metre	375
6	16.0 sq.mm	metre	583
7	25.0 sq.mm	metre	798
8	35.0 sq.mm	metre	1169
9	50.0 sq.mm	metre	1638
10	70.0 sq.mm	metre	2415
11	95.0 sq.mm	metre	2940

Note: 1) The above rates are basic rates only.
2) GST extra applicable as per GO

12.2 RATE FOR CABLE JOINTS INCLUDING JOINTING MATERIALS AND LABOUR

I. JOINTING OF L.T.CABLES - 3,3.5,4 CORE 1.1 KV GRADE ARMoured ALUMINIUM CONDUCTOR CABLE CONFIRMING TO IS 1554 AND AS AMENDED THEREAFTER PART I WITH ISI MARKING

Sl.No	Description	Unit	Rate for 2019-20 in Rupees		
			3 Core	3.5 Core	4 Core
1	4 sq.mm	metre	79	—	158
2	6 sq.mm	metre	95	—	166
3	10 sq.mm	metre	107	—	183
4	16 sq.mm	metre	112	—	240
5	25 sq.mm	metre	139	291	—
6	35 sq.mm	metre	173	343	—
7	50 sq.mm	metre	228	447	—
8	70 sq.mm	metre	302	574	—
9	95 sq.mm	metre	395	743	—
10	120 sq.mm	metre	475	908	—
11	150 sq.mm	metre	580	1073	—
12	185 sq.mm	metre	714	1317	—
13	240 sq.mm	metre	901	1663	—
14	300 sq.mm	metre	1094	2039	—
15	400 sq.mm	metre	1400	2610	—

II. JOINTING OF XLPE INSULATED AND SHEATHED 3 CORE FLAT TYPE COPPER CABLE CONFIRMING TO IS 694/1990 and as amended thereafter

Sl.No	Description	Unit	Rate for 2019-20 in Rupees
1	1.5 sq.mm	metre	77
2	2.5 sq.mm	metre	123
3	4.0 sq.mm	metre	182
4	6.0 sq.mm	metre	244
5	10.0 sq.mm	metre	426
6	16.0 sq.mm	metre	659
7	25.0 sq.mm	metre	867
8	35.0 sq.mm	metre	1269
9	50.0 sq.mm	metre	1780
10	70.0 sq.mm	metre	2624
11	95.0 sq.mm	metre	3194

III. JOINTING OF HT CABLE -XLPE INSULATED ARMoured ALUMINIUM CONDUCTOR CABLE

Sl.No	Description	Unit	Rate for 2019-20 in Rupees	
			11KV	12KV
1	3 C 240 sq.mm	metre	1366	1668
2	3 C 185 sq.mm	metre	1138	1411
3	3 C 150 sq.mm	metre	965	1254
4	3 C 120 sq.mm	metre	858	1127
5	3 C 95 sq.mm	metre	728	1021
6	3 C 70 sq.mm	metre	652	900

12.3 CABLE LAYING

Sl.No	Description	Rate for 2019-20 in Rupees	
		For laying below GL including earth work in Rupees	For laying in trenches inside the pump room or in air
1	up to 95 sq.mm	150.00	97.00
2	95 to 240 sq.mm	212.00	147.00
3	240 to 400 sq.mm	307.00	241.00

12.4 CABLE CLAMPS

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	up to 95 sq.mm	each	309.00
2	95 to 240 sq.mm	each	384.00
3	240 to 400 sq.mm	each	568.00

- NOTE :
- 1) The above rates are basic rates only.
 - 2) GST extra applicable as per GO
 - 3) For every 3 metre length one set of clamp is to be provided
 - 4) Suitable number of clamps are to be arrived at according to the length
 - 5) Provision for cable trench and delivery pipe duct are to be provided in pump house detailed estimate.

H.T. CABLE

12.5. PVC INSULATED ARMoured ALUMINIUM CONDUCTOR CABLE

Sl.No	Description	Unit	Rate for 2019-20 in Rupees	
			11KV	12KV
1	3 C 240 sq.mm	metre	1253	1531
2	3 C 185 sq.mm	metre	1044	1295
3	3 C 150 sq.mm	metre	886	1151
4	3 C 120 sq.mm	metre	786	1034
5	3 C 95 sq.mm	metre	668	938
6	3 C 70 sq.mm	metre	598	825

Note: 1) The above rates are basic rates only.
2) GST extra applicable as per GO.

13.0 VACCUM PUMP SET WITH ACCESSORIES

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
1	Price for 5 HP Model/Rotary type Vacuum pumpsets (Pumpset + GI Pipes + Fittings + Starters + Valves + 100 Lr.Tank) including Transportation and handling charges.	1 No	372007
2	Price for 10 HP Vacuum pumpset with all the above Accessories	1 No	480479
3	150mm dia Pressure Gauge and Vacuum guage including all accessories as per specification (For Suction and Delivery to be mounted on wall on Teak Wood Board)	1 No	6655

NOTE : 1) The above rates are basic rates only.
2) GST extra applicable as per GO

14.0 MOULDED CASE CIRCUIT BREAKER(MCCB) WITH THERMO MAGNETIC RELEASE

Sl.No.	Range	Rate for 2019-20 in Rupees	
		3POLE	4 POLE
1	32-100	9800	12133
2	125	13533	14933
3	160	16352	19600
4	200	28000	31061
5	250	28000	32668
6	320	35861	41523
7	400	37771	43400
8	630	41770	50333
9	800	56624	75447
10	1000	88059	113248
11	1250	99372	137199
12	1600	113190	170799

- NOTE:**
- 1) The above rates are basic rates inclusive of handling charges and F.O.R destination.
 - 2) GST extra applicable as per GO
 - 3) The rate for MCB for single phase usage the PWD schedule of rates shall be referred.
 - 4) Add 35% cost of MCCB/ACB/ MCB towards the cost of fabrication other fittings and labour
 - 5) Upto 15 KW distribution box shall be used. For more than one outgoing loads PWD schedule of rates shall be referred.

15.0 RATE FOR MIXED DI ELECTRIC CAPACITOR WITH TNEB TEST CERTIFICATE WITH ACCESSORIES INCLUDING BANKING CONFIRMING TO IS 2834.

Rs.440/- per KVAR

- Note:**
- 1) The above rate is basic rate inclusive of handling charges.
 - 2) GST extra applicable as per GO
 - 3) The rate for mixed DI Electric Capacitor with Test Certificate given as Rs.440/- per KVAR is inclusive of Banking charges, such as providing of copper bus bars with provision for adding atleast 2 capacitors at later date, cable entry box, fabricating charges etc. complete. This rate is not applicable for replacement of capacitors which does not require banking and fabrication works.

16.0 LT/LTCT METERING BOX as per IE rules and TANGEDCO norms

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	Up to 50HP/37 KW (which includes LT meter panel board 6 Nos. suitable fuse carriers	1 No.	24255.00
2	75 HP/56 KW (which includes LT meter panel board 6 Nos. suitable fuse carriers)	1 No.	31654.00
3	75HP-150HP/56-112 KW (which includes LTCT meter panel board 6 Nos. suitable fuse carriers and 3 Nos. CT Coil)	1 No.	39445.00
4	In HT supply using LTCT metering Box as per IE rules and TANGEDCO norms (Above 150 HP below 200 HP) 112-150 KW	1 No.	63700.00

Note : 1) The above rates are basic rates inclusive of handling charges.
2) GST extra applicable as per GO

17.0 TRANSFORMER SUB STATION RELATED WORKS

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	Designing and preparation of CEIG drawings, obtaining Approval and safety certificate including submission of Completion report and rectification report.	1 No.	66032.00
2	Supply, delivery of 6 pole structure materials with suitable Size RSJ along with all structure material are as under.		
a	For 11 KV Sub station	1 No.	336000.00
b	For 22 KV Sub station	1 No.	448000.00
3	Construction of transformer plinth	1 No.	22400.00
4	Chain link fencing with gate including the TNEB 2 poles Spreading of materials as per CEIG requirements	1 No.	56000.00
5	Transformer yard earthing using copper flat and TWIN earthing as per IS		
a	Upto 250 KVA Transformer sub station	1 No.	33600.00
b	Above 250 KVA	1 No.	67200.00
6	Transformer sub station erection charges	1 No.	21356.00

Note : 1) The above rates are basic rates inclusive of handling charges.
2) GST extra applicable as per GO
3) Provision for cement concrete flooring has to be made at the sub station yard

17.1 AIR CIRCUIT BREAKER (With Shunt release and Under voltage release)

Sl.No.	Range in AMPS	Rate for 2019-20 in Rupees	
		3POLE	4 POLE
1	630	123768.00	124762.00
2	800	153873.00	155950.00
3	1000	174384.00	215000.00
4	1250	185097.00	226735.00
5	1600	205408.00	264200.00
6	2000	242666.00	289333.00
7	2500	266000.00	317333.00
8	3200	349999.00	420933.00
9	4000	486157.00	583333.00

Note: 1) The above rates are basic rates inclusive of handling charges, F.O.R destination.
2) GST extra applicable as per GO

18.0 SAFETY APPLIANCES

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	Electrical gloves tested to 11 KV /22 KV with wooden box dusted with french chalk powder	1 No.	582
2	Electrical quality 6mm thick rubber mat	1 No.	636
3	5 kg capacity ISI marked Dry chemical powder fire extinguisher	1 No.	2273
4	Fire Bucket-3 Nos Hooked to MS stand	1 No.	908
5	Laminated shock treatment chart	1 No.	606
6	Wooden First Aid Box	1 No.	765
7	Rechargeable Emergency lamp(600mm fluorescent lamp)	1 No.	3040
	H.T. SUPPLY		
8	Teak Wood ladder –5M Ht.	1 No.	1557
9	Earth Discharge Rod (3 Nos. -RYB)	1 No.	1302

Note: 1) The above rates are basic rates inclusive of handling charges, F.O.R destination.
2) GST extra applicable as per GO

19.0 TWIN CI EARTHING as per IS 3043/1987 and Latest amendments

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	Upto 25 HP installation	1 No.	12396
2	Above 25-60 HP	1 No.	19078
3	Above 60-150 HP	1 No.	29746
4	Above 150 HP	1 No.	47694

- Note :
- 1) The above rates are basic rates only.
 - 2) GST extra applicable as per GO
 - 3) In case of collector well the collector well distance from the bank of the river should be ascertained to find out the weight of GI strip to be used only in the foot bridge and rate of Rs.47/- per Kg should be adopted for estimation and this amount should be added with the above rates.

20.0 TOOLS

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	6" Chain wrench best India make or equivalent	1 No.	660
2	8"Chain Wrench Best India Make or equivalent	1 No.	893
3	Connector Screw Driver 901 Taparia Make or equivalent	1 No.	58
4	200mm Screw Driver 825 Taparia Make or equivalent	1 No.	95
5	300mm Screw Driver 829 Taparia Make or equivalent	1 No.	176
6	400mm Screw Driver 930 Taparia Make or equivalent	1 No.	256
7	200mm Cutting Plier Taparia Make or equivalent	1 No.	311
8	800gm Ball Pane Hammer with Handle Taparia Make equivalent	1 No.	392
9	Digital Tong Tester CE Make or equivalent	1 No.	3467
10	Digital Multi Meter CE Make or equivalent	1 No.	2330
11	15" Screw Spanner Taparia Make or equivalent	1 No.	807
12	12" Bearing Puller	1 No.	801
13	Lever Type Grease Gun	1 No.	655
14	12"Screw Spanner	1 No.	593
15	Crow Bar 5"	1 No.	579
16	1" Cold Chisel	1 No.	212
17	Hacksaw Frame with Blade	1 No.	131
18	Electrical Air Blower	1 No.	3005
19	Digital Tachometer	1 No.	2019
20	Hand Crimping Tool 8"	1 No.	546
21	DE Spanner set 6 to 32 Jhalani Make or equivalent	1 No.	1045
22	Rings spanner set 6 to 32 Jhalani Make or equivalent	1 No.	2339
23	Pipe Wrench 24" Jhalani Make or equivalent	1 No.	1338
24	Pipe Wrench 14" Jhalani Make or equivalent	1 No.	660
25	12" Flat rough File Scissors Make or equivalent	1 No.	330
26	12" Flat smooth File Scissors Make or equivalent	1 No.	496
27	12"Round File Rough Scissors Make or equivalent	1 No.	384
28	12" Round File Smooth Scissors Make or equivalent	1 No.	458
29	12"Half Round File Rough Scissors Make or equivalent	1 No.	670
30	12"Half Round File Smooth Scissors Make or equivalent	1 No.	670

Note: 1) The above rates are basic rates inclusive of handling charges, F.O.R destination.
2) GST extra applicable as per GO

21. H.O.T. CRANE AND ACCESSORIES

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
1	2T capacity hand operated over head Travelling (HOT) crane suitable for a span upto 6 Mtrs, and travel length upto 10 Mtrs. with clear lift upto 6 Mtrs. including gear type chain pulley block with GI chain and geared Travelling trolley complete with all accessories including girder	1 No.	339273.00
2	2T HOT crane with above specifications upto 8 M Span including Girder	1 No.	352424.00
3	2T HOT crane with above specifications upto 10 M Span including Girder	1 No.	383080.00
4	3T capacity hand operated over head Travelling (HOT) crane suitable for a span upto 6 Mtrs, and travel length upto 10 Mtrs. with clear lift upto 6 M including gear type chain pulley block and geared Travelling trolley complete with all accessories including Girder.	1 No.	367200.00
5	3T HOT crane with above specifications upto 8 M Span including Girder.	1 No.	397421.00
6	3T HOT crane with above specifications upto 10 M Span including Girder.	1 No.	412128.00
7	5T capacity hand operated over head Travelling (HOT) crane suitable for a span upto 6 Mtrs, and travel length upto 10 M with clear lift upto 6 M including gear type chain pulley block and geared Travelling trolley complete with all accessories including Girder.	1 No.	432427.00
8	5T HOT crane with above specifications upto 8 M Span including Girder.	1 No.	464630.00
9	5T HOT crane with above specifications upto 10M Span including Girder.	1 No.	483024.00

Note: 1) The above rates are basic rates inclusive of handling charges.
2) GST extra applicable as per GO

22.0. Submersible Centrifugal Sewage non clog pumps

Supply and delivery of submersible centrifugal sewage non-clog pumps, vertical spindle type pump, wear resistance with submersible motor for the various duty conditions as stated in the annexure. Pump shall be capable of handling min 100 mm solid size with sewage specific gravity of up to 1.05. Pump shall be of robust construction. Liquid passages shall be finished smooth and designed as to allow free passage to solids. Pump Impeller should be of Non-clog semi open type, single vane / multi vane preferably contra bloc or vortex impeller design. Double mechanical seal with silicon carbide faces should be provided to protect the motor from ingress of sewage along the shaft. The critical speed of the rotor shall be at least 30% above the operating speed. Pumps to have double bearings between the pump & motor. The bearings life shall be minimum 100,000 hrs of operation with greased for life. Pump should be provided with automatic coupling device including pedestal, duck foot bend, stainless steel guide pipe or related accessories of suitable size to facilitate lifting and lowering into guide rails for easy maintenance. Pump shall be provided with a stainless steel lifting chain conforming to BS 970 Gr 304. Pump speed shall be of 9600rpm for high duty pumps and 960/1450 rpm for low duty pumpsets. Casing and impeller should be of CI Gr. FG 260 :IS210 more preferably with hardened impeller. Shaft should be of stainless steel AISI 410. All the fasteners and bolts shall be of AISI 410. The submersible motor shall be operated with 3 ph, 415 V(+ or - 10 %), 50 Hz (+ or - 5 %) dry induction type. Motor shall be capable of giving rated output without reduction in the expected life span when operated continuously. The rotating assembly shall be dynamically balanced as per standards. The starting current of the motor shall not exceed 200% of rated full load current for Star / Delta or ATS starting under any circumstances. The motor shall be suitable for full voltage star delta / ATS starting. The locked rotor current of the motor shall not exceed 600% of full load current unless otherwise specified. Motor shall be designed to withstand 120 % of rated speed for two minutes without any mechanical damage, in either direction of rotation. The motor vibration shall be within the limit specified in applicable standards. Motor should be of IE2, explosion proof compatible for VFD operation together with star-Delta / ATS starter, protection against increase in stator winding temperature (15 deg Celsius), bearing temperature, leakage in the stator housing and terminal box shall be provided and to be suitably interlocked with the control panel for tripping the pump in case of increase in temperature beyond set limit.

Insulation class shall be of "Class H" and degree of protection shall be of IP 68 as per IS 4691. Motor shall be suitable for continuous operation in fully submerged or partially submerged condition. The pumpset shall be supplied with power cable of PVC insulated and PVC sheathed, copper, flexible, round type with required conductor size and number of cores as per starting method and of specified length for continuous use under water and air. The control cable of PVC insulated, PVC sheathed, flexible for stator winding temperature sensor 3 core x 1.5 sq.mm copper conductor and for bimetallic switches 2 core x 1.5 sqmm copper conductor shall be provided. Motor shall be supplied with 10 mts of round submersible copper cable of suitable size.

The non clog submersible pumpset shall be provided with suitable starter control panel having all protections as mentioned above. (upto 5 HP - DOL Starter, above 5 HP to 25 HP -Star Delta Panel and beyond 25 HP shall be ATS)

Sl.No.	Description	Unit	Rate for 2019-20 in Rupees
	10 m upto 15 m head		
1	Discharge Upto 20 M ³ /hour	1 No	468114
2	Discharge 20 to 100 M ³ /hour	1 No	468114
3	Discharge 100 to 200 M ³ /hour	1 No	494353
4	Discharge 200 to 300 M ³ /hour	1 No	849112
5	Discharge 300 to 400 M ³ /hour	1 No	1027541
6	Discharge 400 to 500 M ³ /hour	1 No	1230893
7	Discharge 500 to 600 M ³ /hour	1 No	1528566
8	Discharge 600 to 700 M ³ /hour	1 No	1528566
9	Discharge 700 to 800 M ³ /hour	1 No	1513152
10	Discharge 800 to 900 M ³ /hour	1 No	1616066
11	Discharge 900 to 1000 M ³ /hour	1 No	2021415
12	Discharge 1000 to 1100 M ³ /hour	1 No	1988207
	above 15m upto 20 m head		
13	Discharge Upto 20 M ³ /hour	1 No	468114
14	Discharge 20 to 100 M ³ /hour	1 No	468114
15	Discharge 100 to 200 M ³ /hour	1 No	814397
16	Discharge 200 to 300 M ³ /hour	1 No	890045
17	Discharge 300 to 400 M ³ /hour	1 No	1142902
18	Discharge 400 to 500 M ³ /hour	1 No	1230893
19	Discharge 500 to 600 M ³ /hour	1 No	1528566
20	Discharge 600 to 700 M ³ /hour	1 No	1528566
21	Discharge 700 to 800 M ³ /hour	1 No	1513152
22	Discharge 800 to 900 M ³ /hour	1 No	1616066
23	Discharge 900 to 1000 M ³ /hour	1 No	2021415
24	Discharge 1000 to 1100 M ³ /hour	1 No	1988207
	above 20 m upto 25 m head		
25	Discharge Upto 20 M ³ /hour	1 No	628268
26	Discharge 20 to 100 M ³ /hour	1 No	625148
27	Discharge 100 to 200 M ³ /hour	1 No	868005

Sl.No.	Description	Unit	Rate for 2018-19 in Rupees
28	Discharge 200 to 300 M ³ /hour	1 No	987066
29	Discharge 300 to 400 M ³ /hour	1 No	1235999
30	Discharge 400 to 500 M ³ /hour	1 No	1396425
31	Discharge 500 to 600 M ³ /hour	1 No	2021415
32	Discharge 600 to 700 M ³ /hour	1 No	2021415
33	Discharge 700 to 800 M ³ /hour	1 No	1988207
34	Discharge 800 to 900 M ³ /hour	1 No	2186830
35	Discharge 900 to 1000 M ³ /hour	1 No	2451030
36	Discharge 1000 to 1100 M ³ /hour	1 No	2841273
	above 25 m upto 30 m head		
37	Discharge Upto 20 M ³ /hour	1 No	625418
38	Discharge 20 to 100 M ³ /hour	1 No	868005
39	Discharge 100 to 200 M ³ /hour	1 No	903690
40	Discharge 200 to 300 M ³ /hour	1 No	1340758
41	Discharge 300 to 400 M ³ /hour	1 No	1340758
42	Discharge 400 to 500 M ³ /hour	1 No	1926071
43	Discharge 500 to 600 M ³ /hour	1 No	1931520
44	Discharge 600 to 700 M ³ /hour	1 No	1931520
45	Discharge 700 to 800 M ³ /hour	1 No	2193705
46	Discharge 800 to 900 M ³ /hour	1 No	2193705
47	Discharge 900 to 1000 M ³ /hour	1 No	2407694
48	Discharge 1000 to 1100 M ³ /hour	1 No	3162359

Note : 1) The above rates are basic rates inclusive of transportation handling charges.
2) GST extra applicable as per GO

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**III (C) RATES FOR
ELECTROMECHANICAL ITEMS**

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III (C) RATES FOR ELECTROMECHANICAL ITEMS

Sl. No.	Description	Unit	Rates for 2019-20 in Rupees
1	Selector Switch for Panel Board / Cubical Panel Board/ Starter		
a	Voltmeter Selector Switch - 6A	Each	278.00
b	Ammeter Selector Switch - 6A	Each	536.00
2	Multi Functions Meters - Flush type for M V Panel Board		
a	LED type, CT/PT, Voltage, Current, Frequency, Kilowatt, Kilo Volt Ampere, KVAR , KVAH, Run Hours, unbalance(V,A),Rpm, Phase angles,Thd- Class 1 With RS 485 Port	Each	17524.00
b	LED type, CT/PT, Voltage, Current, Frequency, Kilowatt, Kilo Volt Ampere, KVAR , KVAH, Run Hours, unbalance(V,A), Rpm, Phase angles, Thd - Class 0.5 With RS 485 Port	Each	21418.00
3	Ammeter - Digital		
a	96 mm X 96 mm Single Phase Ammeter Class 1-5A	Each	2488.00
b	96 mm X 96 mm Single Phase Ammeter Class 1-1A	Each	2704.00
c	96 mm X 96 mm Three Phase Ammeter Class 1-5A	Each	3028.00
d	96 mm X 96 mm Three Phase Ammeter Class 1-1A	Each	3353.00
4	Pressure Gauge only		
a	50 mm upto 60 kg/cm 2 with s.s.case	Each	640.00
b	50 mm Glycerine filled upto 400 kg/cm2	Each	1435.00
c	63 mm upto 60 kg/cm 2 with s.s.case	Each	662.00
d	63 mm Glycerine filled upto 400 kg/cm2	Each	1522.00
e	80 mm upto 60 kg/cm 2 with s.s.case	Each	860.00
f	80 mm Glycerine filled upto 400 kg/cm2	Each	2537.00
g	100 mm upto 60 kg/cm 2 with s.s.case	Each	1324.00
h	100 mm Glycerine filled upto 400 kg/cm2	Each	3088.00
i	150 mm upto 60 kg/cm 2 with s.s.case	Each	1600.00
j	150 mm Glycerine filled upto 400 kg/cm2	Each	3640.00
k	200 mm upto 60 kg/cm 2 with s.s.case	Each	3530.00
l	200 mm Glycerine filled upto 400 kg/cm2	Each	7832.00
m	250 mm upto 60 kg/cm 2 with s.s.case	Each	4413.00
n	250 mm Glycerine filled upto 400 kg/cm2	Each	8825.00

Sl. No.	Description	Unit	Rates for 2019-20 in Rupees
5	Mechanical Interlocking System for M V Panel Board		
a	2 lock 1 key	Each	2945.00
b	3 lock 2 key	Each	5141.00
6	Ammeter Analog		
a	SR 65 5D/5A C.T.operated-AC	Each	535.00
b	SR 72 5D/5A C.T.operated-AC	Each	694.00
c	SR 96 5D/5A C.T.operated-AC	Each	742.00
7	Voltmeter - Digital		
a	Voltmeter- Single Phase Class 1-AC	Each	2488.00
b	Voltmeter- Three Phase Class 1-AC	Each	3353.00
8	Voltmeter Analog		
a	Voltmeter SR 65 600V-AC	Each	586.00
b	Voltmeter SR 72 500V-AC	Each	768.00
c	Voltmeter SR 96 600V-AC	Each	849.00
9	Fabrication & Supply of M V Cubical Panel board vermi proof box of MS sheet 20 SWG powder coated, door with 180 degree opening, poly urethane/rubber gaskets as per IE rules - 1m2		
a	Projection of 0.3 m	per m ²	13386.00
b	Projection of 0.45m	per m ²	15528.00
c	Projection of 0.6 m	per m ²	20240.00
10	Electro magnetic contactors of suitable capacity in AC Three Phase rating, conforming to IS/IEC 60947-4-1.		
a	9 Amphs	No.	777.00
b	12 Amphs	No.	902.00
c	18 Amphs	No.	1554.00
d	22 Amphs	No.	2572.00
e	25 Amphs	No.	3339.00
f	32 Amphs	No.	4076.00
g	40 Amphs	No.	4242.00
h	45 Amphs	No.	5245.00
i	50 Amphs	No.	6177.00
j	70 Amphs	No.	8304.00
k	80 Amphs	No.	10529.00
l	95 Amphs	No.	13276.00
m	110 Amphs	No.	15994.00
n	140 Amphs	No.	21108.00

Sl. No.	Description	Unit	Rates for 2019-20 in Rupees
o	185 Amphs	No.	25395.00
p	225 Amphs	No.	27956.00
q	250 Amphs	No.	31537.00
r	300 Amphs	No.	38025.00
s	400 Amphs	No.	48348.00
t	550 Amphs	No.	69334.00
u	650 Amphs	No.	103755.00
11	Overload Relays: Directly operated Bimetallic Thermal overload relay which operates in case of overload and also in case of under voltage with manual and auto reset mode.		
a	Upto 5 A	No.	1230.00
b	5 A to 10 A	No.	1240.00
c	10 A to 20 A	No.	1395.00
d	20 A to 30 A	No.	2020.00
e	30 A to 50 A	No.	2781.00
f	50 A to 75 A	No.	4030.00
g	75 A to 110 A	No.	5958.00
h	110 A to 150 A	No.	7100.00
i	150 A to 200 A	No.	8070.00
j	200 A to 300 A	No.	9720.00
12	Preventer – Single Phasing		
	Electric Motor protection device against single phasing. The device should protect the motor against single phasing, reverse phasing and unbalance supply. The device should be suitable for any device and have provisions for mounting in panel boards. Operate without need of any auxiliary supply.	No.	1082.00
13	Preventer – Dry Run		
	Electric Motor protection device against dry running. The device should protect the motor against Dry running. The device should be suitable for any auxiliary device and have provisions for mounting in panel boards. Operate without need of any auxiliary supply	No.	1514.00
14	Erection of Power Pumpset		Refer Page
			295 Item 17a and Page 297 Item 17c
15	Hire charges for Centrifugal sludge removal pumpset with fuel and crew charges including transportations, fixing and dismantling.		Refer Page 299 Item (m)

- Note:**
1. The above rates are basic rates.
 2. GST extra applicable as per G.O.

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III (D) RATES FOR BUILDING MATERIALS

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BUILDING MATERIALS

1. Cement - Rs. 5,750/- per metric tonne
(Rupees Five Thousand Seven Hundred and fifty only)

The above rate for cement is basic rate and GST extra applicable as per GO. Necessary lead charges (i.e. excluding loading and unloading charges), as applicable as per conveyance table, may be allowed from the Dealer's Godown / stockyard to the site of work, if duly certified by an Officer not below the rank of Assistant Executive Engineer.

However, in the case, if the source is specified as "Stockyard" the same shall be decided and approved by the Superintending Engineers concerned.

2. Steel Rods of all sizes - Rs.45,000/- per metric tonne
(Rupees Forty Five Thousand only)

The above rate for steel is basic rate and GST extra applicable as per G.O. Necessary lead charges (i.e. excluding loading and unloading charges), as applicable as per conveyance table, may be allowed from the Dealer's Godown / stockyard to the site of work, if duly certified by an Officer not below the rank of Assistant Executive Engineer.

However, in the case, if the source is specified as "Stockyard" the same shall be decided and approved by the Superintending Engineers concerned.

(The above rates are subject to revision as and when revised by the PWD authorities)

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BUILDING MATERIALS

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
1	Bricks-II Class Table Moulded (Chamber burnt)		
a.	9" x 4 1/2" x 3"	1000 Nos.	7435.00
b.	9" x 4 3/8" x 2 3/4"	1000 Nos.	7150.00
2	Bricks-II Class (Ground Moulded Chamber burnt)		
a.	9"x 4 1/2" x 3"	1000 Nos.	6405.00
b.	9"x 4 3/8" x 2 3/4"	1000 Nos.	6220.00
3	Bricks-III Class (Country Bricks, Kiln burnt)		
a	22 x 11 x 5 cm (8 3/4" x 4 1/4" x 2")	1000 Nos.	4055.00
b.	22 x 11 x 5.7 cm (8 3/4" x 4 1/4" x 2 1/4")	1000 Nos.	4235.00
c.	22 x 11 x 7cm (8 3/4" x 4 1/4" x 2 3/4")	1000 Nos.	5385.00
4	Fly Ash bricks		
a.	230 x 110 x 70mm	1000 Nos.	6220.00
b.	230 x 110 x 75mm	1000 Nos.	6405.00
5	Bricks Country (specially moulded for well steining)		
a.	8 3/4" x 4 1/4" x 2"	1000 Nos.	2385.00
b.	Perforated Bricks 19 x 9 x 9cm	1000 Nos.	3635.00
c.	Terrace Bricks 15 x 7.5 x 2.5cm	1000 Nos.	934.00
	New Items for Heritage Works		
6	Special Bricks 8" x 4" x 2" for Heritage works	1000 Nos.	12600.00
7	Terrace Bricks 6" x 3" x 1" for Heritage works	1000 Nos.	9450.00
8	Wire cut Bricks for Heritage works		
a	Size 9" x 4" x 3"	1000 Nos.	12600.00
b	Size 9" x 4" x 2"	1000 Nos.	10500.00
c.	Size 9" x 6.5" x 2"	1000 Nos.	15750.00
9	Flat Tiles		
a.	15cm x 15cm x 12mm	1000 Nos.	782.00
b.	15cm x 15cm x 20mm	1000 Nos.	928.00
10	Brick Jelly		
a.	40mm size	cu.m.	666.00
b.	20mm size	cu.m.	742.00
11	Pressed Tiles		
a.	20cm x 20cm x 2cm	1000 Nos.	10920.00
b.	23cm x 23cm x 2cm	1000 Nos.	15487.00
12	Pan Tiles		
a.	23cm x 8cm x 1.7cm	1000 Nos.	425.00
b.	16.5cm x 8cm x 1.7cm	1000 Nos.	350.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
13	Best Mangalore Tiles		
a.	1 st Class 'A'	1000 Nos.	10185.00
b.	Class 'AA'	1000 Nos.	10395.00
c.	Best Mangalore Ridge Tiles	1000 Nos.	29820.00
d.	Best Mangalore Ceiling Tiles	1000 Nos.	6268.00
e.	Best Mangalore Glass Roofing Tiles	Each	294.00
f.	Best Mangalore Ventilating Tiles (Single)	Each	44.00
g.	Best Mangalore Ventilating Tiles (Double)	Each	56.00
14	Mosaic Flooring tiles GREY		
a.	25cm x 25cm x 2cm	1000 Nos.	11445.00
b.	20cm x 20cm x 2cm	1000 Nos.	7318.00
15	Mosaic (other colour)		
a.	25cm x 25cm x 2cm	1000 Nos.	15802.00
b.	20cm x 20cm x 2cm	1000 Nos.	9324.00
c.	Mosaic (Green)Tile 20cm x 20cm x 2cm	1000 Nos.	11445.00
d.	Mosaic (Green) Tile 25cm x 25cm x 2cm	1000 Nos.	17955.00
e.	Mosaic Chequered Tile of Grey colour size 25 cm x 25 cm x 2 cm	1000 Nos.	14385.00
	New Items for Heritage Works		
	Attangudi Tiles for Heritage Works		
	Size 8" x 8" x 3/4"	Each	26.00
	Size 10" x 10" x 3/4"	Each	31.50
	Stone and Road materials		
16	Rough stone for Masonry works (Hard Granite)	cu.m.	433.00
17	Rough stone for revetment works	cu.m.	375.00
18	Jeddy size for revetment (Hard granite)	cu.m.	412.00
19	Cut stone pillar of size 0.15 x 0.15 x 2.1M	Each	160.00
20	From boulders without blasting for revetment	cu.m.	110.00
21	From boulders without blasting for masonry	cu.m.	143.00
22	Course Rubble stone for masonry works	cu.m.	346.00
23	Course Rubble stone for Arch works	cu.m.	375.00
24	Chisel dressed stone		
a.	70cm x 30cm x 29cm	Each	171.00
b.	37cm x 30cm x 29cm	Each	154.00
25	Hammer dressed stone		
a.	37cm x 30cm x 29cm	Each	119.00
26	Cut stone fully dressed to size on all faces	cu.m.	6195.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
27	Cut stone roughly dressed	cu.m.	4263.00
28	Ashlar arch stone fully dressed to size all faces	cu.m.	4704.00
29	Flooring stone SS size (not less than 10cm thick)	sq.m.	344.00
30	Stone slab for culvert (3 faces, one line dressed)		
a.	Above 1.2m	cu.m.	4488.00
b.	Up to 1.2m	cu.m.	4079.00
31	Stone slab for culvert (3 faces, two line dressed)	cu.m.	4998.00
32	For lintel coping (3 faces, two line dressed)	cu.m.	4998.00
33	Bond stones	cu.m.	624.00
34	Kilometre stone 1.65 x 0.45 x 0.15m	Each	427.00
35	Hecta metre stone		
a.	0.90 x 0.10 x 0.10m	Each	119.00
b.	0.75 x 0.23 x 0.10m	Each	218.00
c.	0.90 x 0.15 x 0.15m	Each	214.00
36	Demarcation stone (Two line dressed for top 30cm)		
a.	0.75 x 0.15 x 0.15m	Each	89.00
b.	0.90 x 0.23 x 0.23m	Each	114.00
c.	0.75 x 0.23 x 0.23m	Each	106.00
d.	0.90 x 0.15 x 0.15m	Each	97.00
e.	Demarcation Stone with letters cut 0.75 x 0.15 x 0.15m	Each	119.00
f.	Edge stone 0.45 x 0.15 x 0.15m	Each	54.00
g.	T.R.S. Bench Mark Stone neatly dressed the exposed surface to a height of 15cm including cutting letters		
i)	0.15 x 0.15 x 0.60m	Each	137.00
ii)	0.10 x 0.10 x 0.25m	Each	99.00
37. a.	Guard Stone (Two line dressed for 45cm) 23cm dia 1.0m long	Each	158.00
b.	Guard stone (Top 0.70m chisel dressed and 0.50m bottom roughly dressed) 0.23m x 0.23m x 1.20m long (Two line dressed top 45cm) 23cm dia 1.0m long	Each	169.00
c.	Guard stone (Top 0.70m chisel dressed and 0.50m bottom roughly dressed) 0.23m x 0.23m x 0.9m long (Two line dressed top 45cm) 23cm dia 0.90m long	Each	158.00
d.	Guard stone (Top 0.70m chisel dressed and 0.50m bottom roughly dressed) 0.15m x 0.15m x 0.90m long (Two line dressed top 45cm) 23cm dia 0.90m long	Each	110.00
e.	Guard stone 90cm long 23cm dia	Each	81.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
38	Hard broken Granite stone jelly (I.S.S.) machine crushed / Hand broken.		
i.	90mm size	cu.m.	420.00
ii.	80mm size	cu.m.	470.00
iii.	63mm size	cu.m.	543.00
iv.	50mm size	cu.m.	630.00
v.	40mm size	cu.m.	980.00
vi.	25mm size	cu.m.	842.00
vii.	20mm size	cu.m.	1364.00
viii.	12mm size	cu.m.	1266.00
ix.	10mm size	cu.m.	931.00
x.	6mm size	cu.m.	630.00
xi.	3mm size	cu.m.	567.00
39	Quartz metal		
i.	50mm	cu.m.	94.00
ii.	40mm	cu.m.	95.00
40	Soft broken stone		
i.	63mm	cu.m.	72.00
ii.	40mm	cu.m.	81.00
41	Laterite 40mm to 75mm size	cu.m.	94.00
42	Kankar 40mm to 75mm size	cu.m.	94.00
43.a	Soling stones 15cm cube (un blasted)	cu.m.	110.00
b.	Soling stones 15cm cube (blasted)	cu.m.	180.00
44.a	Gravel	cu.m.	210.00
b.	Well Gravel	cu.m.	157.00
c.	Screened Kankar Gravel	cu.m.	115.00
45.a	Quarry rubbish	cu.m.	93.00
b.	Stone dust	cu.m.	119.00
c.	Pond Ash (wet /dry)	cu.m.	92.00
d	Crushed Stone Sand (M-Sand)	cu.m.	1250.00
e.	Plastering sand (P- Sand)	cu.m.	1255.00
46	Sand for Mortar	cu.m.	447.00
47	Sand for Filling	cu.m.	447.00
48	Clay for puddle and masonry	cu.m.	36.00
49. i)	Cuddapah slab 50mm thick	sq.m	409.00
ii)	Cuddapah slab 38mm/40mm thick	sq.m	394.00
iii)	Cuddapah slab 20mm/30mm thick	sq.m	363.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
	LIME		
50	Shell Lime (Slacked and screened)	cu.m.	1272.00
51	Freshly Slacked and Screened Burnt Lime Stone	cu.m.	937.00
52	Stone Lime or Lime Metal	cu.m.	81.00
53	Unslaked Pollachi Lime for Heritage Works	cu.m.	9945.00
54	Teakwood scantlings (over 3m for joists and rafters) Malabar	cu.m.	116600.00
55	Teakwood scantlings (for tiebeams and principal rafters) - Malabar	cu.m.	114700.00
56	Teakwood scantlings (over 2m and below 3m in length) - Malabar	cu.m.	111600.00
57	Teakwood scantlings(below 2m in length) - Malabar	cu.m.	99400.00
58	Teakwood planks		
i)	Over 45cm wide and 12mm thick.	cu.m.	123100.00
ii)	Over 30cm and up to 45cm wide and 12mm thick	cu.m.	114300.00
iii)	Over 30cm and up to 45cm wide and 12mm to 25mm thick	cu.m.	107000.00
iv)	Over 30cm and up to 45cm wide and 25mm to 40mm thick	cu.m.	102600.00
v)	Over 15cm and up to 30cm wide and 12mm thick	cu.m.	99900.00
vi)	Over 15cm and up to 30cm wide and 12mm to 25mm thick	cu.m.	95000.00
vii)	Over 15cm and upto 30cm wide and 25mm to 40mm thick	cu.m.	93100.00
viii)	Up to 15cm wide and 12mm thick	cu.m.	91300.00
ix)	Up to 15cm wide and 12mm to 25mm thick	cu.m.	91300.00
x)	Up to 15cm wide and 25mm to 40mm thick	cu.m.	86200.00
	New Items for Heritage Works		
59	Seasoned Teakwood for Scantling and Planks for Heritage Works	cu.m.	185200.00
60	Teak Wood Reepers		
i)	50mm x 25mm	RM	76.00
ii)	50mm x 12mm	RM	61.00
61	Country wood Scantlings		
i)	Up to 4m in length	cu.m.	34300.00
ii)	Over 4m in length	cu.m.	36200.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
62	Country wood scantlings (for tiebeams and principal rafters for trusses)	cu.m.	36200.00
63	Jack wood Scantlings (up to 4m)	cu.m.	37900.00
64	Silver Oak Scantling	cu.m.	15500.00
65	Country wood planks		
i)	40mm thick- upto 30cm wide	cu.m.	39400.00
ii)	25mm thick - up to 30cm wide	cu.m.	39400.00
iii)	40mm thick - over 30cm wide	cu.m.	39400.00
iv)	25mm thick - over 30cm wide	cu.m.	39400.00
66.a.	Jack wood planks 25 to 40mm thick	cu.m.	41300.00
b.	Silver Oak plank (40mm thick)	cu.m.	17600.00
c.	Blue gum plank	cu.m.	18100.00
67	Country wood reepers		
a.	50mm x 25mm	RM	34.60
b.	50mm x 12mm	RM	24.90
68	Mango Plank	cu.m.	16700.00
69.a.	Palmyrah rafter (50mm to 60mm wide and 125mm depth)	RM	49.50
b.	Palmyrah leaves	100 Nos.	255.00
c.	Palmyrah leaves (Labour for cutting)	100 Nos.	40.20
70	Casurina Poles		
a.	13cm to 15cm diameter	RM	33.00
b.	10cm to 13cm diameter	RM	25.20
c.	8cm to 10cm diameter	RM	19.20
d.	5cm to 8cm diameter	RM	17.50
71	Eucalyptus Poles		
a.	13cm to 15cm dia	RM	33.00
b.	10cm to 13 cm dia	RM	23.60
c.	8 cm to 10 cm dia	RM	19.20
d.	5 cm to 8 cm dia	RM	16.40
e.	Below 5 cm	RM	15.00
72	Eucalyptus Bullies 4cm to 5 cm dia & cross ties	RM	12.00
73	Casurina Bullies 4cm to 5cm dia & cross ties	RM	13.50
74	Bamboo large		
i)	10cm diameter and above	RM	12.00
ii)	7.5cm to 10cm diameter	RM	10.60

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
	METAL AND IRON ITEMS		
75	Mild steel plates or sheets BG 10	Kg.	41.20
76	Mild Steel Angles 25mm x 25mm x 3mm	Kg.	41.20
77.a)	Binding wire (Black 18G)	Kg.	43.75
b)	Binding wire (Galvanised – 18G)	Kg.	43.75
78	G.I. sheets 30cm wide and 1.6mm thick	sq.m.	304.00
79	Weld mesh		
i)	7.5 x 2.5cm, 10 gauge	sq.m.	295.00
ii)	7.5cm x 5cm, 10 gauge	sq.m.	264.00
iii)	10cm x 10cm, 10 gauge	sq.m.	143.00
80	Chicken Mesh	sq.m.	31.65
81	Fly Proof Mesh	sq.m.	91.00
82	Supplying mild steel grills for windows, ventilators, etc., including priming coat	Kg.	54.50

Note:

1. For Road works, the Schedule of Rates of Highways Department may be adopted in respect of materials for which rates are not available in this schedule of rates.
2. For all the materials viz. Bricks and Tile products, Stone Jelly, Gravel, Sand, Lime Stone etc., necessary incidental charges , loading charges and unloading charges have been included in the basic cost of materials listed above. Hence no separate incidental charges, loading and unloading charges shall be allowed for the above materials.
3. The above rate is exclusive of all tax and GST.
4. The cost of sand as indicated Sl. No. 46 & 47 is at Government sand Depot.

III (E) RATES FOR OTHER CONSTRUCTION MATERIALS

BLANK

RATES OF OTHER CONSTRUCTION MATERIALS

Note : No extra on cost, conveyance charges shall be allowed for all the items included under this category. The rates approved therein are applicable at site of work.

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
1	Water proofing compound	Kg	41.50
2	Mild Steel Flats of all sizes	Kg	40.45
3	Mild Steel Square Rods of all sizes	Kg	40.45
4	First Quality Design Ceramic tiles of All colours		
i	305 mm x 305 mm x 6 mm	Each	45.00
ii	200 mm x 200 mm x 6 mm	Each	19.80
iii	200 mm x 100 mm x 6 mm	Each	10.70
5	First Quality Plain ceramic tiles of all colours		
i	305 mm x 305 mm x 6 mm	Each	32.20
ii	200 mm x 200 mm x 6 mm	Each	14.40
iii	200 mm x 100 mm x 6 mm	Each	7.40
6	First quality White glazed tiles		
i	150 mm x 150 mm x 6 mm	Each	7.70
ii	100 mm x 200 mm x 6 mm	Each	6.70
7	First quality colour glazed tiles		
i	150 mm x 150 mm x 6 mm	Each	8.90
ii	100 mm x 200 mm x 6 mm	Each	7.70
8	First quality colour glazed tiles with printed design		
i	150 mm x 150 mm x 6 mm	Each	10.50
ii	100 mm x 200 mm x 6 mm	Each	9.50
	New items (PWD)		
9	Tactile paver Type of New Tek BT Yellow colour ceramic tiles of size 305x305x15mm for vision Impairment person	sq.m.	2000.00
10	Providing and filling the tile join with epoxy grout with follwoing specificaion:Surface preparation including cleaning the joint to be free from dust and loose particles. Providing masking sealing tape on either side of the tile joint edges and and providing sealing the tile gap with epoxy tile joint grout and finishing neatly and as directed by the departmental officers. The rate inclusive of cost of materials and labour, etc., complete.	sq.m.	430.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
11	White Cement	Kg	22.00
12	Colour Cement (White cement mixed with colouring pigments)	Kg	26.60
13	Multi-colour marble chips of all Grades / Sizes	Bag	88.60
14	White Marble slab (Adanga) 18 mm to 20 mm thick		
i	4'0" x 2'0" and above	sq.m.	1365.00
ii	2'0" x 2'0" or 2'0" x 1'0" or 1'0" x 1'0"	sq.m.	682.00
15	Granite tiles - (Superfine polished with Machine cut edges) of size 2'0" x 1'0" or 1'0" x 1'0" or 1'0" x 0'6", of 10 mm thick		
a	Jet Black	sq.m.	844.00
b	Ruby Red, Raw Silk	sq.m.	756.00
c	Sinthetic Grey, Paradise and Similar varieties.	sq.m.	714.00
16	Granite slabs (Super fine polished with machine cut edges) of sizes 4'x2' and above 18mm to 20mm thick.		
a	Jet Black	sq.m.	1690.00
b	Ruby Red, Raw Silk	sq.m.	1580.00
c	Sinthetic Grey, Paradise and Similar varieties.	sq.m.	1420.00
d	Fine polished Steel Grey Granite Slab 1200mm x 600mm, 16mm to 18mm thick	sq.m.	1470.00
e	Fine polished Blue Pearl Granite Slab 1200mm x 600mm, 16mm to 18mm thick	sq.m.	7350.00
17	Flamed Steel Grey Granite Slab 1200mm x 600mm, 16mm to 18mm thick	sq.m.	1780.00
18	Flamed Ruby Red Granite Slab 1200mm x 600mm, 16mm to 18mm thick	sq.m.	1890.00
	New items (PWD)		
19	Nosing for Granite slab		
a	Single Nosing	RM	190.00
b	Double Nosing	RM	360.00
20	Polished shahabad stone slabs of 20 mm thick with machine cut edges of size 2' 0" x 2'0" and above.	sq.m.	367.00
21	Polished shahabad stone slabs 20 mm thick with machine cut edges of size below 2' 0" x 2'0".	sq.m.	309.00
22	Polished Rajasthan Kota stone slabs of 20 mm thick with machine cut edges of size 2' 0" x 2'0" and above.	sq.m.	535.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
23	Polished Rajasthan Kota stone slabs of 20 mm thick with machine cut edges of size below 2'0" x 2'0".	sq.m.	472.00
24	Dolphur stone slabs - semi polished with machine cut edges of all sizes		
a	40 mm thick	sq.m.	408.00
b	20 mm thick	sq.m.	372.00
	New items (PWD)		
25	PVC Trims (Beading)	RM	90.00
26	Teracota Jally of size 20x20x0.75mm	Each	38.00
27	Aluminium strips of size 40 mm wide x 1.5 mm thick	RM	32.30
28	Brass strips of size 40 mm wide x 1.5 mm thick	RM	67.30
29	Glass strips of size 40 mm wide and 4 mm thick	RM	15.30
30	Marble Tiles 3 mm thick	sq.m.	664.00
31	Red Oxide - Superior quality for floor finish	Kg	141.00
32	Decorative pressed tiles of 12 mm thick of all sizes and shapes	sq.m.	1045.00
33	Exterior Emulsion Paint - Water based primer (Liquid)	Litre	147.00
34	Alkali Resistant Distemper Primer	Litre	131.70
35	Sandtex matt	Litre	154.00
36	Vinaratex or equivalent Textured coat	sq.m.	198.00
37	Best Lac Polish / French Polish	Litre	257.00
38	Varnish	Litre	264.00
39	Cotton Waste	Kg	10.10
40	Cement based Hydraulically pressed Anti skid tiles (pattern design) - 20 mm thick	sq.m.	496.00
41	Marble Powder	Kg	4.45
42	Polishing Stone		
i	Rough	Each	65.20
ii	Medium	Each	87.10
iii	Fine / Nice	Each	99.70
43	Oxalic Acid	Kg	37.80
44	Turpentine	Litre	23.10
45	Mansion polish	400 gram	144.90
46	Poly Sulphide	Kg	171.90
47	Primer for expansion joints	Kg	147.90

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
48	Filler material	sq.m.	141.00
49	Bond Breaker	RM	3.65
50	PVC Water Bar 150mm wide with single bulb	RM	280.00
51	Plain G.I. sheet 0.8mm thick (22 Gauge)	sq.m.	354.00
52	Phil Plug	Each	4.90
53	G.I. Screws		
i	30mm x 6mm	Each	1.25
ii	19mm x 6mm	Each	0.79
54	G.I. Limpet / Cup Washers	Each	1.84
55	Bitumen washers 15mm dia	Each	1.10
56	Asbestos Cement pipe - 100mm dia	3 RM	139.90
57	A.C. shoe - 100mm dia	Each	44.40
58	A.C. Bend - 100mm dia	Each	50.80
59	A.C. Cylindrical Cowl - 100mm dia	Each	76.30
60	C.I. Brackets for A.C. pipe 100mm dia	Each	19.50
61	C.I. Grating - 100mm dia	Each	31.20
62	Asbestos cement fully corrugated sheet - 6mm thick	sq.m.	184.20
63	Asbestos cement plain sheet		
i	6mm thick	sq.m.	165.30
ii	4mm thick	sq.m.	114.50
64	Asbestos cement adjustable ridges	Pair	190.70
65	G.I. "J" or "L" Bolts with nuts 6mm Dia	Each	3.80
66	Steel - special extruded sections for steel windows and ventilators conforming to I.S.S. 7452 / 1990 including Fabrication charges	Kg	60.90
67	CRCA pressed steel Box section 18 Gauge or 1.25mm thick for Door frames including providing holes and fixing wooden blocks for fixing furniture and fittings		
a	With one coat of Red oxide priming coat.	RM	350.00
b	With powder coated primer	RM	373.00
68	Aluminium extruded sections (for Doors, windows, ventilators, partitions, false ceiling etc.) including charges for Anodising for 15 micron thickness		
a	Natural colour matt finish.	Kg	287.00
b	With powder coating of any colours.	Kg	307.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
69	Alumminum Extruded Box Section for Staircase Hand Rails including charges for Anodising for 15 micron thickness - Natural colour matt finish	Kg	359.00
70	Rubber beading for aluminium glazed doors	RM	37.25
71	Rubber beading for aluminium glazed windows.	RM	28.40
72	PVC / Woollen felt for aluminium doors 6mm thick	RM	7.50
73	Pivot for Aluminium Door	Set	146.00
74	Hydraulic Door closer of various sizes of approved quality using Aluminium Extruded section body tubular type universal hydraulic door closer with double speed adjustment like HARDWYN (make) 'GAZEL' (or) equivalent (with ISI Monogram)	Each	890.00
75	Hydraulic Floor springs of various sizes double acton hydraulic floor spring of approved quality, brand, manufacture as per BIS standards for doors including cost of cutting floors as required, embedding in to floors and Stainless Steel Cover plates with Aluminium Pivot and single piece M.S. sheet outer box with side plate etc., capable of taking upto 130 Kg. weight from door shutter, like HARDWYN make (U-32) or its equivalent with ISI monogram.	Each	2035.00
76	Lock for Aluminium doors	Each	251.00
77	Lock for Aluminium sliding windows	Each	62.80
78	Aluminium Grill of standard pattern (diamond shape) - 10mm thick including 'F' (or) 'H' Section.	sq.m.	1835.00
79	Aluminium Grill of standard pattern (diamond shape) - 6mm thick including 'F' (or) 'H' Section.	sq.m.	1485.00
80	Bolts and Nuts 10mm dia for false ceiling	Each	5.50
81	Rawl Plugs for false ceiling	Each	9.35
82	PVC Roller for sliding windows	Each	13.75
83	Synthetic Resin - Fevicol or equivalent (Phenol Formaldehyde based Resin)	Kg	194.00
84	Butt Hinges with nylon washers of various sizes. Length and width (with required screws).		
a	125mm x 30mm	Each	78.40

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
b	100mm x 30mm	Each	62.90
c	75mm x 30mm	Each	43.20
d	50mm x 30mm	Each	34.80
85	Tower Bolts of various lengths and diameter (with required screws)		
a	400mm long and 12mm dia	Each	148.30
b	300mm long and 12mm dia	Each	114.10
c	250mm long and 12mm dia	Each	85.50
d	200mm long and 12mm dia	Each	71.90
e	150mm long and 12mm dia	Each	56.70
f	100mm long and 10mm dia	Each	49.80
g	75mm long and 10mm dia	Each	34.80
86	Aldrops of following lengths and diameter with required screws, bolts and nuts.		
a	300mm long and 16mm dia	Each	183.40
b	250mm long and 16mm dia	Each	158.20
c	200mm long and 16mm dia	Each	107.10
d	200mm long and 12mm dia	Each	88.90
87	Handles "D" type of various sizes with required screws		
a	200mm long	Each	56.20
b	150mm long	Each	50.40
c	100mm long	Each	30.90
88	Ornamental handles of various sizes with required screws		
a	200mm long	Each	144.90
b	150mm long	Each	96.60
c	100mm long	Each	53.30
89	Aluminium door stopper with rubber bush with required screws	Each	43.80
90	Rubber bush - 40 mm dia and 60 mm long with required screws	Each	22.50
91	Mortice Lock-(Godrej or equivalent) with required screws with 3 Keys		
a	With night latch	Each	525.00
b	Without night latch	Each	391.00
c	Wire nails	Kg	62.20

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
91	Teakwood beading		
a	15mm x 12mm	RM	15.00
b	35mm x 12mm	RM	38.10
92	Teakwood Beading (ordinary)		
a	30mm x 12mm	RM	31.60
b	25mm x 12mm	RM	25.40
93	Teakwood beading - Ornamental / design		
a	40mm x 12mm	RM	88.90
b	40mm x 15mm	RM	101.80
c	25mm x 12mm	RM	69.60
d	15mm x 12mm	RM	47.90
94	Medium Density Fibre (MDF) Board - Exterior Grade, Both sides pre-laminated including external lipping with kiln dried soft wood 35mm thick	sq.m.	2120.00
95	Medium Density Fibre (MDF) Board - exterior Grade - Both sides pre-laminated, 12mm thick	sq.m.	1020.00
96	MDF Board exterior Grade - Plain including external lipping with kiln dried soft wood		
i	35mm thick	sq.m.	1730.00
ii	30mm thick	sq.m.	1595.00
97	Medium density fibre (MDF) Board 12 mm thick Exterior grade - with melamine finish.		
a	One side melamine finish	sq.m.	1080.00
b	Both sides melamine finish	sq.m.	1215.00
98	Medium density fibre (MDF) board - Exterior grade - Plain - With teak wood external lipping around		
a	35mm thick	sq.m.	1860.00
b	30mm thick	sq.m.	1650.00
99	Solid core Flush shutters with Teak ply on both side with teak wood lipping around 35 mm thick	sq.m.	2190.00
100	Solid core Flush shutters with Teak ply on one side and commercial ply on other side with teak wood lipping around 35 mm thick	sq.m.	1925.00
101	Solid core Flush shutters with commercial ply on both side with teak wood lipping around 35 mm thick	sq.m.	1650.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
	New items (PWD)		
102	Providing cup board Shutter using termite/ water proof plywood of 19mm thick over which laminated sheet of 0.8mm thick fixed inside the shutter and 1mm thick fixed outside the shutter using fevicol along with necessary furniture fittings such as hydraulic hinges tower bolt handles multi purpose locks etc as directed by the Departmental officers. the design pattern water proof plywood laminate sheet and other materials should be got approved from the Executive Engineer before use on work	sq.m.	4900.00
103	Solid PVC door shutters using 19 Gauge 19mm MS square tubes for styles and outer frames. 15mm MS square tubes for top, lock and bottom rails. The steel tubes shall be covered with 5mm thick solid PVC sheets. Shutter using 5mm thick solid PVC sheets for panelling shall rigidly fixed in position including necessary furniture and fittings. The over all size of styles shall be 50mm x 30mm. The over all size of top rail, Lock rail and bottom rail shall be 75mm x 30mm. The over all size of frames shall be 50mm x 45mm, with suitable rabate for housing the shutter.		
a	Solid panel PVC door with frame	sq.m.	2800.00
b	Solid panel PVC door without frame	sq.m.	2360.00
	New items (PWD)		
104	Supplying and fixing of PVC sliding door with roller	sq.m.	3000.00
105a	FRP door Shutter with FRP door frames made out of FRP Sheets of 3mm thick of over all size 65mm x 50mm with rebate suitably reinforced using MS Angle / Flats, cost of holdfasts and solid core FRP shutter Panel of 5mm thick and hollow core frames of 3mm wall thickness for styles and rails etc., of sizes specified by Engineers	sq.m.	3880.00
b	Excluding door frames	sq.m.	2980.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
106a	PVC panelled door shutters hollow type - 200 mm x 20 mm panels with 1 mm wall thickness for panels and styles and rails of suitable size with 2 mm wall thickness suitably reinforced using MS Angle / Flat including cost of necessary Aluminium hinges and other furniture fittings.	sq.m.	1995.00
b	Excluding door frames	sq.m.	1685.00
107	RCC door frame of 100mm x 65mm cross sectional size with necessary rebate for housing the shutters, manufactured with cement concrete of grade not less than M20 using 10 mm and below graded stone jelly and using steel reinforcement as per C.E. (B) circular instructions.	RM	273.00
108	Stainless Steel (Salem Stainless Steel) Door Frame (Box Section using Stainless Steel Plate of 1 mm thick) of size 100 mm x 60 mm with a rebate of 30/ 35 mm x 15 mm on one side of the frame including supplying and fixing dovetail splayed end stainless steel Hold fast etc.,	RM	892.00
109	Stainless Steel (Salem Stainless Steel) Door Frame (Box Section using Stainless Steel Plate of 1.6mm thick) of size 100mmx60mm with a rebate of 30/ 35mm x 15mm on one side of the frame including supplying and fixing dovetail splayed end stainless steel hold fast etc.,	RM	1205.00
110	Supplying and erecting pull and push type rolling shutter with ISI make of approved size and section using 18 GI sheet. The shutter shall be painted with one coat of red oxide primer and the rate is inclusive of hood covers, transportation charges etc.,		
A	ROLLING SHUTTERS (WITH ISI MONOGRAM)		
a	Manually operated (up to 8 m ² area)	sq.m.	2110.00
b	Gear operated type (from 8 m ² to 12 m ² area)	sq.m.	2350.00
c	Electrically operated type (exceeding 12m ² area)	sq.m.	2550.00
B	ROLLING GRILLS (WITH ISI MONOGRAM)		
a	Manually operated (up to 8 m ² area)	sq.m.	2150.00
b	Gear operated (from 8 m ² to 12 m ² area)	sq.m.	2420.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
c	Electrically operated (exceeding 12 m ² area)	sq.m.	2690.00
111	Barbed Wire - 10 Gauge - Two ply and four pronged (Galvanised)	1 Kg or 6 RM	60.30
112	Chain link - 2" x 2" using 10 Gauge Galvanised Iron Wire (of all sizes)	sq.m.	155.70
113	Pin Headed / Fluted / Figured Glass 3mm thick	sq.m.	220.00
114	Plain Glass - 4mm thick	sq.m.	298.00
115	Plain Sheet Glass - 5.5mm thick	sq.m.	352.00
116	Metal screws (for Aluminium Doors, windows etc.)		
i	75mm x 8mm	Each	2.15
ii	38mm x 6mm	Each	1.50
iii	19mm x 8mm	Each	1.05
iv	19mm x 6mm	Each	0.79
117	Cement paint (First quality)	Kg	48.50
118	Oil Bound Distemper	Kg	71.70
119	Acrylic Distemper	Kg	82.80
120	Primer for Plastic Emulsion paint	Litre	143.30
121	Plastic Emulsion paint (First quality)	Litre	287.00
122	Wood Primer	Litre	143.30
123	Synthetic Enamel paint for Wood work	Litre	232.00
124	Red Oxide primer for Iron work	Litre	133.00
125	Synthetic Enamel paint for Iron work	Litre	221.00
126	Melanine polish	sq.m.	630.00
127	Exterior Emulsion Paint	Litre	295.00
128	Painting the wall with texture finish paint including labour charges	sq.m.	400.00
129	Providing wall putty including labour charges	sq.m.	50.00
130	Brass chromium plated screw down Tap 15 / 12mm Dia (Heavy Type)	Each	200.00
131	Chromium plated stop cock 15mm Dia	Each	147.00
132	Brass chromium plated pillar Tap (Heavy type)- 15/12mm Dia	Each	263.00
133	Brass chromium plated shower Rose - 100mm Dia	Each	189.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
	New items (PWD)		
134	CP wall mixture tap 3 in 1 system with hand showers	Each	4025.00
135	CP two way bib cock with health faucet	Each	2000.00
136	CP Shower Arm with Overhead shower rose	Each	1150.00
137	Wooden plug, clamp and screws	Set	11.90
138	Shellac	100 gram	18.00
139	Thread Ball	Each	3.50
	New items (PWD)		
140	CP Heavy duty Bottle trap 32mm	Each	1075.00
	CP Angle cock tap	Each	755.00
141	Oriya Type Indian Water closet 580mm x 440mm with "P" or "S" Trap		
i	White	Set	1170.00
ii	Colour	Set	1490.00
142	European Water closet with "P" or "S" Trap with Double Flapped seat and seat cover with Brass Hinges and 10 litre capacity PVC low level flusing tank with all internal fittings		
i	White	Set	3000.00
ii	Colour	Set	3390.00
143	European water closet with "P" or "S" Trap with Double falpped seat and seat cover with Brass Hinges and 12.5 litre capacity Porcelin low level flusing tank with all internal fittings		
i	White	Set	4230.00
ii	Colour	Set	5090.00
	New items (PWD)		
144	SS Elbow Action tap of size 15mm	Each	1500.00
145	SS Heavy Duty long body tap 15mm	Each	1500.00
146	SS Swan Neck Tap	Each	1000.00
147	Wash Hand Basin of size 550mm x 400mm with all accessories such as cast iron brackets, 32mm dia C.P. waste coupling, rubber plug and chain, 32mm dia 'B' Class G.I. waste pipe, 15mm dia G.M. wheel valve, 15mm dia nylon connection, 15mm dia brass nipples, 15mm pillar tap etc.		

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
i	White without pedastal	Set	1625.00
ii	White with pedastal	Set	1955.00
iii	Colour without pedastal	Set	2175.00
iv	Colour with pedastal	Set	2405.00
148	White Porcelin Sink of size 600mm x 450mm x 200mm with 32mm dia 'B' Class G.I. waste water pipe and 32mm dia C.P. waste coupling.	Set	2085.00
149	Cuddapah Slab Sink of size 600mm x 450mm x 200mm with 32mm dia 'B' Class G.I. waste water pipe & 32mm dia C.P. waste coupling.	Set	748.00
150	Cuddapah Slab Sink of size 600mm x 600mm x 200mm with 32mm dia 'B' Class G.I. waste water pipe & 32mm dia C.P. waste coupling.	Set	991.00
151	Lipped Mouth Porcelin Flat Back Urinal with all accessories such as 32mm dia Bell mouth PVC connection, 15mm dia G.M. wheel valve, 15mm dia 'B' Class G.I. waste water pipe, 15mm dia nylon connection, 15 mm dia brass nipple etc.,		
i	White	Set	913.00
ii	Colour	Set	1045.00
	New items (PWD)		
152	Supplying and fixing of SS Sink of size 1200x550x180mm	Each	18000.00
153	Supplying and fixing of Granite Sink of size 600x600x250mm	Each	4026.00
154	Supplying and fixing Ornamental type White glazed Porcelain corner L type Wash hand Basin of size 350mm	Each	3450.00
155	Supplying and fixing of Oval shape wash hand basin of size 560x450mm	Each	2815.00
156	Supplying and fixing of white glazed porcelain oval shape special type Urinal of size 382x398x601mm	Each	9775.00
157	Porcelin soap dish of size 150mm x 150mm x 50mm		
i	White	Each	190.50
ii	Colour	Each	261.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
158	Brass chromium plated soap tray of size 150mmx100mm	Each	160.30
159	Brass chromium plated towel rail 60cm long and 20mm dia with Brackets	Set	261.20
	New items (PWD)		
160	SS Towel rack 600mm long with lower hanger	Each	1500.00
161	Anodised Aluminium Towel Rail 60cm long and 20mm dia with Brackets.	Set	128.00
162	PVC / Fibre Glass framed 5.5mm thick mirror, shelf type with Hard Board Backing		
i	600mm x 450mm	Each	462.00
ii	500mm x 400mm	Each	372.00
	New items (PWD)		
163	Special type Mirror of size 1000x780mm	Each	2500.00
164	Stone ware gully trap of size 150mm x 100mm with cast Iron Double Gratings	Each	165.50
165	Cast Iron Nahini / Floor Trap with stainless Steel Grating		
i	100mm x 75mm	Each	271.50
ii	75mm x 50mm	Each	212.70
166	PVC Nahini / Floor Trap with PVC Grating		
i	100mm x 75mm	Each	150.00
ii	75mm x 50mm	Each	131.40
167	Spun Yarn	Kg	12.80
168	Hemp Yarn	Kg	11.50
169	Gunny Tape / Kithan	sq.m.	11.50
170	Tar	Kg	39.90
171	Bitumen Felt 15 mm thick pad	sq.m.	228.00
172	Supplying, fabricating, erecting and fixing gyp board false ceiling upto a ceiling height of 4.5m from floor level.		
a	Using plain sheets (10mm thick)	sq.m.	945.00
b	Using perforated sheets (10mm thick)	sq.m.	967.00
173	Supplying and laying Glass wool for insulation including necessary packing materials.		
a	Using 50mm thick Glass wool	sq.m.	382.00
b	Using 25mm thick Glass wool	sq.m.	203.00

Sl. No.	Description	Unit	Rate for 2019-20 in Rupees
	New items (PWD)		
174	Providing Polymer coating (water proof coating) for sunken portion of toilet with following specification and the surface shall be cleaned to remove all dust, foregin, matters lose material or any other deposits of contamination by rubbing with wire brush.Slurry: Dry blend and polymer liquid blend shall be mixed into the desired ratio as per recommendation of the supplier. the mix shall be stirred thouroughly until no bubbles remain in the mix . Any lumps found shall be removed.Apply first coat of polymer modified cementatitious slurry by brush on wet cleaned surface. After drying, second coat shall be applied on the first coat as directed by the departmental officers etc., The rate inclusive of cost of material & labour etc. complete	sq.m	320.00
175	Providing Cornice work for Gyp Board false ceiling	RM	185.00
176	8mm thick Calcium Silicate Board designed and perforated for false ceiling	sq.m	1500.00
177	Termite proof/ water proof plywood 19mm thick	sq.m	1300.00
178	Laminated sheet 0.8mm thick (inside)	sq.m	240.00
179	Laminated sheet 1mm thick (outside)	sq.m	400.00
180	Double Charged Vitrified Tiles of size 600 x 600 x 8 mm	sq.m.	900.00
181	Pre-polished concrete anti-skid step tiles of 20mm thick	sq.m.	599.00
182	Colour designed glazed tiles 300 x 200 x 6 mm	Each	28.30
183	Squatting Urinal	Set	442.00
184	CI Brackets for fixing the sink	set	104.90
185	Swan Neck Tap	Each	246.00
186	Brass Screws (30 x 6 mm)	Each	2.35
187	Brass Screws (75 x 10 mm)	Each	4.75
188	Special clamp, teak wood plugs and screws	Set	21.00
189	PVC Clamp, teak wood plugs and screws	Set	8.30
190	Teak Wood plug	Each	1.05
191	Teak wood plug (50 x 50 x 100 mm)	Each	5.25
192	Manhole cover 60 x 60 cm (heavy duty) with frame	Each	1810.00
193	Welding Charges		
a	50 mm	Each	2.05
b	40 mm	Each	1.60
194	Add for painting/ tarring for Hex Nipple	Each	2.75
195	Labour charges for fixing cuddapah slab to cup board	sq.m.	44.70
196	Hire charges for polishing machinery	Day	222.00
197	Electricity charges	Unit	11.60
198	PVC mould CI steps for sump	Each	224.00

III (F) WATER SUPPLY AND SANITARY ARRANGEMENTS

BLANK

WATER SUPPLY AND SANITARY ARRANGEMENTS

Sl. No.	Name of Materials	Unit	Basic Rate approved for the year 2019-2020 (Working Pressure)		
			4Kg per cm2	6Kg per cm2	10Kg. per cm2
	WATER SUPPLY AND SANITARY ARRANGEMENTS				
I	PVC ITEMS FINOLEX (OR) EQUIVALENT (WITH ISI MONOGRAM)				
I	PVC Pipes				
a	15 mm Dia	RM	—	—	14.60
b	20 mm Dia	RM	—	—	21.60
c	25 mm Dia	RM	—	—	36.80
d	32 mm Dia	RM	—	—	55.10
e	40 mm Dia	RM	—	—	86.30
2	PVC Specials for water supply arrangements				
A	Coupler				
a	15 mm Dia	Each	—	—	3.50
b	20 mm Dia	Each	—	—	4.10
c	25 mm Dia	Each	—	—	4.80
d	32 mm Dia	Each	—	—	6.00
e	40 mm Dia	Each	—	—	9.00
B	Elbow				
a	15 mm Dia	Each	—	—	5.30
b	20 mm Dia	Each	—	—	6.00
c	25 mm Dia	Each	—	—	8.50
d	32 mm Dia	Each	—	—	12.20
e	40 mm Dia	Each	—	—	17.20
C	BEND				
a	15 mm Dia	Each	—	—	6.00
b	20 mm Dia	Each	—	—	7.30
c	25 mm Dia	Each	—	—	9.70
d	32 mm Dia	Each	—	—	14.60
e	40 mm Dia	Each	—	—	19.60
D	Tee				
a	15 mm Dia	Each	—	—	7.30
b	20 mm Dia	Each	—	—	8.50
c	25 mm Dia	Each	—	—	12.20

Sl. No.	Name of Materials	Unit	Basic Rate approved for the year 2019-2020 (Working Pressure)		
			4Kg per cm2	6Kg per cm2	10Kg. per cm2
d	32 mm Dia	Each	—	—	14.70
e	40 mm Dia	Each	—	—	24.50
E	End Cap				
a	15 mm Dia	Each	—	—	3.50
b	20 mm Dia	Each	—	—	4.80
c	25 mm Dia	Each	—	—	6.00
d	32 mm Dia	Each	—	—	7.30
e	40 mm Dia	Each	—	—	11.40
F	Reducer				
a	20 mm x 15 mm	Each	—	—	4.80
b	25 mm x 20 mm	Each	—	—	5.30
c	32 mm x 25 mm	Each	—	—	8.50
d	40 mm x 32 mm	Each	—	—	11.40
G	Reducer Tee				
a	20 mm x 15 mm	Each	—	—	7.30
b	25 mm x 20 mm	Each	—	—	8.50
c	32 mm x 25 mm	Each	—	—	12.20
d	40 mm x 32 mm	Each	—	—	14.70
H	Reducer Elbow				
a	20 mm x 15 mm	Each	—	—	6.00
b	25 mm x 20 mm	Each	—	—	7.30
c	32 mm x 25 mm	Each	—	—	9.70
d	40 mm x 32 mm	Each	—	—	12.20
J	Jet Nipple				
a	25 mm Dia	Each	—	—	15.80
b	32 mm Dia	Each	—	—	20.70

Sl. No.	Name of Materials	Unit	Rates for 2019-20 in Rupees	
			"O" Ring Jointing	By Pasting
3	PVC SPECIALS FOR SANITARY ARRANGEMENTS FINOLEX (OR) EQUIVALENT (WITH ISI MONOGRAM)			
A	Vent Cowl			
a	50 mm dia	Each	—	29.30
b	75 mm dia	Each	—	47.30
c	110 mm dia	Each	—	70.00
	OTHER ITEMS :			
4	PVC screw down tap heavy type 20 mm dia.	Each	—	79.40
5	PVC screw down tap heavy type 15 mm dia.	Each	—	61.40
6	PVC Adhesive (solution)	100 gm	—	33.70
7	PVC low level flushing tank with all internal fittings - (wall mounting type)			
a	White - 10 litre capacity	Set		847.00
b	White - 7.5 litre capacity	Set		647.00
c	Colour - 10 litre capacity	Set		959.00
d	Colour - 7.5 litre capacity	Set		762.00
8	HDPE PIPES FOR SUB-MERSIBLE PUMP IN BORE WELL Class-5			
A	(1 MPa or 10 kg./cm² pressure)			
a	20mm dia	RM	—	30.40
b	25mm dia	RM	—	55.10
c	32mm dia	RM	—	73.90
d	40mm dia	RM	—	104.50
9	Nylon Rope for Bore well	RM	60.00	
10	UPVC Pipe (Un-Plasticized Polyvinyl Chloride) UPVC used for residential and home applications, water pressure in residential areas do not normally exceed the maximum tolerance. (Schedule-40)			
a	15mm dia	RM	36.30	
b	20mm dia	RM	52.10	
c	25mm dia	RM	75.60	
d	32mm dia	RM	102.50	
e	40mm dia	RM	113.80	

Sl. No.	Name of Materials	Unit	Rates for 2019-20 in Rupees	
			"O" Ring Jointing	By Pasting
11	UPVC Pipe (Un-Plasticized Polyvinyl Chloride) UPVC used for commercial applications operate and designed to handle higher water pressure (Schedule-80)			
a	15mm dia	RM	45.60	
b	20mm dia	RM	64.30	
c	25mm dia	RM	91.40	
d	32mm dia	RM	126.00	
e	40mm dia	RM	155.00	
12	UPVC Specials			
I	Elbow			
a	50mm dia	Each	74.80	
b	40mm dia	Each	49.80	
c	32mm dia	Each	37.40	
d	25mm dia	Each	24.90	
e	20mm dia	Each	15.30	
f	15mm dia	Each	10.20	
II	Tee			
a	50mm dia	Each	103.60	
b	40mm dia	Each	64.30	
c	32mm dia	Each	48.50	
d	25mm dia	Each	32.80	
e	20mm dia	Each	19.00	
f	15mm dia	Each	13.50	
III	Union			
a	25mm dia	Each	56.40	
b	32mm dia	Each	76.10	
c	40mm dia	Each	112.80	
	New Items (PWD)			
d	50mm dia	Each	240.00	
IV	COUPLER	Each		
a	50mm dia	Each	60.50	
b	40mm dia	Each	44.00	
c	32mm dia	Each	35.50	

Sl. No.	Name of Materials	Unit	Rates for 2019-20 in Rupees	
			"O" Ring Jointing	By Pasting
V	Reducer			
a	50mm x 40mm dia	Each	51.10	
b	40mm x 32mm dia	Each	32.80	
c	32mm x 25mm dia	Each	23.80	
d	25mm x 20mm dia	Each	14.40	
e	20mm x 15mm dia	Each	10.70	
VI	Reducer Elbow			
a	50mm x 40mm dia	Each	99.70	
b	40mm x 32mm dia	Each	68.50	
c	32mm x 25mm dia	Each	49.80	
d	25mm x 20mm dia	Each	32.60	
e	20mm x 15mm dia	Each	27.00	
VII	Reducer Tee			
a	50mm x 40mm dia	Each	114.10	
b	40mm x 32mm dia	Each	76.10	
c	32mm x 25mm dia	Each	55.10	
d	25mm x 20mm dia	Each	32.80	
e	20mm x 15mm dia	Each	26.20	
VIII	Hex Nipple			
a	50mm dia	Each	160.00	
b	40mm dia	Each	106.30	
c	32mm dia	Each	69.50	
d	25mm dia	Each	49.80	
13	CPVC Specials			
I	Elbow			
a	50mm dia	Each	313.00	
b	40mm dia	Each	152.00	
c	32mm dia	Each	91.40	
d	25mm dia	Each	43.00	
e	20mm dia	Each	20.40	
f	15mm dia	Each	17.70	
II	Tee			
a	50mm dia	Each	394.00	
b	40mm dia	Each	209.00	
c	32mm dia	Each	116.70	

Sl. No.	Name of Materials	Unit	Rates for 2019-20 in Rupees	
			"O" Ring Jointing	By Pasting
d	25mm dia	Each	51.80	
e	20mm dia	Each	33.40	
f	15mm dia	Each	23.80	
III	Coupling			
a	50mm dia	Each	214.90	
b	40mm dia	Each	103.00	
c	32mm dia	Each	56.10	
d	25mm dia	Each	27.90	
e	20mm dia	Each	16.30	
f	15mm dia	Each	13.60	
IV	Union			
a	50mm dia	Each	567.00	
b	40mm dia	Each	315.00	
c	32mm dia	Each	190.00	
d	25mm dia	Each	118.00	
e	20mm dia	Each	93.50	
f	15mm dia	Each	60.00	
V	Nipple			
a	50mm dia	Each	375.00	
b	40mm dia	Each	238.00	
c	32mm dia	Each	163.00	
d	25mm dia	Each	104.40	
e	20mm dia	Each	68.90	
f	15mm dia	Each	62.70	

Note :- The basic rate adopted under this Head-“Rates for other construction materials” is exclusive of all taxes and GST.

III (G) RATES FOR ELECTRICAL ITEMS

BLANK

ELECTRICAL ITEMS OF WORKS
ELECTRICAL LAMPS, FITTINGS AND CONNECTED ACCESSORIES

Note:- No extra on cost, conveyance charges shall be allowed for all the items included under this category. The rates approved therein are applicable at site of work.

Item No.	Description	Unit	Rates for 2019-20 in Rupees
I	PART-A		
1	INCANDESCENT BULBS 230V/ 250V GRADE BC/ ES WITH ISI		
a.	15 Watts	Each	9.30
b.	25 Watts	Each	9.30
c.	40 Watts	Each	9.30
d.	60 Watts	Each	9.30
e.	100 Watts	Each	9.30
f.	200 Watts	Each	18.65
2	INCANDESCENT BULB 230V/250V GRADE BC/ ES		
a.	Colour 15 Watts	Each	11.40
b.	Blended lamp 160 Watts	Each	225.90
3	PL LAMP (PHILIPS/ OSRAM / EQUIVALENT)		
a.	9 Watts	Each	70.30
b.	11 Watts	Each	74.90
c.	18 Watts	Each	118.10
d.	36 Watts	Each	131.30
4	FLUORESCENT TUBULAR LAMPS WITH ISI MARK		
a.	Cool Day light 2 Ft. 20 Watts	Each	35.30
b.	Cool Day light 4 Ft. 40 Watts	Each	35.30
c.	Cool Day light 4 Ft. 36 Watts	Each	34.50
		Havells/ Equivalent	
5	4' 18W crystal Glass LED Tube Light	Each	380.50
6	MERCURY VAPOUR DISCHARGE LAMP 230V GRADE 3 PIN BC		
a.	80 Watts	Each	162.20
b.	125 Watts	Each	170.40
c.	250 Watts	Each	415.90
d.	400 Watts	Each	587.00
7	BOX TYPE SINGLE FLUORESCENT FITTING WITH COPPER CHOKE AND CONDENSOR COMPLETE WITH ISI MARK		Philips Crompton / Wipro/ Equivalent
a.	4 Ft. 40 Watts with ballast	Each	300.00
b.	4 Ft. 40 Watts Box type with Ballast (Philips/ Crompton / Wipro / Equivalent)	Each	442.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
8	BOX TYPE TWIN FLUORESCENT FITTING WITH COPPER CHOKE AND CONDENSOR[HPF] COMPLETE WITH ISI MARK		Philips Crompton / Equivalent
a.	4 Ft. 40 Watts	Each	564.00
b.	4 Ft. 40 Watts Box type with Ballast	Each	737.00
9	INDUSTRIAL TYPE FLUORESCENT FITTING STOVE ENAMELLED WITH COPPER CHOKE AND CONDENSOR (HPF) 4 Ft. 40W		
a.	Single type suitable for 1 No. tube	Each	831.00
b.	Twin type suitable for 2 Nos. tube	Each	1021.00
10	DECORATIVE TWIN FLUORESCENT TYPE FITTING WITH COPPER CHOKE AND CONDENSOR COMPLETE SUITABLE FOR 2 NUMBERS FLUORESCENT TUBES		
a.	4 Ft. 40W Twin Mirror optic Recessed mounting fitting	Each	1432.00
b.	4 Ft. 40W Twin Mirror optic Suspension type fitting. (Philips/ Crompton /Wipro / Equivalent)	Each	2582.00
c.	4 Ft. 40W Twin Mirror Optic Recessed mounting type fitting(Philips/ Crompton/ Wipro / Equivalent)	Each	1894.00
11	SINGLE TYPE STREET LIGHT FLUORESCENT FITTING SUITABLE FOR ONE NO. FLUORESCENT TUBE WITH COPPER CHOKE AND CONDENSOR COMPLETE		
a.	4 Ft. 40 Watts type	Each	630.00
12	TWIN TYPE STREET LIGHTS FLUORESCENT FITTING SUITABLE FOR 2 Nos. FLUORESCENT TUBES WITH COPPER CHOKE AND CONDENSOR COMPLETE		
a.	4 Ft. 40 Watts type	Each	848.00
13	POST TOP LANTERN FITTING OF INTEGRAL TYPE WITH COPPER CHOKE AND CONDENSOR & NECESSARY ACCESSORIES (PHILIPS/ CROMPTON GREAVES/WIPRO)(SPHERICAL / RIBBED /CONICAL ACRYLIC COVER)		
a.	Suitable for 125 Watts M.V lamp	Each	3050.00
b.	Suitable for 70 Watts S.V. Lamp	Each	3214.00
c.	Post top lantern fitting with S.C. holder suitable for 160 W blended lamp/ incandescent lamp	Each	1756.00

Item	Description	Unit	Rates for 2019-20 No. in Rupees	
			Higher End Havells / Crompton/ Equivalent/	Lower End Orbit/ Inventa / Equivalent/ Each
14	CFL STREET LIGHT FITTINGS (COMPACT FLOURESCENT LAMP)			
a	T5 Street Light (IP65) EB / 4 x 14W T5	Each	3635.00	2906.00
b	T5 Street Light (IP65) EB / 4 x 24W T5	Each	4015.00	3214.00
c	1 x 9W CFL Street Light	Each	837.00	669.00
d	1 x 11W CFL Street Light	Each	837.00	669.00
e	1 x 13W CFL Street Light	Each	842.00	672.00
f	1 x 18W CFL Street Light	Each	842.00	672.00
g	2 x 9W CFL Street Light	Each	801.00	641.00
h	2 x 11W CFL Street Light	Each	980.00	785.00
i	2 x 13W CFL Street Light	Each	980.00	785.00
j	2 x 18W CFL Street Light	Each	980.00	785.00
k	1 x 36 CFL Street Light	Each	1000.00	800.00
l	45-1 x 45W 4U Retro CFL B22 Street Light	Each	934.00	749.00
m	CFL - 1 x 85W CFL E27 Street Light	Each	1519.00	1216.00
n	CFL 1 x 85W CFL B22 Street Light	Each	1519.00	1216.00
o	36WFP-LHF(MS) Street Light	Each	1581.00	1263.00
p	36WFP-LHF(AL) Street Light	Each	1756.00	1400.00
q	T5 1 x 24W FTL T5 Street Light	Each	1638.00	1309.00
r	T5 2 x 14W FTL T5 Street Light	Each	1812.00	1453.00
s	T5 2 x 24W FTL T5 Street Light	Each	1899.00	1519.00
t	FTL 1 x 36 / 40W FTL Street Light	Each	1314.00	1052.00
u	FTL 2 x 36 / 40W FTL Street Light	Each	1874.00	1499.00
15	LED INDOOR FITTINGS (LIGHT EMITTING DIODE)			
a	24W LED 4000K 2 x 2 Square Type Recessed Fitting	Each	3440.00	2439.00
b	18W LED 3000K Square Type Recessed Fitting	Each	1345.00	888.00
c	18W LED 3000K Round Type Recessed Fitting	Each	1222.00	965.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
16	LED OUTDOOR FITTINGS (LIGHT EMITTING DIODE)		Higher End Havells / Crompton/ Equivalent
a	30W LED Street Light Fitting	Each	2454.00
b	48W LED Street Light Fitting	Each	4847.00
c	80W LED Focus Light Fitting	Each	11550.00
d	120W LED Street Light Fitting	Each	13649.00
e	150W LED Street Light Fitting	Each	17010.00
17	LED OUTDOOR FITTINGS (LIGHT EMITTING DIODE)		Lower End Orbit / Equivalent
a	25W LED Street Light Fitting	Each	1160.00
b	30W LED Street Light Fitting	Each	1802.00
c	60W LED Street Light Fitting	Each	3563.00
d	120W LED Street Light Fitting	Each	11550.00
e	150W LED Street Light Fitting	Each	13650.00
18	TIMER SWITCHES		Havells/ Equivalent
a	24 Hours Analog Timer Switch with Shortest Switching Time 30 Minutes	Each	2238.00
b	24 Hours Programmable Timer Switch with Shortest Switching Time 15 Minutes	Each	2377.00
c	Digital Weekly Programmable Timer Switch with Shortest Switching Time 1 Minute	Each	2228.00
d	Astronomical Weekly Programmable Timer Switch	Each	2567.00
e	Staircase Light Timer Switch Adjustable Range 5 to 20 Minutes	Each	1181.00
19	STARTERS FOR FLUORESCENT TUBES		
a.	Starters of capacity 20 Watts	Each	9.30
b.	Starters of capacity 40 Watts	Each	9.30
20	POLYSTER FILLED COPPER CHOKE 250V/ 50 HZ GRADE SUITABLE FOR (PHILIPS/CROMPTON/ WIPRO / EQUIVALENT)		
a.	20 Watts fluorescent Tube	Each	166.30
b.	40 Watts fluorescent Tube	Each	166.30
c.	36/40W Electronic ballast for flu. Tube (Philips/ Crompton / Equivalent)	Each	276.20
d.	36/40W Electronic ballast for flu. Tube (Indo Asean / Equivalent)	Each	224.90

Item No.	Description	Unit	Rates for 2018-19 in Rupees
21	CONDENSOR FOR S.V/ M.V LAMP		
a.	8 Mfd for 80 Watts Bulb	Each	101.40
b.	10 Mfd for 125 watts Bulb	Each	121.40
c.	15 Mfd for 250 Watts Bulb	Each	161.70
d.	20 Mfd for 400 watts Bulb	Each	223.70
22	Battern type Bakelite holder for lamp	Each	16.20
23	Water tight bulk head fitting suitable for 100/60 watts lamp with guard heavy type (PHILIPS/ BAJAJ/ CROMPTON GREAVES / Equivalent)	Each	270.50
24	Ceiling Rose	Each	13.50
25	Ceiling fixtures 250/300mm complete with Gallery etc. Clear glass opac/ crystal suitable for 40/60 Watts Bulb	Each	159.30
26.	Ceiling Luminaire with Mirror Optics suitable for 2 Nos. 9 Watts/11 Watts (Philips, Crompton / Bajaj / Equivalent).	Each	1009.00
	(FOR ITEMS 7 TO 14,25 & 26 THE RATES ARE EXCLUSIVE OF COST OF TUBES AND LAMPS)		
27	Fan Clamp (12mm) with 6 mm MS Side Plates & 45cm cross arm	Each	107.80
28	CALL BELLS		
a.	Call bell/ Buzzar 6mm suitable for AC/DC	Each	40.50
b.	Push bell	Each	16.20
c.	Gong bell 9" size suitable for 250 V	Each	405.00
d.	Gong bell 12" size suitable for 250V	Each	587.00
29	WATER HEATER WITH ISI MARK		
a.	Automatic Electrical Water Heater with copper container, with Glass Wool/ Puf insulation with MS powder coated shell suitable for 25 Litres capacity 230V/1000W (Venus/Racold/Equivalent)	Each	6644.00
b.	Automatic Electrical Water Heater with copper container, with Glass Wool/ Puf insulation with MS powder coated shell suitable for 25 Litres capacity 230V/1000W (Other make ISI)	Each	4919.00
c.	Automatic Electrical Water Heater with copper container, with Glass Wool/ Puf insulation with MS powder coated shell suitable for 35 litres capacity 230V/1000W (Venus/Racold/Equivalent)	Each	7630.00
d.	Automatic Electrical Water Heater with copper container, with Glass Wool/ Puf insulation with MS powder coated shell suitable for 35 litres capacity 230V/1000W (Other make ISI)	Each	5699.00
II	PART 'B'		
1.	FANS – CONFORMING TO ISS 374 / 1979		
a.	AC Ceiling fan complete 1200mm (48") sweep with 300mm Down rod.(without regulator)	Each	1119.00

Item	Description	Unit No.	Rates for 2019-20 in Rupees	
b.	AC Ceiling fan complete 1400mm (56") sweep with 300mm Down rod. (Without regulator)	Each	1200.00	
c.	Stepped electronic 300W/450W square type fan regulator (Anchor Deluxe/Equivalent)	Each	190.50	
d.	Dimmer type electronic 300W/450W square type fan regulator (Anchor Deluxe/Equivalent)	Each	152.30	
e.	AC Ceiling fan complete 1200mm (48") sweep with 300mm Down rod.(without Regulator) (Crompton/Equivalent)	Each	1270.00	
f.	AC Ceiling fan complete 1400mm (56") sweep with 300mm Down rod (Without regulator) (Crompton / equivalent)	Each	1370.00	
2	EXHAUST FANS			
a.	AC Exhaust Fan 225 mm (9") sweep (Light duty)	Each	1037.00	
b.	AC Exhaust Fan 300 mm (12") sweep (Light duty)	Each	1186.00	
c.	AC Exhaust Fan 375 mm (15") sweep (Light duty)	Each	1222.00	
d.	AC Exhaust Fan 450 mm (18") sweep (Light duty)	Each	1720.00	
e.	AC Exhaust Fan 375 mm (15") sweep (Heavy duty)	Each	2259.00	
f.	AC Exhaust Fan 450 mm (18") sweep (Heavy duty)	Each	2808.00	
3	LOUVER SHUTTERS ARRANGEMENTS			
a.	MS/Fibre Louvers shutters arrangements for 300mm AC Exhaust Fan	Each	216.50	
b.	MS/Fibre Louvers shutters arrangements for 375mm AC Exhaust Fan	Each	229.40	
c.	MS/Fibre Louvers shutters arrangements for 450mm AC Exhaust Fan	Each	256.70	
4	CEILING FAN		Higher End Havells / Crompton/ Usha / Equivalent	Lower End Almonard/ Equivalent
a	48" Ceiling Fan 5 Star Rates		1,430.00	1272.00
b	48" Ceiling Fan Crompton High Speed		1,422.00	1254.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
c	BEE Energy efficient 1200mm sweep ceiling fan 5 star rated, inverter driven controlled by microprocessor with 300mm down rod with regulator/ remote control (35W)	Each	2572.00
5	DIMMER AND REGULATOR	Higher End Crabtree/ Logrand/ Hager/ Equivalent	Lower End arbit/oswin/ Roma / Equivalent
a	Fan Step Regulator 100W - 1 Module	332.00	239.00
b	Fan Step Regulator 100W - 2 Module	379.00	273.00
III	PART "C"		
1	SWITCHES		
a.	5 Amps (Flush type)	Dozen	188.90
b.	5 Amps (Flush type staircase)	Dozen	235.00
2	DOUBLE POLE SWITCHES(GEM / HPL / HAVELLS / EQUIVALENT)		
a.	16 Amps DP Switch with metal clad (front handle)	Each	405.00
b.	32 Amps DP Switch with metal clad (front handle)	Each	831.00
c.	16 Amps DP Switch with metal clad (side handle)	Each	334.80
d.	32 Amps DP Switch with metal clad (side handle)	Each	754.00
3.	TRIPLE POLE SWITCHES (SIDE HANDLE) (STANDARD /HPL/HAVELLS/ EQUIVALENT)		
a.	100 Amps TPN Switch with HRC fuses sheet steel double break	Each	5699.00
b.	125 Amps TPN Switch with HRC fuses sheet steel double break	Each	6249.00
c.	200 Amps TPN Switch with HRC fuses sheet steel double break	Each	8077.00
d.	315 Amps TPN Switch with HRC fuses sheet steel double break	Each	11460.00
e.	400 Amps TPN Switch with HRC fuses sheet steel double break	Each	14757.00
f.	16 Amps TPN Metal clad switch with rewirable fuse units	Each	865.00
g	32 Amps TPN Metal clad switch with rewirable fuse units	Each	1278.00
h	63 Amps TPN Metal clad switch with rewirable fuse units	Each	2783.00
I	100 Amps Metal clad switch with rewirable fuse units	Each	5479.00
j	200 Amps Metal clad switch with rewirable fuse units	Each	8318.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
4.	SWITCH DISCONNECTOR FUSE UNITS IN SHEET STEEL ENCLOSURE (SDF) (L&T/SIEMENS / EQUIVALENT)		
a	63 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	3520.00
b	100 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	5920.00
c	125 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break.	Each	6990.00
d	200 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	8780.00
e	250 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	10950.00
f.	315 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	13130.00
g	400 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	15060.00
5	SWITCH DISCONNECTOR FUSE UNITS IN OPEN EXECUTION (INTERIOR FOR CUBICAL) (L&T/SIEMENS / EQUIVALENT)		
a	63A TPN Switch disconnecter fuse units interior only with HRC fuses Double break	Each	2326.00
b	100 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	4230.00
c	125 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	5770.00
d	200 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	7445.00
e	250 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	9700.00
f.	315 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	12200.00
g	400 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	14390.00
6	FUSE UNITS (ANCHOR /EQUIVALENT)		
a.	16 Amps Porcelain fuse unit (500 V)	Each	46.80
b.	32 Amps Porcelain fuse unit (500 V)	Each	82.80

Item No.	Description	Unit	Rates for 2019-20 in Rupees
c.	63 Amps Porcelain fuse unit (500 V)	Each	184.80
d.	100 Amps Porcelain fuse unit (500 V)	Each	333.70
e.	200 Amps Porcelain fuse unit (500 V)	Each	540.00
7	SINGLE PHASE DBS (GEM /EQUIVALENT)		
a.	4 Way DB 16 Amps /Way with fuse & Neutral Each (250V)	Each	450.00
b.	6 Way DB 16 Amps /Way with fuse & Neutral Each (250V)	Each	613.00
c.	8 Way DB 16 Amps /Way with fuse & Neutral Each (250V)	Each	759.00
8	THREE PHASE DBS(GEM /EQUIVALENT)		
a.	4 Way TPDB 16A/Way with fuse & Neutral link	Each	1775.00
b.	6 Way TPDB 16A/Way with fuse & Neutral link	Each	2430.00
c.	8 Way TPDB 16A/Way with fuse & Neutral link	Each	2940.00
d.	4 Way TPDB 32A/Way with fuse & Neutral link	Each	2245.00
e.	6 Way TPDB 32A/Way with fuse & Neutral link	Each	3003.00
f.	8 Way TPDB 32A/Way with fuse & Neutral link	Each	3799.00
g.	4 Way TPDB 63A/Way with fuse & Neutral link	Each	5253.00
h.	6 Way TPDB 63A/Way with fuse & Neutral link	Each	6757.00
9	CHANGE OVER SWITCHES(GEM /HAVELLS / HPL/STANDARD /EQUIVALENT)		
a.	16 Amps three phase 500 V 4 pole Change over switch	Each	1222.00
b.	32 Amps three phase 500 V 4 pole Change over switch	Each	1448.00
c.	63 Amps three phase 500 V 4 pole Change over switch	Each	3163.00
d.	100 Amps three phase 500 V 4 pole Change over switch	Each	5027.00
e.	200 Amps three phase 500 V 4 pole Change over switch	Each	9458.00
	CHANGE OVER SWITCH		
f	250A 3 phase 4 pole change over switch	Each	20016.00
g	400A 3 phase 4 pole change over switch	Each	30581.00

Item	Description	Unit	Rates for 2019-20 No. in Rupees	
10	MODULAR SWITCHES		Higher End Crabtree / legrand / Hager / Equivalent (Each)	Lower End Orbit / Oswin / ROMA / Equivalent (Each)
1	Switches 6A - 230V			
a	6A Switch 1W - 1 Module	Each	76.00	56.00
b	6A Switch 2W - 1 Module	Each	92.80	66.00
c	6A Switch 1W - 1 Module with Indicator	Each	102.00	72.80
d	6A Switch 1W - 1 Module with 'Light' Marking	Each	81.95	58.50
e	6A Switch 1W - 1 Module with 'Fan' Marking	Each	81.95	58.50
2	Switches 16A - 230V			
a	16A Switch 1W - 1 Module	Each	114.60	81.95
b	16A Switch 2W - 1 Module	Each	141.40	102.00
c	16A Switch 1W with Indicator - 1 Module	Each	134.70	97.05
3	Switches 20A - 230V			
a	20A 1W Switch - 1 Module	Each	148.90	107.10
b	20A DP 1W Switch - 2 Module	Each	248.50	177.60
c	20A DP 1W Switch with Indicator - 2 Module	Each	261.80	188.90
4	Switches 25A - 230V			
a	25A SP 1W Switch with Indicator - 1 Module	Each	162.00	117.00
5	Switches 32A - 230V			
a	32A DP Switch with Indicator - 2 Module	Each	316.00	229.00
11	PUSH BUTTONS			
a	6A Push Button SP - 1 Module	Each	102.70	74.40
b	6A Push Button SP with Indicator - 1 Module	Each	133.50	96.20
c	6A Bell Push - 1 Module	Each	102.00	72.80
d	6A Bell push with Indicator - 1 Module	Each	126.30	90.30
e	6A Bell Push - 2 Module	Each	133.50	96.20
f	6A Bell Push with Indicator - 2 Module	Each	157.10	112.90
12	MOTOR STARTER			
a	25A Motor Starter - 2 Module	Each	293.00	211.00
13	FLUSH MOUNTING BOXES (GI)			
a	Flush Box - 1/2 Module	Each	37.70	27.30
b	Flush Box - 3 Module	Each	44.20	32.15

Item	Description	Unit	Rates for 2019-20	
			No. in Rupees	
c	Flush Box - 4 Module	Each	53.90	38.60
d	Flush Box - 6 Module	Each	84.50	61.10
e	Flush Box - 8 Module	Each	103.70	74.80
f	Flush Box - 8 Module (2 row x 4)	Each	104.50	75.60
g	Flush Box - 12/16 (2 rowx6) Module Metal Box	Each	140.00	100.60
h	Flush Box - 18 Module Metal Box	Each	159.30	114.30
14	SURFACE MOUNTING BOXES (PLASTIC)			
a	Surface Box - 1/2 Module	Each	41.80	29.75
b	Surface Box - 3 Module	Each	44.25	32.15
c	Surface Box - 4 Module	Each	57.10	40.95
d	Surface Box - 6 Module	Each	74.00	53.90
e	Surface Box - 8 Module	Each	90.15	65.20
f	Surface Box - 8 (2 row x 4) Module	Each	104.60	75.60
g	Metal Surface Box - 12/16 (2 row x 6) Module	Each	158.50	114.00
h	Metal Surface Box - 18 Module	Each	202.00	144.90
15	COMBINED PLATES (PLASTIC)			
a	1 Module Cover Plate	Each	61.90	45.00
b	2 Module Cover Plate	Each	65.20	46.60
c	3 Module Cover Plate	Each	78.80	56.20
d	4 Module Cover Plate	Each	87.70	62.70
e	6 Module Cover Plate	Each	123.10	88.50
f	8 Module Cover Plate	Each	156.90	112.60
g	8 Module Cover Plate (H)	Each	157.70	133.40
h	12 Module Cover Plate	Each	196.40	141.70
i	18 Module Cover Plate	Each	248.00	177.80
16	COMBINED PLATES (ALUMINIUM)			
a	1 Module Cover Plate	Each	126.30	90.90
b	2 Module Cover Plate	Each	132.70	95.80
c	3 Module Cover Plate	Each	144.00	103.80
d	4 Module Cover Plate	Each	162.50	116.70
e	6 Module Cover Plate	Each	276.20	199.60
f	8 Module Cover Plate	Each	305.00	220.60
g	8 Module Cover Plate (H)	Each	388.00	279.30
h	12 Module Cover Plate	Each	504.00	363.50
i	18 Module Cover Plate	Each	665.00	478.50

Item	Description	Unit	Rates for 2019-20 No. in Rupees	
IV	PART 'D'			
1	PLUG AND SOCKETS			
a	5 Amps 3 pin and 2 pin combined flush type wall socket only.		Each	23.50
b	5 Amps/15amps.3 pin flush type wall socket only.		Each	53.00
c	5 Amps 3 pin Top		Each	33.30
d	15 Amps 3 pin Top		Each	47.20
e	15 Amps Flush type switch		Each	55.00
f	10 Amps M.C plug with 3 pin Top		Each	175.60
g	20 Amps M.C plug with 3 pin Top		Each	200.00
e	25A Flush type Wall Socket with 25A DP MCB for AC Plug		Each	788.00
2	SOCKET - 230V		Higher End Crabtree / legrand / Hager / Equivalent (Each)	Lower End Orbit / Oswin / ROMA / Equivalent (Each)
a	16A 3 Pin Switched Socket - 3 Module		377.00	272.00
b	6A 5 pin Universal Socket - 2 Module		117.00	85.00
c	6/16A Socket - 3 Module		212.00	153.00
d	6/16A Socket - 2 Module		180.00	129.00
3	SINGLE PHASE WATT HOUR METERS [HPL/EQUIVALENT)			
a.	AC single phase 230V/250V/50 HZ 5 Amps Watt Hour Meter	Each	936.00	
b.	AC single phase 230V/250V/50 HZ 10 Amps Watt Hour Meter	Each	936.00	
c.	AC single phase 230V/250V/50 HZ 20 Amps Watt Hour Meter	Each	936.00	
4	THREE PHASE WATT HOUR METERS (ANCHOR / EQUIVALENT)			
a.	AC 3 phase 400V 50 HZ unbalanced load 4 wire 10 Amps Watt Hour Meter	Each	1930.00	
b.	AC 3 phase 400V 50 HZ unbalanced load 4 wire 25 Amps Watt Hour Meter	Each	1930.00	
c.	AC 3 phase 400 V 50 HZ unbalanced load 4 wire 50 Amps Watt Hour Meter	Each	2444.00	

Item No.	Description	Unit	Rates for 2019-20 in Rupees
V	PART 'E'		
I	SERVICE CONNECTION ACCESSORIES LT. 1100V PVC ALUMINIUM ARMoured UNDER GROUND CABLE WITH ISI MARK		
a.	2 Core 6 sq.mm PVC armoured UG cable	Metre	85.60
b.	2 Core 10 sq.mm PVC armoured UG cable	Metre	104.20
c.	2 Core 16 sq.mm PVC armoured UG cable	Metre	113.10
d.	2 Core 25 sq.mm PVC armoured UG cable	Metre	128.50
e	3 ¹ / ₂ core 25 sq.mm. PVC Armoured UG Cable	Metre	193.60
f	3 ¹ / ₂ core 35 sq.mm. PVC Armoured UG Cable	Metre	227.90
g	3 ¹ / ₂ core 50 sq.mm. PVC Armoured UG Cable	Metre	296.90
h	3 ¹ / ₂ core 70 sq.mm. PVC Armoured UG Cable	Metre	380.70
i	3 ¹ / ₂ core 95 sq.mm. PVC Armoured UG Cable	Metre	492.80
j	3 ¹ / ₂ core 120 sq.mm. PVC Armoured UG Cable	Metre	601.90
k	3 ¹ / ₂ core 150 sq.mm. PVC Armoured UG Cable	Metre	713.00
l	3 ¹ / ₂ core 185 sq.mm. PVC Armoured UG Cable	Metre	871.00
m	3 ¹ / ₂ core 240 sq.mm. PVC Armoured UG Cable	Metre	1104.00
n	3 ¹ / ₂ core 300 sq.mm. PVC Armoured UG Cable	Metre	1355.00
o	3 ¹ / ₂ core 400 sq.mm. PVC Armoured UG Cable	Metre	1727.00
p	4 core 6 sq.mm. PVC Armoured UG Cable	Metre	110.80
q	4 core 10 sq.mm. PVC Armoured UG Cable	Metre	121.50
r	4 core 16 sq.mm. PVC Armoured UG Cable	Metre	160.10
2	PVC INSULATED SINGLE CORE MULTI STRAND FIRE RETARDANT FLEXIBLE COPPER CABLE WITH ISI MARK CONFORMING TO IS 694/ 1990		
a.	14/0.3 (1 sq.mm)	Metre	8.50
b.	22/0.3 (1.5 sq.mm)	Metre	13.40
c.	36/0.3 (2.5 sq.mm)	Metre	20.80
d.	56/0.3 (4 sq.mm)	Metre	33.00
e.	84/0.3 (6 sq.mm)	Metre	48.90
f.	140/0.3 (10 sq.mm)	Metre	73.50
g.	101/0.45 (16 sq.mm)	Metre	120.10
h.	168/0.45 (25 sq.mm)	Metre	263.90
3	CONDUCTOR		
a.	Hard drawn copper conductor(Gauge No.8 & 6)	KG	496.00
b.	14 SWG TC wire	KG	508.00
c.	GI No.8 wire and No. 6 wire	KG	81.80

Item No.	Description	Unit	Rates for 2019-20 in Rupees
4	CABLE GLANDS		
a.	Cable gland suitable for 2 core 4 sq.mm UG cable	Each	17.90
b.	Cable gland suitable for 2 core 6 sq.mm UG cable	Each	22.30
c.	Cable gland suitable for 2 core 10 sq.mm UG cable	Each	26.70
d.	Cable gland suitable for 2 core 16 sq.mm UG cable	Each	39.50
e.	Cable gland suitable for 2 core 25 sq.mm UG cable	Each	47.20
f.	Cable gland suitable for 3½ core 25 sq.mm UG cable	Each	47.20
g.	Cable gland suitable for 3½ core 35 sq.mm UG cable	Each	59.90
h.	Cable gland suitable for 3½ core 50 sq.mm UG cable	Each	59.90
I	Cable gland suitable for 3½ core 70 sq.mm UG cable	Each	73.90
j	Cable gland suitable for 3½ core 95 sq.mm UG cable	Each	90.20
k	Cable gland suitable for 3½ core 120 sq.mm UG cable	Each	114.90
l	Cable gland suitable for 3½ core 150 sq.mm UG cable	Each	151.20
m	Cable gland suitable for 3½ core 185 sq.mm UG cable	Each	178.90
n	Cable gland suitable for 3½ core 240 sq.mm UG cable	Each	178.90
o	Cable gland suitable for 3½ core 300 sq.mm UG cable	Each	213.60
p	Cable gland suitable for 3 ½ core 400 sq.mm UG cable	Each	303.90
q	Cable gland suitable for 3 ½ core 500 sq.mm UG cable	Each	354.30
r	Cable gland suitable for 4 core 6 sq.mm UG cable	Each	22.30
s	Cable gland suitable for 4 core 10 sq.mm UG cable	Each	26.70
t	Cable gland suitable for 4 core 25 sq.mm UG cable	Each	47.20
5	FUSE WIRE (COPPER)		
a.	5 Amps fuse wire	Kg	496.00
b.	10 Amps fuse wire	Kg	496.00
c.	20 Amps fuse wire	Kg	496.00
6	NEUTRAL LINK 15 AMPS		
a.	4 way Neutral Link	Each	24.60
b.	6 way Neutral Link	Each	36.40
c.	8 way Neutral Link	Each	45.40
d.	12 way Neutral Link	Each	66.00
VI	PART ' F '		
1	M.S. BOX WITH PAINTING (16 SWG)		
a.	M.S Box of Size (100 x 100 x 75mm)	Each	39.70
b.	M.S Box of Size (150 x 100 x 75mm)	Each	54.90
c.	M.S Box of Size (200 x 150 x 75mm)	Each	89.30
d.	M.S Box complete with Lock & Key arrangements with painting of size (300 x 200 x 100 mm)	Each	270.00
	New Items (PWD)		
2	Synthetic Moulded Compound box for street light	Each	735.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
VII	PART ' G '		
1	MS ANGLES		
a.	1½" x 1½" x 1/4" (37.5 x 37.5 x 6.24 mm)(1M= 3.25 Kg)	KG	44.70
b.	1½" x 1½" x ½" (37.5 x 37.5 x 12.5mm)	KG	44.70
c.	2" x 2" x ½" (50 x 50 x 12.5 mm)	KG	44.70
2	ALUMINIUM FLAT		
a.	Aluminium Flat (1"x 1/4") (25x 6.25 mm)	KG	154.30
b.	Aluminium Flat (1"x1/8")	KG	154.30
3	COPPER FLAT		
a.	Copper Flat (25 x 3 mm)	KG	454.00
b.	Copper Flat (25 x 6 mm)	KG	454.00
c.	Copper Flat (33 x 6 mm)	KG	454.00
d.	Copper Flat (50 x 6 mm)	KG	454.00
4	POWER CAPACITOR		
a.	Power capacitor for power factor improvement with oil filled with discharge resistance 3 phase 415/440V 50 HZ conforming to ISS:2834 with ISI marking	KVAR	309.00
VIII	PART ' H '		
1	CONDUIT MATERIALS 16 Gauge		
a.	Conduit pipe 16 mm (5/8") Heavy Gauge	Metre	27.00
b.	Conduit pipe 19 mm (3/4") Heavy Gauge	Metre	27.90
c.	Conduit pipe 25 mm (1") Heavy Gauge	Metre	34.30
d.	Conduit pipe 32 mm (1¼") Heavy Gauge	Metre	45.00
e.	Conduit pipe 38 mm (1½") Heavy Gauge	Metre	53.00
2	CONDUIT TEE BENDS		
a.	Conduit Tee bends 16 mm (5/8")	Dozen	75.60
b.	Conduit Tee bends 19 mm (3/4")	Dozen	76.40
c.	Conduit Tee bends 25 mm (1")	Dozen	91.70
d.	Conduit Tee bends 32 mm (1¼")	Dozen	94.90
e.	Conduit Tee bends 38 mm (1½")	Dozen	118.30
f.	Conduit Tee bends 50 mm (2")	Dozen	147.80
3	CONDUIT BENDS 16 Gauge		
a.	Conduit solid bends 16 mm (5/8")	Dozen	71.50
b.	Conduit solid bends 19 mm (3/4")	Dozen	79.60
c.	Conduit solid bends 25 mm (1")	Dozen	94.10
d.	Conduit solid bends 32 mm (1¼")	Dozen	111.10
e.	Conduit solid bends 38 mm (1½")	Dozen	157.70
f.	Conduit solid bends 50 mm (2")	Dozen	193.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
4	CONDUIT INSPECTION BEND 16 Gauge		
a.	Conduit Inspection bends 16 mm (5/8")	Dozen	71.50
b.	Conduit Inspection bends 19 mm (3/4")	Dozen	74.00
c.	Conduit Inspection bends 25 mm (1")	Dozen	94.90
d.	Conduit Inspection bends 32 mm (1 ¼")	Dozen	114.30
e.	Conduit Inspection bends 38mm (1½")	Dozen	148.00
f.	Conduit Inspection bends 50mm (2")	Dozen	168.20
g.	Conduit Inspection bends 65mm (2½")	Dozen	216.50
	New Items (PWD)		
5	HDPE Pipe		
a.	HDPE pipe 50mm/ 38mm	RM	100.00
b.	HDPE pipe 90mm/ 76mm	RM	206.00
c.	HDPE pipe 120mm/ 103.50mm	RM	257.00
6	Cable Tray		Manibhadra/ Equivalent
a.	GI Hot dip/ Powder coated 16 SWG Cable tray with 150mm width and 50mm height	RM	319.00
b.	GI Hot dip/ Powder coated 16 SWG Cable tray with 300mm width and 50mm height	RM	390.00
IX	PART ' I '		
1	PVC (RIGID) PIPES (1.8 MM THICK) WITH ISI MARK (Building)		
a.	PVC rigid pipes 16mm (5/8")	Metre	11.70
b.	PVC rigid pipes 20mm (3/4")	Metre	17.10
c.	PVC rigid pipes 25mm (1")	Metre	25.40
d.	PVC rigid pipes 32mm (1¼")	Metre	38.40
e.	PVC rigid pipes 40mm (1½")	Metre	54.90
f.	PVC rigid pipes 50mm (2")	Metre	82.20
2	PVC RIGID BENDS		
a.	PVC rigid bends 16mm (5/8")	Each	2.70
b.	PVC rigid bends 20mm (3/4")	Each	2.70
c.	PVC rigid bends 25mm (1")	Each	3.70
d.	PVC rigid bends 32mm (1¼")	Each	6.60
e.	PVC rigid bends 40mm (1½")	Each	16.50
f.	PVC rigid bends 50mm (2")	Each	20.10
3	PVC COUPLES		
a.	PVC Couples 16mm (5/8")	Dozen	11.80

Item No.	Description	Unit	Rates for 2019-20 in Rupees
b.	PVC Couples 19mm (3/4")	Dozen	11.80
c.	PVC Couples 25mm (1")	Dozen	23.00
d.	PVC Couples 32mm (1¼")	Dozen	52.60
e.	PVC Couples 38mm (1½")	Dozen	112.70
f.	PVC Couples 50mm (2")	Dozen	117.70
4	PVC TEES		
a.	PVC Tees 16mm (5/8")	Dozen	11.80
b.	PVC Tees 19mm (3/4")	Dozen	13.70
c.	PVC Tees 25mm (1")	Dozen	17.50
d.	PVC Tees 32mm (1¼")	Dozen	78.50
e.	PVC Tees 38mm (1½")	Dozen	252.00
f.	PVC Tees 50mm (2")	Dozen	276.00
5	PVC Saddles		
a.	PVC Saddles 16 mm (5/8")	Dozen	2.70
b.	PVC Saddles 19mm (3/4")	Dozen	3.10
c.	PVC Saddles 25mm (1")	Dozen	3.60
d.	PVC Saddles 32mm (1¼")	Dozen	4.50
e.	PVC Saddles 38mm (1½")	Dozen	5.50
f.	PVC Saddles 50mm (2")	Dozen	11.00
6	PVC JUNCTION BOXES		
a.	Junction boxes 1,2,3 & 4 way 16 mm (5/8")	Dozen	36.80
b.	Junction boxes 1,2,3 & 4 way 19 mm (3/4")	Dozen	36.80
c.	Junction boxes 1,2,3 & 4 way 25 mm (1")	Dozen	43.30
d.	Junction boxes 1,2,3 & 4 way 32 mm (1¼")	Dozen	96.20
e.	Junction boxes 1,2,3 & 4 way 38 mm (1½")	Dozen	114.30
7	PVC Hylem sheets		
a.	Hylem sheet 3 mm thick	Sq.m	563.00
8	Insulation Tape PVC		
a.	PVC Insulation Tape (19mm)	Roll/10 mts	13.70
b.	Empire Tape (12 mm)	Roll/10 mts	18.40
c.	Empire Tape (19 mm)	Roll/10 mts	22.10
X	PART ' J '		
1	TEAK WOOD MATERIALS		
	T.W. BOX CONCEALED TYPE		
a.	T.W. Box concealed type 12"x8"x3"	Each	69.30

Item No.	Description	Unit	Rates for 2019-20 in Rupees
b.	T.W.Box concealed type 8"x6"x3"	Each	36.80
c.	T.W. Box concealed type 6"x4"x3"	Each	16.40
d.	T.W. Box concealed type 4"x4"x3"	Each	13.70
e.	T.W. plugs 1½" x 1" x2"	1000 Nos.	285.00
f.	T.W. Round blocks	100 Nos.	553.00
XI	PART ' K '		
1	CRIMPING LUGS SUI TABLE FOR THE FOLLOWING SIZES		
	Size	Aluminium (Each)	Copper (Each)
a.	4 Sq.mm	1.26	3.85
b.	6 Sq.mm	1.41	3.85
c.	10 Sq.mm	1.82	4.85
d.	16 Sq.mm	1.82	5.85
e.	25 Sq.mm	2.78	9.80
f.	35 Sq.mm	3.69	10.75
g.	50 Sq.mm	5.50	12.70
h.	70 Sq.mm	7.35	20.60
i.	95 Sq.mm	8.35	25.55
j.	120 Sq.mm	11.15	35.30
k.	150 Sq.mm	14.85	45.15
l.	185 Sq.mm	19.45	68.80
m.	225 Sq.mm	28.85	98.15
n.	240 Sq.mm	31.60	98.15
o.	300 Sq.mm	43.70	132.45
p.	400 Sq.mm	65.25	201.20
2	CABLE ROUTE INDICATOR		
a.	Cable route indicator for L.T/ cable	Each box	65.60
b.	Cable route indicator for H.T/ cable	Each box	65.60
XII	PART ' L '		
1	BRASS SCREWS		
a.	Brass Screws (20mm) ¾" No.6	Gross	58.60
b.	Brass Screws (25mm) 1" No.6	Gross	63.10
c.	Brass Screws (40mm) 1½" No.6	Gross	67.60
d.	Brass Screws (20mm) ¾" No.8	Gross	58.60
e.	Brass Screws (25mm) 1" No.8	Gross	63.10
f.	Brass Screws (50mm) 2" No.10	Gross	130.40
g.	Brass screws (75mm) 3" No.10	Gross	193.00
2	Coach screws 2"x¼" (50 x 6.25mm)	Dozen	11.60

Item No.	Description	Unit	Rates for 2019-20 in Rupees
3	CONDUIT SADDLES		
a.	Conduit Saddles 16mm (5/8")	Gross	36.00
b.	Conduit Saddles 19mm (3/4")	Gross	38.40
c.	Conduit Saddles 25mm (1")	Gross	45.00
d.	Conduit Saddles 32mm (1¼")	Gross	58.60
e.	Conduit Saddles 38mm (1½")	Gross	71.80
f.	Conduit Saddles 50mm (2")	Gross	81.10
g.	Conduit Saddles 65mm (2½")	Gross	92.40
4	SODIUM VAPOUR FITTINGS & LAMP		
	(For External Electrification & Campus lighting)		
a.	250 Watts Sodium Vapour fittings	Each	2968.00
b.	250 Watts Sodium Vapour lamp	Each	656.00
c.	150 Watts Sodium Vapour fittings	Each	2925.00
d.	150 Watts Sodium Vapour lamp	Each	562.00
e.	70 Watts Sodium Vapour fittings	Each	2360.00
f.	70 Watts Sodium Vapour lamp	Each	374.00
5	SODIUM VAPOUR LAMP FITTING SINGLE PIECE DIE CAST ALUMINIUM HOUSING & LAMP FOR HEAVY TRAFFIC ROADS (PHILIPS/ CROMPTON GREAVES/WIPRO/ BAJAJ/ EQUIVALENT)		
a.	400 Watts sodium vapour fittings	Each	8870.00
b.	400 Watts sodium vapour lamp	Each	920.00
c.	250 Watts sodium vapour fittings	Each	6050.00
d.	250 Watts sodium vapour lamp	Each	744.00
e.	150 Watts sodium vapour fittings	Each	5680.00
f.	150 Watts sodium vapour lamp	Each	611.00
g.	70 Watts sodium vapour fittings	Each	2430.00
h.	70 Watts sodium vapour lamps	Each	421.00
6	MINIATURE CIRCUIT BREAKERS 240 V/415 V 50HZ AC SUPPLY SUITABLE FOR BOTH LIGHTING AND MOTOR CIRCUITS.	Legrand/ Hager / Equivalent (Each)	All other makes with ISI (Std.) / HPL / Havells / Equivalent) (Each)
a.	Single pole 6A to 32A, 10 KA	171.00	125.00
b.	Single pole 40A , 10 KA	351.00	261.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
c.	Single pole & Neutral 6A to 32A, 10 KA	501.00	379.00
d.	Single pole & Neutral 40A, 10 KA	813.00	525.00
e.	Double pole 6A to 32A, 10 KA	501.00	416.00
f.	Double pole 40A, 10 KA	813.00	571.00
g.	Triple pole 6A to 32A, 10 KA	806.00	629.00
h.	Triple pole 63A, 10 KA	1227.00	1001.00
I	Triple pole & Neutral 6A to 32A, 10 KA	1062.00	819.00
j.	Triple pole & Neutral 63A, 10 KA	1586.00	1263.00
k.	Four pole 6A to 32A, 10 KA	1062.00	878.00
l.	Four pole 63A, 10 KA	1586.00	1345.00
7	PLUG AND SOCKETS IN SHEET STEEL ENCLOSURE WITHOUT MCBS	Legrand/ Hager / Equivalent (Each)	All other makes with ISI (Std.) / HPL / Havells / Equivalent) (Each)
a.	10A single Pole	830.00	492.00
b	20A Single Pole	887.00	498.00
c.	20A Double Pole	960.00	-
d.	20A Triple Pole	1627.00	944.00
e.	32A Triple Pole	1941.00	1278.00
f.	63A Triple Pole	7907.00	-
8	Sheet Steel Enclosure for MCB's	Legrand/ Equivalent	Equivalent Havells/
a	2 Pole	368.00	256.00
b	4 pole	539.00	313.00
9	RCCB/ ELCB		
a.	10 Amps 30 MA DP	Each	2341.00
b	25 Amps 30 MA DP	Each	1930.00
c.	40 Amps 30 MA DP	Each	2136.00
10	RCCB/ELCB (FOUR POLE)		
a.	25 Amps 30 MA	Each	2659.00
b	40 Amps 30 MA	Each	2690.00
c.	63 Amps 30 MA	Each	3111.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
11	HRC FUSES		
a.	16 Amps Each	59.90	29.30
b	32 Amps Each	62.20	49.10
c.	63 Amps Each	128.30	61.80
d.	125 Amps Each	299.80	137.10
e.	160 Amps Each	374.00	184.80
f.	200 Amps Each	386.00	184.80
g.	250 Amps Each	536.00	273.00
12	MCB ISOLATORS	Legrand/ Hager / Equivalent (Each)	All other makes with ISI (Std.) / HPL / Havells / Equivalent) (Each)
a	32A -DP	263.00	—
b	32A - TP	440.00	—
c	32A -FP	503.00	—
d	40A -DP	364.00	252.00
e	40A - TP	630.00	463.00
f	40A -FP	810.00	565.00
g	63A -DP	488.00	320.00
h	63A - TP	733.00	504.00
i	63A -FP	887.00	590.00
j	100A -DP	—	413.00
k	100A - TP	585.00	657.00
l	100A -FP	934.00	718.00
	New Items (PWD)		
13	MCCB		L&T/ Equivalent
a	400A Spreader Terminal	Each	2760.00
b	Rotary handle for 400A/ 630A	Each	2250.00
c	250A Spreader Terminal	Each	1355.00
d	Rotary handle for 250A/ 125A	Each	1379.00
e	630A Spreader Terminal	Each	3239.00
f	400A Spreader Terminal	Each	1922.00
g	Spreader Terminal for 250A/ 125A	Each	1116.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
XIII	PART "M"		
1	11 KV INDOOR VACCUM CIRCUIT BREAKER		Megawin/ Pentagon/ (OEM)
a	11 KV, 25 KA, 630 A, HT Indoor Single Panel Vaccum Circuit Breaker complete as per specification	Each	401000.00
b	11 KV, 25 KA, 630 A, HT Indoor Three Panel Vaccum Circuit Breaker complete as per specification	Each	1021000.00
c	11 KV, 25 KA, 630 A, HT Indoor Four Panel Vaccum Circuit Breaker complete as per specification	Each	1449000.00
d	11 KV, 25 KA, 630 A, HT Indoor Five Panel Vaccum Circuit Breaker complete as per specification	Each	1737000.00
2	11 KV OUTDOOR VACCUM CIRCUIT BREAKER		Megawin/ Pentagon/ (OEM)
a	11 KV, 25 KA, 630 A, HT Outdoor Single Panel Vaccum Circuit Breaker complete as per specification	Each	419000.00
b	11 KV, 25 KA, 630 A, HT Outdoor Three Panel Vaccum Circuit Breaker complete as per specification	Each	1047000.00
c	11 KV, 25 KA, 630 A, HT Outdoor Four Panel Vaccum Circuit Breaker complete as per specification	Each	1466000.00
d	11 KV, 25 KA, 630 A, HT Outdoor Five Panel Vaccum Circuit Breaker complete as per specification	Each	1755000.00
3	11 KV INDOOR RING MAIN GEAR (RMG)		Megawin / Voltech / (OEM)
a	11 KV, 25 KA, 630 A, HT Indoor Three Panel Ring Main Gear complete as per specification	Each	584000.00
4	11 KV OUTDOOR RING MAIN GEAR (RMG)		Megawin / Voltech / (OEM)
a	11 KV, 25 KA, 630 A, HT Outdoor Three Panel Ring Main Gear complete as per specification	Each	611000.00
5	HT CABLES		Polycab / Equivalent
a	240 sq.mm. 3 core HT XLPE 11KV (E) SISMV11E3 x 2402797	Mtr	1694.00
b	300 sq.mm. 3 core HT XLPE 11KV (E)		

Item No.	Description	Unit	Rates for 2019-20 in Rupees
	SISMV11E3 x 3002797	Mtr	1971.00
c	300 sq.mm. 3 core HT XLPE 11KV (UE) SISMV11U3 x 3002424	Mtr	2310.00
6	CABLES, ACCESSORIES AND KITS		Raychem RPG / Equivalent
a	120-185 sq.mm. 3 core HT Cable Indoor Terminations XLPE 11KV (E) - EPKT 3111	Each	9489.00
b	240-300 sq.mm. 3 core HT Cable Indoor Terminations XLPE 11KV (E) - EPKT 3121	Each	10120.00
c	120-185 sq.mm. 3 core HT Cable Outdoor Terminations XLPE 11KV (E) - EPKT 3362	Each	13100.00
d	240-300 sq.mm. 3 core HT Cable Outdoor Terminations XLPE 11KV (E) - EPKT 3372	Each	14740.00
e	240-400 sq.mm. 3 core HT Cable Indoor Terminations 11 KV (UE)-Belted PILC Cables-EPKT 4685	Each	13370.00
f	240-400 sq.mm. 3 core HT Cable Outdoor Terminations 11 KV (UE)-Belted PILC Cables-EPKT 4961	Each	17740.00
g	150-185 sq.mm. 3 core HT Cable Outdoor Terminations 22KV(E) Screened XLPE Cables-EPKT 5363	Each	18800.00
h	240-400 sq.mm. 3 core HT Cable Outdoor Terminations 22KV(E) Screened XLPE Cables-EPKT 5373	Each	25000.00
i	185-240 sq.mm 3 core HT Cables Straight Through Joints 22KV (E) Screened XLPE Cables-EPKJ 5118	Each	49200.00
j	300-400 sq.mm. 3 core HT Cable Straight Thorough Joints 22KV (E) Screened XLPE Cables - EPKJ 5119	Each	54900.00
	PART "N"		
1	SUPPLY & INSTALLATION OF AIR-CONDITIONER WITH COPPER COIL	3 Star Rated (Carrier / Voltas / Blue Star / Equivalent)	5 Star Rated Inverter (Carrier / Voltas /O General /Equivalent)
a	1.5 TR Split Type AC Unit	30800.00	41000.00
b	2.0 TR Split Type AC Unit	41000.00	52300.00
c	Supply and installation of 4 KVA capacity		

Item No.	Description	Unit	Rates for 2019-20 in Rupees
	Automatic Voltage Stabilizer with time delay relay (V-Gurad / Equivalent)	Each	4120.00
d	Supply and installation of 5 KVA capacity Automatic Voltage Stabilizer with time delay relay (V-Gurad / Equivalent)	Each	4580.00
e	Supply and laying of 5/8" and 3/8" copper pipe (Extra beyond 3 metres supplied with AC unit)	Each	872.00
f	Supply and fixing of MS stand for fixing outdoor unit	Each	1010.00
2	SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND HANDING OVER OF AIR- COOLED SELF CONTAINED DUCTABLE AC UNITS		ETA (OEM)
a	3.0 TR Ceiling Suspended Ductable Unit	Each	91000.00
b	5.0 TR Ceiling Suspended Ductable Unit	Each	157000.00
c	8.5 TR Ceiling Suspended Ductable Unit	Each	214000.00
d	11 TR Ceiling Suspended Ductable Unit	Each	276000.00
e	17 TR Ceiling Suspended Ductable Unit	Each	400000.00
f	5.5 TR Floor Mounted Ductable Unit	Each	332000.00
g	8.5 TR Floor Mounted Ductable Unit	Each	343000.00
h	11 TR Floor Mounted Ductable Unit	Each	377000.00
i	17 TR Floor Mounted Ductable Unit	Each	538000.00
j	25 TR Floor Mounted Ductable Unit	Each	647000.00
3	ACCESSORIES FOR PACKAGE AC		
a	Supply and filling of R-22 Refrigerant Gas	KG	531.00
b	Supply and fixing of Copper Refrigerant Piping of 7/8" dia	RM	963.00
c	Supply and fixing of Flexible Canvas Connection	Each	2567.00
d	Supply and fixing of 50mm thick Anti Vibrating Rubber Pads	Sqm.	504.00
e	Supply, Fabrication and erection of fabricated ducting made up of GI Sheets of 24 Gauge thickness	RM	788.00
f	Supply, Fabrication and erection of fabricated ducting made up of GI sheets of 22 Gauge thickness	Sqm.	1054.00
g	Supply, Fabrication and erection of fabricated ducting made up of GI sheets of 20 Gauge thickness	Sqm.	1310.00
h	Supply and fixing of extruded aluminum powder coated, Supply and return Air Grilles / Diffusers with Volume Control Damper	Sqm.	7335.00
i	Supply and fixing of water drain pipe line (1" PVC Pipe)	RM	59.50

Item No.	Description	Unit	Rates for 2019-20 in Rupees
j	Supply, fabrication and fixing of MS Channel for Mounting the Airconditioning Indoor Unit	Each	6785.00
k	Supply, fabrication and fixing of Ms Channel for Mounting the Airconditioning Outdoor Unit	RM	5775.00
l	Supply and providing of pipeline nitrle rubber insulation for Refrigerant and drain pipe lines.	RM	51.30
m	Supply and fixing of Duct Mouth Dampers	Set	2199.00
n	Supply and providing acoustic for initial portion of ducting with 12mm thick Fibre Glass Rigid Board covered with Tissue Paper and Aluminum Perforated Sheet	Sqm.	781.00
o	Supply and providing thermal insulation of 9mm thick vidoflex with Aluminum Foil	Sqm.	761.00
p	Supply and providing Civil Concrete Block for Mounting the Airconditioning Unit	Each	654.00
q	Supply and laying of 30 sq.mm. incoming cable	RM	355.00
r	Supply and providing of 10 sq.mm. copper flexible single cable	RM	82.00
s	Supply and providing of 1.5 sq.mm. copper flexible cable	RM	18.40
t	Supply and providing of 0.5 sq.mm. 4 core flexible signal cable	RM	15.40
4	GENERATORS WITH STANDARD PANEL		Kirloskar / Ashok Leyland / Equivalent
a	5 KVA	Each	190600.00
b	7.5 KVA	Each	199000.00
c	10 KVA	Each	225000.00
d	15 KVA	Each	241700.00
e	20 KVA	Each	254200.00
f	30 KVA	Each	309400.00
g	35 KVA	Each	330300.00
h	40 KVA	Each	385500.00
i	45 KVA	Each	450100.00
j	62.5 KVA	Each	517800.00
k	82.5 KVA	Each	610600.00
l	100 KVA	Each	679300.00
m	125 KVA	Each	780400.00
n	160 KVA	Each	1060700.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
o	200 KVA	Each	1295200.00
p	250 KVA	Each	1458800.00
5	GENERATORS WITH AUTO MAIN FAILURE (AMF) PANEL		Kirloskar / Ashok Leyland / Equivalent
a	62.5 KVA	Each	622000.00
b	82.5 KVA	Each	714800.00
c	100 KVA	Each	887700.00
d	125 KVA	Each	988800.00
e	160 KVA	Each	1269100.00
f	200 KVA	Each	1503600.00
g	250 KVA	Each	1667200.00
6	Exhaust Pipe with Silencer	RM	2054.00
7	PASSENGER LIFTS (G+3)		Johnson / Kone / OTIS/ Equivalent
	SS 304 Grade with 1m/sec. speed with ARD		
A	8 Persons Passenger Lift Car Size (1300 x 1100)		
a	Gearless Lift with Machine Room	Each	1415000.00
b	Gearless Lift without Machine Room	Each	1482000.00
B	10 Persons Passenger Lift Car Size (1300 x 1350)		Johnson / Kone / OTIS/ Equivalent
a	Gearless Lift with Machine Room	Each	1479000.00
b	Gearless Lift without Machine Room	Each	1550000.00
C	13 Persons Passenger Lift Car Size (2000 x 1100)		Johnson / Kone / OTIS/ Equivalent
a	Gearless Lift with Machine Room	Each	1646000.00
b	Gearless Lift without Machine Room	Each	1722000.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
D	20 Persons Passenger Lift Car Size (2000 x 1500)		Johnson / Kone / OTIS/ Equivalent
a	Gearless Lift with Machine Room	Each	2046000.00
b	Gearless Lift without Machine Room	Each	2175000.00
	Further increase of rate per floor for every additional floor Rs.1,00,000/- per floor. Comprehensive servicing and maintenance of lifts for further period of 2 years beyond free warranty period of one year from the date of commissioning of lifts will be paid at the rate of 5% of capital cost of lift		
8	BED-CUM-PASSENGER LIFTS (G+3)SS 304 Grade with 1m/sec. speed with ARD		
A	15 Persons Passenger Lift Car Size (1000 x 2400)		Kone / Equivalent
a	Gearless Lift with Machine Room	Each	1797000.00
b	Gearless Lift without Machine Room	Each	1910000.00
B	20 Persons Passenger Lift Car Size (1300 x 2400)		
a	Gearless Lift with Machine Room	Each	2146000.00
b	Gearless Lift without Machine Room	Each	2235000.00
C	26 Persons Passenger Lift Car Size (1600 x 2400)		
a	Gearless Lift with Machine Room	Each	2439000.00
b	Gearless Lift without Machine Room	Each	2629000.00
	Further increase of rate per floor for every additional floor Rs.1,00,000/- per floor. Comprehensive servicing and maintenance of lifts for further period of 2 years beyond free warranty period of one year from the date of commissioning of lifts will be paid at the rate of 5% of capital cost of lift		
XV 1	PART "O" GI STEEL TUBULAR POLE FOR STREET LIGHT		Kumaran Pole / Oriental Pole / Equivalent
a	4 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm)		
	76.10mm OD x 3.65mm Thick x 4000mm Length	Each	6350.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
b	4 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm) 76.10mm OD x 3.65mm Thick x 4000mm Length	Each	7230.00
c	6 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm) 76.10mm OD x 3.65mm Thick x 6000mm Length	Each	7590.00
d	6 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm) 76.10mm OD x 3.65mm Thick x 6000mm Length	Each	8470.00
e	7 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm) 114.30mm OD x 5.40mm Thick x 4000mm Length, 88.90mm OD x 4.85mm Thick x 1500mm Length, 76.1mm OD x 3.25mm Thick x 1500mm Length	Each	9730.00
f	7 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm) 114.30mm OD x 5.40mm Thick x 4000mm Length, 88.90mm OD x 4.85mm Thick x 1500mm Length, 76.10mm OD x 3.25mm Thick x 1500mm Length	Each	10700.00
g	7.50 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm) 114.30mm OD x 5.40mm Thick x 4500mm Length, 88.90mm OD x 4.85mm Thick x 1500mm Length, 76.1mm OD x 3.25mm Thick x 1500mm Length	Each	10870.00
h	7.50 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm) 114.30mm OD x 5.40mm Thick x 4500mm Length, 88.90mm OD x 4.85mm Thick x 1500mm Length, 76.10mm OD x 3.25mm Thick x 1500mm Length	Each	12010.00
i	8 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm) 114.30mm OD x 5.40mm Thick x 4500mm Length, 88.90mm OD x 4.85mm Thick x 1750mm Length, 76.10mm OD x 3.25mm Thick x 1750mm Length	Each	11190.00
j	8 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm) 114.30mm OD x 5.40mm Thick x 4500mm Length, 88.90mm OD x 4.85mm Thick x 1750mm Length, 76.10mm OD x 3.25mm Thick x 1750mm Length	Each	12320.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
k	8.50 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm)		
	114.30mm OD x 5.40mm Thick x 5000mm Length, 88.90mm OD x 4.85mm Thick x 1750mm Length, 76.10mm OD x 3.25mm Thick x 1750mm Length	Each	11930.00
l	8.50 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm)		
	114.30mm OD x 5.40mm Thick x 5000mm Length, 88.90mm OD x 4.85mm Thick x 1750mm Length, 76.10mm OD x 3.25mm Thick x 1750mm Length	Each	13390.00
m	9 Metre Length Single Bracket Pole with Base Plate (300 x 300 x 6mm)		
	114.30mm OD x 5.40mm Thick x 5000mm Length, 88.90mm OD x 4.85mm Thick x 2000mm Length, 76.10mm OD x 3.25mm Thick x 2000mm Length	Each	11930.00
n	9 Metre Length Double Bracket Pole with Base Plate (300 x 300 x 6mm)		
	114.30mm OD x 5.40mm Thick x 5000mm Length, 88.90mm OD x 4.85mm Thick x 2000mm Length, 76.10mm OD x 3.25mm Thick x 2000mm Length	Each	13390.00
o	10 Metre Length Single Bracket Pole with Base Plate (300 x 300 x 6mm)		
	139.70mm OD x 4.50mm Thick x 5200mm Length, 114.30mm OD x 4.50mm Thick x 2400mm Length, 88.90mm OD x 3.25mm Thick x 2400mm Length	Each	15800.00
p	10 Metre Length Double Bracket Pole with Base Plate (300 x 300 x 6mm)		
	139.70mm OD x 4.50mm Thick x 5200mm Length, 114.30mm OD x 4.50mm Thick x 2400mm Length, 88.90mm OD x 3.25mm Thick x 2400mm Length	Each	16230.00
q	12 Metre Length Single Bracket Pole with Base Plate (300 x 300 x 6mm)		
	165.10mm OD x 4.50mm Thick x 5800mm Length, 139.70mm OD x 4.50mm Thick x 3100mm Length, 114.30mm OD x 3.65mm Thick x 3100mm Length	Each	18620.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
r	10 Metre Length Double Bracket Pole with Base Plate (300 x 300 x 6mm) 165.10mm OD x 4.50mm Thick x 5800mm Length, 139.70mm OD x 4.50mm Thick x 3100mm Length, 114.30mm OD x 3.65mm Thick x 3100mm Length	Each	20640.00
	New Item (PWD)		
2	Octagonal post		Kumaran Pole / Equivalent
a	Supply erection of 8mm free standing single arm bracket 8 sided octagonally continuously tapered structured pole with base plate of size 300x300x12mm as per IS 875 with following specifications. Bottom pole dia - 130mm Top Pole Dia - 70mm Thickness of pole - 3mm The pole should be hot tip galvanized confirming to BESN ISO 1461 with thickness of 65 micron	Each	20790.00
b	Supply erection of 8mm free standing double arm bracket 8 sided octagonally continuously tapered structured pole with base plate of size 300x300x12mm as per IS 875 with following specifications. Bottom pole dia - 130mm Top Pole Dia - 70mm Thickness of pole - 3mm The pole should be hot tip galvanized confirming to BESN ISO 1461 with thickness of 65 micron	Each	21920.00
c	Supply erection of 7mm free standing double arm bracket 8 sided octagonally continuously tapered structured pole with base plate of size 250x250x12mm as per IS 875 with following specifications. Bottom pole dia - 140mm Top Pole Dia - 70mm Thickness of pole - 3mm The pole should be hot tip galvanized confirming to BESN ISO 1461 with thickness of 65 micron	Each	20910.00
3	LIGHTNING ROD		Jef Flash / Nimbus / Equivalent
a	Supply of Early Streamer Emission Air Terminal (ESEAT) Model: L The ESEAT has corrosion resistant stainless chrome body made up of AISI 316 grade of height 0.50 metres capable of working in hazardous atmosphere. The Air	Each	72400.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
	terminal is non-radioactive and requires no special licensing. The unit is fully autonomous (no battery, no external power supply is required), collects energy from the ambient electric field. The ESEAT model has been tested in a high voltage laboratory in accordance with NFC 17 102 in order to measure the average gain in triggering. The average gain in triggering time ("Ts) obtained during the lab test for the offered model is 60 μ s. The ESEAT works on negative as well as positively polarized discharges. ESEAT has been tested for such discharges in Central Power Research Institute (CPRI). A dedicated tester is available to test the healthiness of the ESEAT on request (Page No. 37, Point No. 3 of Clause 8.6 of the Revised NFC 17-102 version 2011).		
	ESEAT Model : L - Radius of protection : 86 Metres Level of protection considered for the Project-II level		
b	Supply of Early Streamer Emission Air Terminal (ESEAT) Model: S The ESEAT has corrosion resistant stainless chrome body made up of AISI 316 grade of height 0.50 metres capable of working in hazardous atmosphere. The Air terminal is non-radioactive and requires no special licensing. The unit is fully autonomous (no battery, no external power supply is required), collects energy from the ambient electric field. The ESEAT model has been tested in a high voltage laboratory in accordance with NFC 17 102 in order to measure the average gain in triggering. The average gain in triggering time ("Ts) obtained during the lab test for the offered model is 60 μ s. The ESEAT works on negative as well as positively polarized discharges. ESEAT has been tested for such discharges in Central Power Research Institute (CPRI). A dedicated tester is available to test the healthiness of the ESEAT on request (Page No. 37, Point No. 3 of Clause 8.6 of the Revised NFC 17-102 version 2011).	Each	64300.00
	ESEAT Model : S - Radius of protection : 46 Metres Level of protection considered for the Project-II level		

Item No.	Description	Unit	Rates for 2019-20 in Rupees
c	MOUNTING STRUCTURE		
	Supply of Standard / Special Mounting Structure of height 4.5 mts. pipe, and 300 x 300 x 8mm MS plate, 3 mts. 48mm OD class C GI outer pipe, 1.8 mtr, 38mm OD inner pipe, for roof mounting on concrete base and with FRP adapter	Each	19300.00
d	DOWN CONDUCTOR		
	Supply and run of 25mm x 6mm GI Flat Down Conductor with necessary clamps / supports on wall / floor / ground for earth connection	Mtr	111.90
e	TEST LINK		
	Supply of Test Link Box for each Down conductor in order to disconnect the earth termination system to enable measurement of resistance	Each	4749.00
f	EARTH ELECTRODE		
	Supply and installation maintenance free GI Earthing System comprising of 50mm dia and 2 mtr. long earth electrode of low carbon steel rod with 100 micron bonding and 25 kgs. of carbon based environment friendly backfill compound and suitable clamp	Each	8770.00
g	SURGE PROTECTION		
	Supply and installation Cabinet Type Class 1 and 2 Combined Model SPD to arrest surges and overvoltages in the power line due to lightning switching action etc. they must be installed in the incoming MCC panel / DB of the respective building in parallel to the power circuit.	Each	18430.00
	Model: PSV4-12.5/400TT (3 phase power network)		
XVI	PART "P"		
	Conference type Public Address System, Projector and Motorized Screen		BOSCH/ Equivalent
1	Chairman Unit	Each	14799.00
2	Delegate Unit	Each	13120.00
3	Conference Controller	Set	32817.00
4	PA Mixer Amplifier 120W	Set	19760.00
5	PA Mixer Amplifier 240W	Set	25354.00
6	PA Booster Amplifier 480W	Set	43785.00
7	Wall Speaker 15W	Each	8509.00
8	Wall Speaker 30W	Each	12370.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
9	Ceiling Speaker 15W	Each	2154.00
10	Ceiling Speaker 20W	Each	3328.00 AKG/ Equivalent
11	Cordless Mic UHF	Each	19805.00
			Orbit/ Equivalent
12	8 Pin Conference Mic socket with Modular Box and Front Plate	Each	324.50
13	2 Core 1.5 sq.mm Shielded Copper Speaker Wire	RM	40.10
14	8 Core 1.5 sq.mm PVC Copper Conference Cable	RM	154.00
			Sony/ Equivalent
15	3200 Ansi Lumens Projector, XGA (1024 x 768) Resolution, Contrast Ratio : 4000:1	Each	38420.00
16	3600 Ansi Lumens Projector, XGA (1024 x 768) Resolution, Contrast Ratio : 20000:1	Each	54650.00
17	3300 Ansi Lumens Short Throw Projector, WXGA (1280 x 800) Resolution, Contrast Ratio:3000:1	Each	96280.00
			Liberty/ Equivalent
18	6' x 4' Motorized Screen	Each	11860.00
19	8' x 6' Motorized Screen	Each	15910.00
20	10' x 8' Motorized Screen	Each	19100.00
21	3 Feet Ceiling Mount Kit	Each	4210.00
22	20 Metre HDMI Cable	Set	4170.00
23	3 Core 1.5 sq.mm PVC Power cable for Projector	RM	56.80
	New Items (PWD)		
24	Unarmoured 0.5mm Telephone cable		
a	2 Pair	RM	9.00
b	4 Pair	RM	16.00
c	10 Pair	RM	38.00
d	20 Pair	RM	70.00
e	50 Pair	RM	158.00
25	Armoured 0.5mm Jellyfilled Telephone Cable		
a	10 Pair	RM	147.00
b	20 Pair	RM	216.00
c	50 Pair	RM	420.00
d	100 Pair	RM	728.00
e	200 Pair	RM	1,356.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
26	Unarmoured Co-axial Cable for TV		
a	RG-06	RM	23.00
b	RG-11	RM	52.00
27	Armoured Co-Axial cable for TV		
a	RG-06	RM	88.00
b	RG-11	RM	125.00
28	Unarmoured LAN & CCTV Cable		
a	CAT-6	RM	29.00
29	Armoured LAN & CCTV Cable		
a	CAT-6	RM	103.00
30	Unarmoured Speaker Cable		
a	2 Core - 1.00 sq.mm	RM	28.00
b	2 Core - 1.5 sq.mm	RM	40.00
31	Armoured Speaker Cable		
a	2 Core - 1.5 sq.mm	RM	83.00
b	2 Core - 3.5 sq.mm	RM	103.00
32	OFC Cable		
a	6 Core indoor	RM	53.00
b	6 core outdoor	RM	58.00
c	12 core indoor	RM	68.00
33	PoE Switches for CCTV IP camera		D-link/ Equivalent
a	4 Port	Each	6,038.00
b	8 port	Each	8,348.00
c	24 Port	Each	18,900.00
34	Network Video Recorder for CCTV		
a	4 Channel - 1 SATA	Each	5,460.00
b	8 Chennel - 1 SATA (1 No. Hard disk)	Each	6,300.00
c	16 Chennel - 2 SATA (2 Nos. Hard disk)	Each	11,550.00
d	32 Chennel - 2 SATA (2 Nos. Hard disk)	Each	21,000.00
35	LAN NETWORK SWITCHES		
I	Un Managed 10/ 100/1000		
a	8 Port	Each	1,943.00
b	16 Port	Each	5,093.00
c	24 Port	Each	6,248.00
II	Semi managed 10/100/1000		
a	24 Port	Each	11,760.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
III	Fully Managed 10/100/1000 Layer 2 with 1G Uplink		
a	8 Port	Each	16,800.00
b	24 Port	Each	34,650.00
c	24 Port with Fibre port	Each	61,950.00
d	48 Port		42,000.00
IV	Fully Managed 10/100/1000 Layer 2 with 10G Uplink		
a	24 Port	Each	37,800.00
b	28 Port	Each	48,563.00
V	Fully Managed 10/100/1000 Layer 3 with 10G Uplink		
a	24 Port	Each	1,10,250.00
b	24 Port with Fibre port	Each	1,26,000.00
c	48 Port	Each	2,04,750.00
36	Media Convertor for optical fibre cable		
a	Single mode	Each	5,250.00
b	Multi mode	Each	4,725.00
37	I/O Socket		
a	RJ-45	Each	158.00
b	RJ-11	Each	63.00
c	CAT 6 PVC Module Box	Each	63.00
d	Face plate single socket RJ-45	Each	95.00
e	Face plate dual socket RJ-45	Each	105.00
f	Face plate quad socket RJ-45	Each	116.00
38	Hard Disk for NVR		Western/ Digital/ Equivalent
a	2 TB	Each	5,775.00
b	4 TB	Each	12,233.00
c	6 TB	Each	16,590.00
39	8 TB Rack with Accessories	Each	24,150.00 D-link/ Equivalent
a	2U Rack	Each	1,890.00
b	4U Rack	Each	2,625.00
c	6U Rack	Each	3,150.00
d	9U Rack	Each	4,200.00
e	12U Rack	Each	6,300.00
f	36U Rack	Each	21,000.00
g	42U Rack	Each	36,750.00
	Fan extra for the above rack	Each	525.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
40	Patch Cord		
a	1 Metre Length	Each	137.00
b	2 Metre Length	Each	184.00
c	3 Metre Length	Each	221.00
d	24 Port Patch Panel - Unloaded	Each	2,100.00
e	24 Port Patch Panel - Fully loaded	Each	3,938.00
f	PART "Q"		
g	HIRE CHARGES FOR TEMPORARY ARRANGEMENTS		
1	Metal Halide lamp		
a	1 day	Each	263.00
b	2 days	Each	331.00
c	3 days	Each	383.00
d	4 days	Each	431.00
e	5 days	Each	483.00
f	6 days	Each	525.00
g	7 days	Each	578.00
2	Cable		
a	2 of 7/20 sq.mm	RM	2.00
b	4 of 7/20 sq.mm	RM	4.00
c	4 of 19/16 sq.mm	RM	11.00
d	4 of 7/16 sq.mm	RM	6.00
e	4 of 120 sq.mm	RM	53.00
f	3.5x 180 sq.mm LTUG	RM	21.00
g	4 of 185 sq.mm	RM	74.00
h	3 core flexible wire	RM	3.00
i	4 core flexible wire	RM	3.00
j	4 core 6 sq.mm copper cables	RM	6.00
k	4 x 10 sq.mm flexible cable	RM	6.00
l	2 of 3/ 20 sq.mm	RM	2.00
m	3 1/2 x 50 sq.mm LTUG	RM	11.00
n	Co- Axial cable	RM	1.00
4	Serial set		
a	2 days	RM	17.00
b	3 days	RM	25.00
5	Fly Catcher 2 days	Each	168.00
6	Air cooler with stand 2 days	Each	284.00
7	Air Circulator 2 days	Each	63.00
8	Pedestal fan	Each	42.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
9	LED Nose Light	Each	18.00
10	Earth pipe	RM	32.00
11	100A Change over switch	Each	158.00
12	250A Change over switch	Each	168.00
13	400A Change over switch	Each	210.00
14	250A Change over switch with Panel Board	Each	788.00
15	100A Panel Board with 100A TPN Switch & 5 No.s 30A TPN switch with bus bar	Each	814.00
16	250A Panel Board with 250A TPN Switch & 7 No.s 63A DPMCB switch	Each	1050.00
17	100A Panel Board incoming 100A TPN Switch with various range of TP/ DP/ SP MCB with suitable angle iron frame work	Each	777.00
18	200A Panel Board	Each	840.00
19	400A Panel Board	Each	1575.00
20	4'40 W Patty tube light with fitting	Each	25.00
21	15A/ 5A Plug board	Each	25.00
22	Blank post	Each	1943.00
23	6mtr GI post for metal Hallide fitting	Each	95.00
24	1.5 TR Split AC	Each	5250.00
25	2 TR Split AC	Each	7035.00
26	5 TR Split AC	Each	24780.00
27	7.5 TR Ductable AC	Each	36225.00
28	5 TR Slim pack	Each	24570.00
29	Air Curtain	Each	525.00
30	Republic Day High power Audio sysytem	Each	47250.00
31	Republic Day PA sysytem	Each	7350.00
32	Republic Day Amplifier, Mic, XLR	Each	5250.00
33	2x15 HF 3 way speaker	Each	1680.00
34	1x15 HF Speaker	Each	1050.00
35	4x12 Loud speaker	Each	630.00
36	Car calling system Arrangement	Each	3150.00
37	Cordless Mic	Each	525.00
38	Wired Mic	Each	525.00
39	32 Channel mixer Amplifier	Each	630.00
40	Laptop to play CD Songs	Each	2100.00
41	5KVA with 1 Hour back up	Each	7875.00
42	Power Amplifier	Each	210.00

Item No.	Description	Unit	Rates for 2019-20 in Rupees
43	Sony Video Camera	Each	5250.00
44	42" Plasma Screen	Each	2625.00
45	Mixer Board, Computer, UPS, etc.,	Each	8400.00
46	200W LED Flood light fitting	Each	210.00
47	5TR Slim Package AC	Each	26570.00

Note : 1) The basic rate adopted under this head is exclusive of all taxes and GST.

XVII VERTICAL THREE PHASE DISTRIBUTION BOARD WITH MCBS

4 Way / 8 way / 12 Way Vertical TPMCB sheet steel distribution boards Flush type/ Surface type fitted with Bus bars and Neutral links with single / three phase MCB outgoing and separate 4 way provision for accommodating one No.4 pole incoming MCB / Isolator and another separate 4 way provision for accommodating one No. 4 pole ELCB/ RCD with label holder and provisions for taking up cable for size not less than 35 sq.mm

1. TPMCB DB WITH META DOOR COVER WITH IP 42 PROTECTION

Description	No. of ways Havell's / incomer MCB/ Isolator	No.of ways incomer ELCB/RCD	No.of outgoing ways	Legrand (MDS) / HAGER (L & T)	All other makes with ISI (Std /HPL / equivalent) (Rate in Rupees)
4 Ways 3 Phase DB	4	4	12	5299.00	4354.00
8 Ways 3 Phase DB	4	4	24	6716.00	5360.00
12 Ways 3 Phase DB	4	4	36	8955.00	6593.00

2.TPMCB DB WITH ACRYLIC DOOR COVER WITH IP 42 PROTECTION

Description	No. of ways incomer MCB/ Isolator	No.of ways incomer ELCB/RCD	No.of outgoing ways	Legrand (MDS) / HAGER (L & T) Rate in Rs.
4 Ways 3 Phase DB	4	4	12	6398.00
8 Ways 3 Phase DB	4	4	24	8144.00
12 Ways 3 Phase DB	4	4	36	10830.00

3. NEW ITEM

6 Way Vertical TPN Distributions boards; IP43 with double door (Metal); with 12 module incomers and 18 Single Phase/ Three Phase/ MCB's outgoing; as per IS 8623 III	Each	9821.00
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4. INDUSTRIAL TYPE TPMCB DB WITH IP 54 PROTECTION

Description	No. of ways incomer MCB/ Isolator	No. of ways incomer ELCB/RCD	No. of outgoing ways	Legrand (MDS) / HAGER (L & T) Rate in Rs.
4 Ways 3 Phase DB	4	4	12	9900.00
8 Ways 3 Phase DB	4	4	24	11950.00
12 Ways 3 Phase DB	4	4	36	16020.00

XVIII HORIZONTAL THREE PHASE DISTRIBUTION BOARD WITH MCBS

4 way / 6 way / 8 way / 12 way TPMCB sheet steel distribution boards Flush type / Surface type fitted with Bus bars and Neutral links with single/ three phase MCB outgoing and separate 4 way provision for accommodating one No. 4 pole incoming MCB / Isolator and another separate 4 way provision for accommodating one No. 4 pole ELCB / RCD with label holder and provisions for taking up cable for size not less than 35 sq.mm

1. TPMCB DB WITH METAL DOOR COVER WITH IP 42 PROTECTION

Description	No. of ways Havell's / incomer MCB/ Isolator	No. of ways incomer ELCB/RCD	No. of outgoing ways	Legrand (MDS) / HAGER (L & T)	All other makes with ISI (Std /HPL / equivalent) (Rate in Rupees)
4 Ways 3 Phase DB	4	4	12	2218.00	1756.00
6 Ways 3 Phase DB	4	4	18	2731.00	2218.00
8 Ways 3 Phase DB	4	4	24	3276.00	2721.00
12 Ways 3 Phase DB	4	4	36	4837.00	3697.00

2. TPMCB DB WITH ACRYLIC DOOR COVER WITH IP 42 PROTECTION

Description	No. of ways incomer MCB/ Isolator	No. of ways incomer ELCB/RCD	No. of outgoing ways	Legrand (MDS) / HAGER (L & T) Rate in Rs.
4 Ways 3 Phase DB	4	4	12	2577.00
6 Ways 3 Phase DB	4	4	18	3163.00
8 Ways 3 Phase DB	4	4	24	3779.00
12 Ways 3 Phase DB	4	4	36	5760.00

3.INDUSTRIAL TYPE TPMCB DB WITH IP 54 PROTECTION

Description	No. of ways incomer MCB/ Isolator	No.of ways incomer ELCB/RCD	No.of outgoing ways	Legrand (MDS) / HAGER (L & T) Rate in Rs.
4 Ways 3 Phase DB	4	4	12	6254.00
6 Ways 3 Phase DB	4	4	18	7527.00
8 Ways 3 Phase DB	4	4	24	8236.00
12 Ways 3 Phase DB	4	4	36	11370.00

XIX 7 SEGMENTS (3 TIER) 3 PHASE DISTRIBUTION BOARD WITH MCB

4 Way/6 way/8 way/12 Way TPMCB sheet steel distribution boards Flush type/Surface type fitted with Bus bars and Neutral links with single /three phase MCB out goings and separate 4 way provision for accommodating one No. 4 pole incoming MCB /Isolator and another separate 4 way provision for accommodating one No. 4 pole ELCB/RCD (Totally 8 ways in one segment)(3 x 4 ways in each segment) and separate provision for MCB /Isolator)(Totally 12 Nos.) for sub incomers in 3 segments with label holder and provisions for taking up cable for size not less than 35 sq.mm

1. New Item

Vertical TPN Distribution Boards (with MCCB Incomer); Double Door; IP43, as per IS 8623 III; Impact resistance IK09; Frame MCCB Incomer & Single Phase/Three Phase MCBs as Outgoing (for power loads exceeding 100A)	Unit	Hager / Equivalent (Incomer 160A MCCB)	Hager / Equivalent (Incomer 250A MCCB)
4 Way, MCCB + 12 Modules	Each	8870.00	16430.00
6 Way, MCCB + 18 Modules	Each	10250.00	17900.00
8 Way, MCCB + 24 Modules	Each	11170.00	19100.00
12 Way, MCCB + 36 Modules	Each	14876.00	20250.00
16 Way, MCCB + 48 Modules	Each	17570.00	22800.00

2.TPMCB DB WITH METAL /ACRYLIC DOOR COVER WITH IP 42 PROTECTION

Description	No. of ways incomer MCB/Isolator	No. of ways incomer ELCB/RCD	No.of Sub incomers	No. of outgoing ways	Legrand (MDS) /HAGER(L&T) Rate in Rupees
4 Ways 3 Phase DB	4	4	12	12	5206.00
6 Ways 3 Phase DB	4	4	12	18	5884.00
8 Ways 3 Phase DB	4	4	12	24	6562.00
12 Ways 3 Phase DB	4	4	12	36	8359.00

XX SINGLE PHASE DISTRIBUTION BOARD WITH MCBs

4 way/8 way/12 way Vertical SPMCB sheet steel distribution boards Flush type/Surface type fitted with Bus bars and Neutral links with single phase MCB out goings and separate 2 way provision for accommodating one No. 2 pole incoming MCB /Isolator and another separate 2 way provision for accommodating one No, 2 pole ELCB/RCD with label holder and provisions for taking up cable for size not less than 35 sq.mm

1. SPMCB DB WITH METAL DOOR COVER WITH IP 42 PROTECTION

Description	No. of ways Havell's / incomer MCB/ Isolator	No.of ways incomer ELCB/RCD	No.of outgoing ways	Legrand (MDS) / HAGER (L & T) equivalent	All other makes with ISI (Std /HPL / equivalent) (Rate in Rupees)
4 Ways single Phase DB	2	2	2	873.00	571.00
8 Ways single Phase DB	2	2	6	1091.00	780.00
12 Ways single Phase DB	2	2	10	1313.00	1004.00

2. SPMCB DB WITH ACRYLIC DOOR COVER WITH IP 42 PROTECTION

Description	No. of ways incomer MCB/ Isolator	No.of ways incomer ELCB/RCD	No.of outgoing ways	Legrand (MDS) / HAGER (L & T) / equivalent Rate in Rs.
4 Ways single Phase DB	2	2	2	1029.00
8 Ways single Phase DB	2	2	6	1213.00
12 Ways single Phase DB	2	2	10	1472.00

3. INDUSTRIAL TYPE SPMCB DB WITH IP 54 PROTECTION.

Description	No. of ways incomer MCB/ Isolator	No.of ways incomer ELCB/RCD	No.of outgoing ways	Legrand (MDS) / HAGER (L & T) equivalent Rate in Rs.
4 Ways single Phase DB	2	2	2	2628.00
8 Ways single Phase DB	2	2	6	3079.00
12 Ways single Phase DB	2	2	10	3549.00

III (H) RATES FOR CONVEYANCE OF MATERIALS

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CONVEYANCE

1) Rates for Conveyance of C.I./G.I./D.I. Pipes and Specials

Size	Unloading from Railway wagons or loading into Railway wagons/ Tonne	Loading into carts or lorries/ Tonne	Unloading from carts or lorries & stacking/ Tonne	Transport charges up to 8km or part thereof/ Tonne	Total/ Tonne
1	2	3	4	5	6
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
Up to 125 mm	276.78	181.85	181.85	163.73	804.21
Over 125 mm up to 200 mm	379.19	243.17	243.17	174.88	1040.40
Over 200 mm up to 350 mm	465.31	321.68	321.68	178.05	1286.73
Over 350 mm up to 500 mm	582.05	380.97	380.97	200.30	1544.30
Over 500 mm up to 700 mm	702.71	440.39	440.39	220.89	1804.38
Above 700mm	790.79	524.60	524.60	238.44	2078.43

For every 1 KM or part thereof	Rate per Tonne in Rupees	
	up to 500 mm	Above 500 mm
Beyond 8 KM to 25 KM	12.66	14.26
Above 25 KM to 50 KM	9.20	10.81
Above 50 KM to 80 KM	8.06	9.60
Above 80 KM to 125 KM	6.04	7.99
Above 125 KM to 200 KM	6.04	6.04
Above 200 KM	3.96	3.96

- Note:**
- 1) For lorry and cart consignments of capacity one Tonne and below, double the rates may be allowed, when the total quantity to be transported is within 1.00 M.T.
 - 2) For Lorry consignments from 1 to 2 Tonnes, the rates admissible for two Tonnes may be allowed, when the total quantity to be transported is within 2 M.T.
 - 3) For Lorry Consignments from 2 to 5 Tonnes, the rates admissible for 5 Tonnes may be allowed, when the total quantity to be transported is within 5 M.T.
 - 4) Above 5 Tonnes of Lorry consignment, full lorry load rate of 9 Tonnes may be allowed.
 - 5) For the conveyance of E.R.W.M.S. seamless pipes and specials up to 350mm dia, the rates of C.I. Pipes of respective dia available in the Schedule of rates may be adopted.
 - 6) An extra rate of Rs. 32.90 per Tonne may be allowed for unloading from Railway wagons and stacking before loading into carts and lorries.

2) Rates for Conveyance of M.S. Pipes and Specials

Size	Unloading from Railway wagons or loading into Railway wagons/ Tonne	Loading into carts or lorries/ Tonne	Unloading from carts or lorries & stacking/ Tonne	Transport charges up to 8km or part thereof/ Tonne	Total/ Tonne
1	2	3	4	5	6
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
Up to 350 mm	1045.47	723.79	723.79	406.99	2900.04
Over 350 mm up to 500 mm	1313.55	857.86	857.86	451.50	3480.76
Over 500 mm up to 700 mm	1585.44	984.16	984.16	499.18	4052.93
Above 700mm	1780.77	1187.20	1187.20	540.46	4695.62

For every 1 KM or part thereof	Rate per Tonne in Rupees	
	up to 500 mm	Above 500 mm
Beyond 8 KM to 25 KM	28.58	31.75
Above 25 KM to 50 KM	20.47	24.61
Above 50 KM to 80 KM	17.66	22.14
Above 80 KM to 125 KM	13.92	17.71
Above 125 KM to 200 KM	13.92	13.92
Above 200 KM	9.84	9.84

- Note : 1) For lorry and cart consignments of capacity one Tonne and below double the rates may be allowed, when the total quantity to be transported is within 1.00 M.T.
- 2) For Lorry consignments from 1 to 2 Tonnes the rates admissible for two Tonnes may be allowed, when the total quantity to be transported is within 2 M.T.
- 3) For Lorry Consignments from 2 to 5 Tonnes the rates admissible for 5 Tonnes may be allowed, when the total quantity to be transported is within 5 M.T.
- 4) Above 5 Tonnes of Lorry consignment, full lorry load rate of 9 Tonnes may be allowed.
- 5) An extra rate of Rs. 32.90 per Tonne may be allowed for unloading from Railway wagons and stacking before loading into carts and lorries.

3) Rates for Conveyance of R.C.C. /P.S.C/B.W.S.C. Pipes and Specials

Size	Unloading from Railway wagons or loading into Railway wagons/ Tonne	Loading into carts or lorries/ Tonne	Unloading from carts or lorries & stacking/ Tonne	Transport charges up to 8km or part thereof/ Tonne	Total/ Tonne
1	2	3	4	5	6
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
150 mm to 200 mm	214.43	164.64	164.64	187.54	731.24
Over 200 mm up to 350 mm	266.07	210.64	210.64	197.09	884.43
Over 350 mm up to 500 mm	333.14	260.37	260.37	205.08	1058.95
Over 500 mm up to 700 mm	415.46	306.37	306.37	232.04	1260.25
Above 700mm	451.90	340.79	340.79	251.20	1384.68

For every 1 KM or part thereof	Rate per Tonne in Rupees	
	up to 500 mm	Above 500 mm
Beyond 8 KM to 25 KM	10.87	14.55
Above 25 KM to 50 KM	7.30	11.05
Above 50 KM to 80 KM	6.10	10.01
Above 80 KM to 125 KM	6.10	7.99
Above 125 KM to 200 KM	6.10	6.10
Above 200 KM	4.03	4.03

- Note : 1) For lorry and cart consignments of capacity 1 Tonne and below, double the rates may be allowed, when the total quantity to be transported is within 1 M.T.
- 2) For Lorry consignments up to 5 MT (i.e.) above 1 MT Load, the rates admissible for 5 Tonnes may be allowed.

4) Rates for Conveyance of A.C. Pipes and Specials

Size	Unloading from Railway wagons or loading into Railway wagons/ Tonne	Loading into carts or lorries/ Tonne	Unloading from carts or lorries & stacking/ Tonne	Transport charges up to 8km or part thereof/ Tonne	Total/ Tonne
1	2	3	4	5	6
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
Up to 125 mm	141.67	126.30	126.30	286.10	680.38
Over 125 mm up to 200 mm	193.31	134.01	134.01	300.43	761.77
Over 200 mm up to 250 mm	220.20	164.64	164.64	341.78	891.25
For 300 mm	237.40	172.29	172.29	351.32	933.30
For 350 mm	237.40	191.47	191.47	356.10	976.43
For 400 mm	246.96	212.53	212.53	379.96	1051.98
For 450 mm	273.74	237.40	237.40	402.22	1150.76
For 500 mm	291.06	262.27	262.27	414.86	1230.47
For 600 mm	319.73	300.61	300.61	445.12	1366.06
For 700 mm	333.14	308.28	308.28	446.73	1396.41

For every 1 KM or part thereof	Rate per Tonne in Rupees	
	up to 500 mm	Above 500 mm
Beyond 8 KM to 25 KM	21.85	25.54
Above 25 KM to 50 KM	12.88	14.78
Above 50 KM to 80 KM	12.02	14.03
Above 80 KM to 125 KM	9.95	12.02
Above 125 KM to 200 KM	7.99	9.95
Above 200 KM	6.10	7.99

- Note :
- 1) For lorry and cart consignments of capacity one Tonne and below double the rates may be allowed, when the total quantity to be transported is within 1 M.T.
 - 2) For Lorry consignments from 1 to 2 Tonnes the rates admissible for two Tonnes may be allowed, when the total quantity to be transported is within 2 M.T.
 - 3) For Lorry Consignments from 2 to 5 Tonnes the rates admissible for 5 Tonnes may be allowed, when the total quantity to be transported is within 5 M.T.
 - 4) Above 5 Tonnes of Lorry consignment, full lorry load rate of 9 Tonnes may be allowed.
 - 5) For the conveyance of E.R.W.M.S. seamless pipes and specials up to 350mm dia, the rates of C.I. Pipes of respective dia available in the Schedule of Rates may be adopted.
 - 6) An extra rate of Rs. 32.86/Tonne may be allowed for unloading from Railway wagons and stacking before loading into carts and lorries.

5) Rates for Conveyance of PVC/ HDPE /GRP Pipes and Specials

Size	Unloading from Railway wagons or loading into Railway wagons/ Tonne	Loading into carts or lorries/ Tonne	Unloading from carts or lorries & stacking/ Tonne	Transport charges up to 8km or part thereof/ Tonne	Total/ Tonne
1	2	3	4	5	6
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
50mm to 110mm OD	183.76	160.84	160.84	476.98	982.42
125mm to 200mm OD	237.40	162.68	162.68	480.08	1042.84
Over 200mm to 315mm OD	241.26	214.43	214.43	516.65	1186.79
Over 315mm OD	245.06	220.13	220.13	561.17	1246.50

For every 1 KM or part thereof	Rate per Tonne in Rupees
Beyond 8 KM to 25 KM	41.18
Above 25 KM to 50 KM	27.49
Above 50 KM to 80 KM	24.09
Above 80 KM to 125 KM	18.00
Above 125 KM to 200 KM	13.97
Above 200 KM	9.95

- Note:**
- 1) For departmentally loading of PVC pipes and Specials (excluding transport charges) Up to 110 mm dia Rs. 3.10 each length (6m)
 - 2) For departmentally unloading of PVC pipes and Specials Up to 110 mm dia Rs. 3.10 each length (6m)
 - 3) a. For departmentally loading for remaining sizes of pipes Rs. 175.20 per 1 MT
b. For departmentally unloading for remaining sizes of pipes Rs. 175.20 per 1 MT
 - 4) An extra rate of Rs. 34.65 / Tonne may be allowed for unloading from Railway wagons and stacking before loading into carts and lorries.
 - 5) For lorry and cart consignments of capacity one Tonne and below double the rates may be allowed, when the total quantity to be transported is within 1 M.T.
 - 6) For Lorry consignments from 1 to 2 Tonnes the rates admissible for two Tonnes may be allowed, when the total quantity to be transported is within 2 M.T.
 - 7) For Lorry Consignments from 2 to 5 Tonnes the rates admissible for 5 Tonnes may be allowed, when the total quantity to be transported is within 5 M.T.

6) Rates for Conveyance of SW Pipes and Specials

Size	Unloading from Railway wagons or loading into Railway wagons/ Tonne	Loading into carts or lorries/ Tonne	Unloading from carts or lorries & stacking/ Tonne	Transport charges up to 8km or part thereof/ Tonne	Total/ Tonne
1	2	3	4	5	6
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
100 to 200 mm	266.08	174.20	174.20	260.69	875.16
Over 200 to 350 mm	337.00	223.99	223.99	281.33	1066.32
Over 350 mm to 500 mm	423.12	269.93	269.93	305.20	1268.17

For every 1 KM or part thereof	Rate per Tonne in Rupees
Beyond 8 KM to 25 KM	18.18
Above 25 KM to 50 KM	11.05
Above 50 KM to 80 KM	12.07
Above 80 KM to 125 KM	7.99
Above 125 KM to 200 KM	6.10
Above 200 KM	4.03

- Note:** 1) For lorry and cart consignments of capacity one Tonne and below double the rates may be allowed, when the total quantity to be transported is within 1 M.T.
- 2) An extra rate of Rs.34.65 / Tonne may be allowed for unloading from Railway wagons and stacking before loading into carts and lorries.

7) Rates for Conveyance of Pig lead and Yarn

Size	Unloading from Railway wagons or loading into Railway wagons/ Tonne	Loading into carts or lorries/ Tonne	Unloading from carts or lorries & stacking/ Tonne	Transport charges up to 8km or part thereof/ Tonne	Total/ Tonne
1	2	3	4	5	6
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
Pig lead / Yarn	91.82	78.46	78.46	95.35	344.09

For every 1 KM or part thereof	Rate per Tonne in Rupees
Beyond 8 KM to 25 KM	10.88
Above 25 KM to 50 KM	9.20
Above 50 KM to 80 KM	8.06
Above 80 KM to 125 KM	6.10
Above 125 KM to 200 KM	6.10
Above 200 KM	4.03

Note: The above rates are basic rates only and GST extra applicable as per GO.

8 a) Rates for Conveyance of Materials by Road in Hills

		Rate for 2019-20 in Rupees					
Sl.No.	Distance in Kilometre	Cement and Steel (One metric tonne)	Limestone, Laterite, Brickjelly, Wood work, Pond Ash (wet / dry) , stone dust (One Cubic Metre)	Rough Stone, Bond Stone, Cut Stone, Broken Stone jelly, Sand, Gravel, Surki, Earth, Crushed stone sand (One Cubic Metre)	Third Class Country Bricks (Kiln Burnt) (1000 nos.)	Mangalore Tiles (1000 Nos.) Machine Pressed Tiles (2000 Nos.) Hydraulically pressed Mosaic Flooring Tiles (1500 Nos.)	Bricks II class Chamber burnt Bricks (Table Moulded/Ground Moulded), Fly Ash Bricks (1000 Nos.)
1	2	3	4	5	6	7	8
1	Co-efficient	1.00	1.10	1.60	1.35	1.80	2.25
2	Add for every extra 1 Km and part thereof.....						
ba	0 to 10 kms	12.76	13.39	20.39	17.21	22.94	28.66
b	10 to 20 kms	10.92	12	17.45	14.73	19.65	24.55
c	20 to 40 kms	9.39	10.32	15.03	12.66	16.9	21.12
d	40 to 80 kms	8.10	8.93	14.10	10.92	14.54	18.23
e	Above 80 kms	7.40	8.14	11.83	9.99	13.29	16.62

- Note: 1. The above rates do not include stacking charges [as per Circular Memo No.230 Wks.IV(2)/62-3 dated 10.06.1962 of Chief Engineer (General/ PWD)]
- For Conveyance of Materials on cart track, allow 20% extra over the above rates excluding loading and unloading charges.
 - For Sandy and Slushy soil tracks, add 50% extra over the above rates excluding loading and unloading charges.
 - The quantity for Payment towards conveyance of earth in column (5) is for the pit measured quantity at the site of excavation only.
 - For conveyance of laterite, broken stone jelly, etc., through lorries, the rates provided are for the volume with voids.
 - For all materails which finds place in column 3,4,5,6,7 & 8 above, necessary incidental charges, loading charges and unloading charges have been included already under their basic cost furnished below the head "Rates of Materials" itself. Hence, no separate incidental charges, loading and unloading charges shall be allowed for the above materials.
 - The above rates are basic rates only and GST extra applicable as per GO

8 b) Rates for Conveyance of Materials by Road in plains

		Rate for 2019-20 in Rupees					
Sl.No.	Distance in Kilometre	Cement and Steel (One metric tonne)	Limestone, Laterite, Brickjelly, Wood work, Pond Ash (wet /dry) , stone dust (One Cubic Metre)	Rough Stone, Bond Stone, Cut Stone, Broken Stone jelly, Sand, Gravel, Surki, Earth, Crushed stone sand (One Cubic Metre)	Third Class Country Bricks (Kiln Burnt) (1000 nos.)	Mangalore Tiles (1000 Nos.) Machine Pressed Tiles (2000 Nos.) Hydraulically pressed Mosaic Flooring Tiles (1500 Nos.)	Bricks II class Chamber burnt Bricks (Table Moulded/Ground Moulded), Fly Ash Bricks (1000 Nos.)
1	2	3	4	5	6	7	8
1	Co efficient	1.00	1.10	1.60	1.35	1.80	2.25
2	Add for every extra 1Km and part there of						
a	0 to 10 kms	6.38	7.00	10.20	8.61	11.47	14.33
b	10 to 20 kms	5.46	6.00	8.72	7.37	9.83	12.27
c	20 to 40 kms	4.70	5.16	7.52	6.33	8.45	10.56
d	40 to 80 kms	4.05	4.46	7.05	5.46	7.27	9.12
e	Above 80kms	3.70	4.07	5.91	4.99	6.65	8.31
3	Loading Charges	101.20	48.29	33.11	47.52	47.52	47.52
4	Unloading Charges	101.20	48.29	33.11	47.52	47.52	47.52
5	Add above extra for inter state works	20.40	22.40	32.70	27.50	36.70	46.10

- Note: 1 The above rates do not include stacking charges [as per Circular Memo No.230 Wks.IV(2)/62-3 dated 10.06.1962 of Chief Engineer (General)]
- 2 For Conveyance of Materials on cart track, allow 20% extra over the above rates excluding loading and unloading charges.
- 3 For Sandy and Slushy soil tracks, add 50% extra over the above rates excluding loading and unloading charges.
- 4 The quantity for Payment towards conveyance of earth in coloumn (5) is for the pit measured quantity at the site of excavation only.
- 5 For conveyance of laterite, broken stone jelly, etc., through lorries, the rates provided are for the volume with voids.
- 6 For all materails which finds place in column 3,4,5,6,7 & 8 above, necessary incidental charges, loading charges and unloading charges have been included already under their basic cost furnished below the head "Rates of Materials" itself. Hence, no separate incidental charges, loading and unloading charges shall be allowed for the above materials.
- 7 The above rates are basic rates only and GST extra applicable as per GO

9) Rates for Conveyance of materials by Head load

Sl.No	Description of material	Unit	Rate for 2019-20 in Rupees		
			LEAD		LIFT
			Above 10m and upto 100m	Add extra for every additional 100m or part thereof	Add extra for every 1m height or part thereof for more than 2m lift
1	2	3	4	5	6
1	Rough Stone, Broken Stone Jelly, Cut Stone, RCC Slab, Sand - Cement Block, Wooden Scantling, Wooden plank	cu.m	88.00	36.55	9.55
2	Lime, Lime Stone, Laterite, Brick Jelly, Earth, Sand, Gravel, Surki, Pond Ash (wet/dry), Crushed Stone Sand, Stone Dust	cu.m	46.80	36.55	7.15
3	a) Mangalore Tiles	1000 Nos.	95.45	47.95	12.05
	b) Machine Pressed Tiles	2000 Nos.	95.45	47.95	12.05
	c) Hydraulic Pressed Mosaic Flooring Tiles	1500 Nos.	95.45	47.95	12.05
	d) Terrace Bricks, Flat Tiles and Pan Tiles	2500 Nos.	95.45	47.95	12.05
	e) Bricks	1000 Nos.	95.45	47.95	12.05
4	Cement, A.C. Sheet, Bitumen, Asphalt, Tar	M.T	86.90	47.95	9.55
5	Steel	M.T	146.00	58.75	12.05

- Note:
- 1 Fraction of 100 metres to be rounded off to the nearest 100 metres
 - 2 The rates indicated in the table shall be applicable only to inaccessible places (i.e) the places Wherever the Bullock Carts cannot move [Chief Engineer (General) Memo No.CTO(A) / 38153 / 89 / dated 03.02.1989]
 - 3 For an initial lead of 10m and initial lift of 2m, no charge towards head load is allowable.
 - 4 The above rates are basic rates only and GST extra applicable as per GO

IV (A) RATES FOR WORKS

BLANK

INFILTRATION WORKS

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
1	Earthwork excavation above water level in light or sandy or clayey soils for manhole wells, infiltration wells, suction wells etc. including levelling the site with an initial lead of 10 metres		
	First depth of 2 metres	One Cubic metre	67.10
	Second depth of 2 metres	One Cubic metre	106.56
	Third depth of 2 metres	One Cubic metre	153.93
	Fourth depth of 2 metres	One Cubic metre	214.44
2	Erection of Ring well below water level including all incidental charges using special tools and plants such as air compressor helmet etc. complete and including bailing out water.		
a.	For 0.90 metre dia Ring well (internal)		
	First depth of 2 metres	One metre	544.66
	Second depth of 2 metres	One metre	1003.80
	Third depth of 2 metres	One metre	2110.22
	Fourth depth of 2 metres	One metre	4213.87
	Fifth depth of 2 metres	One metre	8297.49
	Sixth depth of 2 metres	One metre	16608.13
b.	For 1.2 metre dia Ring well (internal)		
	First depth of 2 metres	One metre	605.18
	Second depth of 2 metres	One metre	1210.35
	Third depth of 2 metres	One metre	2412.81
	Fourth depth of 2 metres	One metre	4520.40
	Fifth depth of 2 metres	One metre	8389.58
	Sixth depth of 2 metres	One metre	16760.74
c.	For 1.50 metre dia Ring well (internal)		
	First depth of 2 metres	One metre	699.90
	Second depth of 2 metres	One metre	1389.27
	Third depth of 2 metres	One metre	2749.60
	Fourth depth of 2 metres	One metre	5476.84
	Fifth depth of 2 metres	One metre	10937.90
	Sixth depth of 2 metres	One metre	21782.39

Schedule Item No.	Description	Unit	Rate for 2019-20 in Rupees	
			Ordinary soil (or) loose soil sandy soil	Silt (or) clay pocket
3	Sinking well below water level including all incidental charges using special tools and plants such as air compressor, helmet etc., complete and including baling out water			
a.	For 1.0 metre dia (internal)			
	First depth of 2 metres	One metre	795.94	1148.52
	Second depth of 2 metres	One metre	1339.28	2103.64
	Third depth of 2 metres	One metre	2677.25	4203.34
	Fourth depth of 2 metres	One metre	5284.77	8393.53
	Fifth depth of 2 metres	One metre	10060.39	15762.20
	Sixth depth of 2 metres	One metre	18889.38	29501.01
	Seventh depth of 2 metres	One metre	27715.75	40102.12
	Eighth depth of 2 metres	One metre	36546.05	50701.91
	Nineth depth of 2 metres	One metre	45368.47	61297.75
	Tenth depth of 2 metres	One metre	54197.46	71898.86
b.	For 1.25 metre dia (internal)			
	First depth of 2 metres	One metre	1038.01	1574.77
	Second depth of 2 metres	One metre	2081.28	3154.81
	Third depth of 2 metres	One metre	4153.35	6379.34
	Fourth depth of 2 metres	One metre	7446.30	11466.77
	Fifth depth of 2 metres	One metre	13162.58	20343.12
	Sixth depth of 2 metres	One metre	23767.63	36827.59
	Seventh depth of 2 metres	One metre	34364.79	53319.95
	Eighth depth of 2 metres	One metre	44967.21	69805.74
	Nineth depth of 2 metres	One metre	55574.89	86296.78
	Tenth depth of 2 metres	One metre	66173.36	102786.51
c.	For 2.0 metre dia (internal)			
	First depth of 2 metres	One metre	1615.56	2596.99
	Second depth of 2 metres	One metre	3220.59	5195.30
	Third depth of 2 metres	One metre	6428.02	10372.19

Schedule Item No.	Description	Unit	Rate for 2019-20 in Rupees	
			Ordinary soil (or) loose soil sandy soil	Silt (or) clay pocket
	Fourth depth of 2 metres	One metre	10276.15	19010.42
	Fifth depth of 2 metres	One metre	20086.58	34570.02
	Sixth depth of 2 metres	One metre	40163.95	64580.17
	Seventh depth of 2 metres	One metre	60237.38	94619.27
	Eighth depth of 2 metres	One metre	80313.43	124645.21
	Nineth depth of 2 metres	One metre	100392.12	154668.51
	Tenth depth of 2 metres	One metre	120465.55	184691.82
d.	For 2.5 metre dia (internal)			
	First depth of 2 metres	One metre	2036.55	3388.99
	Second depth of 2 metres	One metre	4236.23	6663.51
	Third depth of 2 metres	One metre	8468.52	13273.09
	Fourth depth of 2 metres	One metre	15771.41	24666.18
	Fifth depth of 2 metres	One metre	29364.19	45615.80
	Sixth depth of 2 metres	One metre	56707.62	85421.91
	Seventh depth of 2 metres	One metre	84045.79	125222.75
	Eighth depth of 2 metres	One metre	111387.91	165026.23
	Nineth depth of 2 metres	One metre	138726.07	204827.08
	Tenth depth of 2 metres	One metre	166072.13	244629.24
e.	For 3.00 metre dia (internal)			
	First depth of 2 metres	One metre	2631.20	4584.87
	Second depth of 2 metres	One metre	5217.67	8915.82
	Third depth of 2 metres	One metre	10423.50	17838.22
	Fourth depth of 2 metres	One metre	20118.16	33501.75
	Fifth depth of 2 metres	One metre	37599.85	62560.73
	Sixth depth of 2 metres	One metre	71267.37	109079.03
	Seventh depth of 2 metres	One metre	104933.57	155535.49
	Eighth depth of 2 metres	One metre	138598.46	202026.17
	Nineth depth of 2 metres	One metre	172262.03	248520.79
	Tenth depth of 2 metres	One metre	205930.87	295015.41

Schedule Item No.	Description	Unit	Rate for 2018-19 in Rupees	
			Ordinary soil (or) loose soil sandy soil	Silt (or) clay pocket
f.	For 3.50 metre dia (internal)			
	First depth of 2 metres	One metre	3348.20	5372.91
	Second depth of 2 metres	One metre	6512.22	10543.22
	Third depth of 2 metres	One metre	12995.50	21039.08
	Fourth depth of 2 metres	One metre	24333.34	39435.11
	Fifth depth of 2 metres	One metre	45460.56	74979.99
	Sixth depth of 2 metres	One metre	86134.96	139185.22
	Seventh depth of 2 metres	One metre	126805.42	203393.08
	Eighth depth of 2 metres	One metre	167483.77	267594.36
	Ninth depth of 2 metres	One metre	208155.55	331799.58
	Tenth depth of 2 metres	One metre	248831.27	396007.44
g.	For 4.00 metre dia (internal)			
	First depth of 2 metres	One metre	3828.40	6445.12
	Second depth of 2 metres	One metre	7371.31	12339.01
	Third depth of 2 metres	One metre	14689.99	24655.66
	Fourth depth of 2 metres	One metre	27589.45	46195.98
	Fifth depth of 2 metres	One metre	51600.46	86149.43
	Sixth depth of 2 metres	One metre	97831.96	163065.99
	Seventh depth of 2 metres	One metre	144062.15	239978.60
	Eighth depth of 2 metres	One metre	190291.02	316900.41
	Ninth depth of 2 metres	One metre	236552.77	393286.78
	Tenth depth of 2 metres	One metre	282756.65	464788.32
h.	For 4.50 metre dia (internal)			
	First depth of 2 metres	One metre	4570.39	7708.10
	Second depth of 2 metres	One metre	8963.18	15332.00
	Third depth of 2 metres	One metre	17993.46	30599.54
	Fourth depth of 2 metres	One metre	31294.18	57383.84
	Fifth depth of 2 metres	One metre	54244.82	107304.28
	Sixth depth of 2 metres	One metre	100888.10	178799.25
	Seventh depth of 2 metres	One metre	147689.26	250294.22
	Eighth depth of 2 metres	One metre	194418.05	321790.50

Schedule Item No.	Description	Unit	Rate for 2019-20 in Rupees	
			Ordinary soil (or) loose soil sandy soil	Silt (or) clay pocket
	Nineth depth of 2 metres	One metre	241137.64	393818.28
	Tenth depth of 2 metres	One metre	287861.17	470734.84
i.	For 5.00 metre dia (internal)			
	First depth of 2 metres	One metre	5668.92	9561.78
	Second depth of 2 metres	One metre	11062.88	17744.81
	Third depth of 2 metres	One metre	22007.36	35433.05
	Fourth depth of 2 metres	One metre	41295.37	69388.69
	Fifth depth of 2 metres	One metre	74565.58	129666.85
	Sixth depth of 2 metres	One metre	145811.89	245689.62
	Seventh depth of 2 metres	One metre	217055.58	361713.70
	Eighth depth of 2 metres	One metre	288297.95	477737.77
	Nineth depth of 2 metres	One metre	359546.90	593763.17
	Tenth depth of 2 metres	One metre	430794.54	709788.57
j.	For 6.00 metre dia (internal)			
	First depth of 2 metres	One metre	8148.83	13325.71
	Second depth of 2 metres	One metre	15796.41	25771.29
	Third depth of 2 metres	One metre	30007.52	51516.26
	Fourth depth of 2 metres	One metre	59136.22	96526.89
	Fifth depth of 2 metres	One metre	110534.08	180050.38
	Sixth depth of 2 metres	One metre	209525.09	340669.36
	Seventh depth of 2 metres	One metre	308530.57	501285.70
	Eighth depth of 2 metres	One metre	407524.20	661903.36
	Nineth depth of 2 metres	One metre	506523.10	822517.07
	Tenth depth of 2 metres	One metre	605516.74	983134.72
NOTE:	In case the water table is met with at depth of 2.00 m and below, from the bed level, an extra percentage as under may be allowed over the existing rates for items 3(a) to 3 (j) for the extra lift involved.			
	Where water table is 2.00m, below bed level and upto 4.00 m		15% extra	
	Where water table is beyond 4.00m and upto 6.00m		20% extra	

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
4a.	Earthwork excavation above water level in light or sandy soil for infiltration gallery, syphon or connecting pipeline and connected works including refilling complete.		
	First depth of 2 m	One cubic metre	77.62
	Second depth of 2 m	One cubic metre	110.51
	Third depth of 2 m	One cubic metre	161.82
	Fourth depth of 2 m	One cubic metre	217.07
b.	Earthwork excavation below water level in light or sandy soil for infiltration gallery, syphon or connecting pipe line and connected works including shoring and strutting and charges for special tools and plants for bailing/ pumping etc., such as air compressor and helmet.		
	First depth of 2 m	One cubic metre	1451.11
	Second depth of 2 m	One cubic metre	2051.02
	Third depth of 2 m	One cubic metre	3077.19
	Fourth depth of 2 m	One cubic metre	4465.15
c	Earthwork excavation below water level in clayey soil for infiltration gallery for laying syphon pipe line or connecting pipe and connected works, shoring and strutting and charges for special tools and plants for bailing/pumping etc., such as air compressor and helmet.		
	First depth of 2 m	One cubic metre	2412.81
	Second depth of 2 m	One cubic metre	3353.46
	Third depth of 2 m	One cubic metre	5238.72
	Fourth depth of 2 m	One cubic metre	7839.66
d	Earthwork excavation below water level in soft disintegrated rock for infiltration gallery, laying syphone pipe line/ connecting pipes etc., including shoring, strutting and charges for special tools and plants.		
	First depth of 2 m	One cubic metre	1686.60
	Second depth of 2 m	One cubic metre	2248.36
	Third depth of 2 m	One cubic metre	3502.13
	Fourth depth of 2 m	One cubic metre	6054.39

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
NOTE (i)	For sinking wells in soil mixed with pebbles boulder of size 80 mm to 600 mm mixed with clay and silt below water level, including bailing/ pumping water and charges for special tools and plants etc., complete, an extra 20% (Twenty percentage) over the rates for items 2,3b,3c & 3d in the schedule of rates is allowed.		
ii	In case the water table is met with at a depth of 2.00m and below from the bed level, an extra percentage as under may be allowed over the existing rates for items 4(b), 4(c) and 4(d) above the extra lift involved		
	Where water table is 2.00m below bed level and upto 4.00m.	10% extra	
	Where water table is beyond 4.00m and upto 6.00m	15% extra	
	Pipe laying works		
5a	Laying stoneware pipes and open joint with fillet in the infiltration gallery excluding cost of pipes but including charges of special tools and plant etc., such as air compressor and helmet.		
I	200 mm dia stoneware pipes	One metre	231.55
ii	225 mm dia stoneware pipes	One metre	284.17
iii	300 mm dia stoneware pipes	One metre	332.85
iv	350 mm dia stoneware pipes	One metre	385.47
v	375 mm dia stoneware pipes	One metre	478.88
vi	450 mm dia stoneware pipes	One metre	493.35
b	Laying and jointing PVC slotted pipes in the infiltration gallery excluding cost of pipes but including charges for special tools and plants etc., complete such as air compressor and helmet.		
	200 mm dia (OD) PVC pipes	One metre	171.03
	315 mm dia (OD) PVC pipes	One metre	263.12
c	Refilling gallery trench and filter basins with clean excavated sand free from silt and clay	One cubic metre	18.29

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
6	Labour charges for laying filter media below water level in all depths as per specification for infiltration gallery works including screening cleaning and charges for special tools and plant etc., complete such as air compressor, helmets, sheet piles		
a	Granite metal 6mm to 40mm	One cubic metre	239.44
b	Coarse sand passing through a sieve of four meshes to 2.5 centimetres and retained in a sieve of ten meshes to 2.5 centimetres and filling it under water	One cubic metre	1189.30
c	Coarse sand passing through a sieve of ten meshes to 2.5 centimetres and retained in a sieve of 200 meshes to 2.5 centimetres and filling it under water	One cubic metre	451.25
d.	Cost of coarse sand D-10 and D-20 for laying gallery media for a lead not exceeding 200m from the source to the place of stacking including stacking etc., complete.	One cubic metre	306.53
e.	Cost of hard granite metal of size (B.S.S.) 6 mm to 12 mm filter media (machine crushed)	One cubic metre	1615.56
	(i) NOTE: For 6(a),(b) and (c):		
	The above rates are labour charges for laying the filter media including screening, cleaning etc., for a lead not exceeding 200 metres from the place of stacking to the point of laying the media. The cost of materials and the lead from the source to the place of stacking are to be paid for separately.		
	(ii) NOTE: FOR 6(d):		
	The above rates are applicable to cases where the screened materials is not less than 10% of the collected material. In specific cases where the screened material is less than 10% of the collected material, prior orders of the Superintending Engineer, TWAD Board are to be obtained in specific cases for increased rate of labour required.		

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	(iii) NOTE: FOR 6(e)		
	The above rates are applicable to cases where the screened materials is not less than 20% of the collected materials. In case where the screened materials is less than 20% of the collected material, prior orders of the Superintending Engineer, TWAD are to be obtained in specific cases for increased rate of labour required.		
7a	Lowering of C.I Pipes and specials in the trenches and laying to proper grade and alignment and as directed by the TWAD Officers.		
	For depth upto 2m		
	80 mm dia C.I Pipes and Specials	One metre	11.81
	100 mm dia C.I Pipes and Specials	One metre	13.48
	125 mm dia C.I Pipes and Specials	One metre	17.54
	150 mm dia C.I Pipes and Specials	One metre	23.95
	200 mm dia C.I Pipes and Specials	One metre	28.93
	250 mm dia C.I Pipes and Specials	One metre	35.60
	300 mm dia C.I Pipes and Specials	One metre	39.25
	350 mm dia C.I pipes and specials	One metre	50.12
	400 mm dia C.I pipes and specials	One metre	57.63
	450 mm dia C.I pipes and specials	One metre	66.85
	500 mm dia C.I pipes and specials	One metre	72.02
	600 mm dia C.I pipes and specials	One metre	87.66
	700 mm dia C.I pipes and specials	One metre	112.98
	750 mm dia C.I pipes and specials	One metre	126.45
	800 mm dia C.I pipes and specials	One metre	145.27
	900 mm dia C.I pipes and specials	One metre	170.02
	NOTE: i) For depth between 2m to 4m 10% over basic rates and for 4m to 6m 20% over basic rate allowed		
	ii) For work of laying CI connecting pipe/ syphon basic pipe below water, double the above rates shall be allowed.		
	iii) For laying pipes in sewer line except pumping main 10% more is allowed.		

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
7a(i)	Lowering of D.I Pipes and specials in the trenches and laying to proper grade and alignment and as directed by the TWAD Officers.		
	For depth upto 2m		
	80 mm dia D.I Pipes and Specials	One metre	11.97
	100 mm dia D.I Pipes and Specials	One metre	13.74
	125 mm dia D.I Pipes and Specials	One metre	17.65
	150 mm dia D.I Pipes and Specials	One metre	23.95
	200 mm dia D.I Pipes and Specials	One metre	29.59
	250 mm dia D.I Pipes and Specials	One metre	35.87
	300 mm dia D.I Pipes and Specials	One metre	40.58
	350 mm dia D.I pipes and specials	One metre	50.75
	400 mm dia D.I pipes and specials	One metre	57.63
	450 mm dia D.I pipes and specials	One metre	68.48
	500 mm dia D.I pipes and specials	One metre	73.31
	600 mm dia D.I pipes and specials	One metre	90.96
	700 mm dia D.I pipes and specials	One metre	113.85
	750 mm dia D.I pipes and specials	One metre	125.55
	800 mm dia D.I pipes and specials	One metre	146.82
	900 mm dia D.I pipes and specials	One metre	171.74
	NOTE: i) For depth between 2m to 4m 10% over basic rates and for 4m to 6m 20% over basic rate allowed		
	ii) For work of laying DI connecting pipe/ syphon basic pipe below water, double the above rates shall be allowed.		
	iii) For laying pipes in sewer line except pumping main 10% more is allowed.		
b	Lowering GI pipes and specials in the trenches and laying to proper grade and alignment and as directed by the TWAD Officers		
	15mm to 40mm dia	One metre	13.78
	50mm to 65mm dia	One metre	13.78
	80mm to 100mm dia	One metre	18.55
	125mm to 150mm dia	One metre	18.55
c	Disjointing C.I. Tyton S/S pipes and specials, and lifting C.I. Pipes from the trenches and stacking at places shown by the departmental Officers.		

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	For depth upto 2 m		
	80 mm dia C.I. Pipes and specials	One metre	12.50
	100mm dia C.I. Pipes and specials	One metre	14.60
	125 mm dia C.I. Pipes and specials	One metre	16.84
	150 mm dia C.I. Pipes and specials	One metre	23.15
	200 mm dia C.I. Pipes and specials	One metre	25.26
	250 mm dia C.I. Pipes and specials	One metre	39.86
	300 mm dia C.I. Pipes and specials	One metre	42.36
	350 mm dia C.I. Pipes and specials	One metre	54.99
	400 mm dia C.I. Pipes and specials	One metre	59.07
	450 mm dia C.I. Pipes and specials	One metre	69.60
	500 mm dia C.I.pipes and specials	One metre	76.04
	600 mm dia C.I.pipes and specials	One metre	92.88
	700 mm dia C.I.pipes and specials	One metre	107.62
	800 mm dia C.I.pipes and specials	One metre	118.27
	825 mm dia C.I.pipes and specials	One metre	135.24
	900 mm dia C.I.pipes and specials	One metre	149.85
	NOTE: For depth between	% excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	20%	
d.	Lowering of M.S pipes and specials into the trenches and laying to proper grade and alignment and as directed by the TWAD Officers.		
	Up to 350mm dia	One metre	37.04
	400 mm Dia	One metre	46.49
	450 mm Dia	One metre	51.36
	500 mm Dia	One metre	53.63
	600 mm Dia	One metre	68.53
	700 mm Dia	One metre	88.40
	900 mm Dia	One metre	125.57
	1000 mm Dia	One metre	159.88
	1050 mm Dia	One metre	168.99
	1100 mm Dia	One metre	176.07
	1200 mm Dia	One metre	182.14
	1400 mm Dia	One metre	274.20
	1600 mm Dia	One metre	366.08
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	20%	

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
8a	Jointing the C.I/ D.I - S/S pipes and specials with molten lead and Yarn including caulking the joints. (Including cost of jointing materials)		
	For depth upto 2m		
	80 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	422.95
	100 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	523.38
	125 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	691.00
	150 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	793.64
	200 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	1100.93
	250 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	1523.77
	300 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	1696.11
	350 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	2110.35
	400 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	2522.13
	450 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	3429.17
	500 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	3735.08
	600 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	4709.97
	700 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	5146.94
	750 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	6391.86
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	15%	
8b	Jointing C.I/ D.I-S/S pipes and specials with rubber gaskets (tyton joint) including cost of lubricants. (including cost of jointing materials) For depth upto 2m		
	80 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	40.35
	100 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	52.43
	125 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	53.43
	150 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	56.43
	200 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	63.72
	250 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	90.05
	300 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	101.63
	350 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	113.63
	400 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	132.63
	450 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	200.35
	500 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	219.35
	600 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	297.90

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	700 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	356.80
	750 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	462.20
	800 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	565.57
	900 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	844.60
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	20%	
8c	Joining the C.I/ D.I Double flanged pipes and specials with rubber insertion to the required specifications with M.S. bolts and nuts, complete. (including cost of jointing materials)		
	For depth upto 2m		
	For works above water level		
	80 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	132.90
	100 mm dia C.I./D.I. Double flanged pipes and specials	Each Joint	229.10
	125 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	238.00
	150 mm dia C.I./D.I. Double flanged pipes and specials	Each Joint	384.01
	200 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	428.68
	250 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	607.99
	300 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	678.44
	350 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	877.36
	400 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	1317.32
	450 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	1518.48
	500 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	1829.97
	600 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	2551.32
	700 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	2636.10

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	750 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	2710.21
	800 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	2724.82
	900 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	3212.04
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	15%	
8d	Joining C.I/ D.I double flanged pipes and specials with rubber insertion or any equivalent to the required specifications with M.S. bolts and nuts etc., complete including charges for special tools and plants such as air compressor and helmets and sheet piles. etc (including cost of jointing materials)		
	For depth upto 2m		
	For works below water level		
	80 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	285.22
	100 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	424.81
	125 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	473.62
	150 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	676.48
	200 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	780.02
	250 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	1065.50
	300 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	1175.49
	350 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	1456.63
	400 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	2002.08
	450 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	2228.36
	500 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	2617.39

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	600 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	3685.13
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	15%	
8e	Jointing the C.I/ D.I-S/S pipes and specials with neat cement or cement mortar and spun yarn including caulking the joints, curing. (including cost of jointing materials)		
	For depth upto 2m		
	80mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	107.55
	100mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	111.06
	125mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	144.20
	150mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	166.27
	200mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	261.86
	250mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	306.48
	300mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	363.21
	350mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	442.88
	400mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	507.49
	450mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	623.57
	500mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	700.64
	600mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	867.45
	700mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	958.03
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	15%	
9	Lowering RCC pipes and specials into the trenches and laying to proper grade and alignment		
	For depth upto 2m		
	150mm dia R.C.C. Pipes and Specials	One metre	37.89
	200mm dia R.C.C. Pipes and Specials	One metre	39.86
	250mm dia R.C.C. Pipes and Specials	One metre	50.65
	300mm dia R.C.C. Pipes and Specials	One metre	59.07
	350mm dia R.C.C. Pipes and Specials	One metre	73.81
	400mm dia R.C.C. Pipes and Specials	One metre	80.12

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	450mm dia R.C.C. Pipes and Specials	One metre	92.88
	500mm dia R.C.C. Pipes and Specials	One metre	107.62
	600mm dia R.C.C. Pipes and Specials	One metre	124.59
	700mm dia R.C.C. Pipes and Specials	One metre	139.45
	750mm dia R.C.C. Pipes and Specials	One metre	145.64
	800mm dia R.C.C. Pipes and Specials	One metre	177.47
	900mm dia R.C.C. Pipes and Specials	One metre	209.05
	1000mm dia R.C.C. Pipes and Specials	One metre	240.89
	1100mm dia R.C.C. Pipes and Specials	One metre	281.01
	1200mm dia R.C.C. Pipes and Specials	One metre	312.85
	1300mm dia R.C.C. Pipes and Specials	One metre	344.42
	NOTE: For depth between	% excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	15%	
i)	Each Collar joint is to be treated as one joint only		
ii)	For laying RCC pipes in sewage lines, except pumping main, 5% more is allowed		
10a	Jointing RCC pipes with cement using necessary collars including the cost of jointing materials.		
	For depth upto 2m		
	150mm dia R.C.C. Pipes and Specials	Each Joint	204.84
	200mm dia R.C.C. Pipes and Specials	Each Joint	251.28
	250mm dia R.C.C. Pipes and Specials	Each Joint	308.51
	300mm dia R.C.C. Pipes and Specials	Each Joint	346.66
	350mm dia R.C.C. Pipes and Specials	Each Joint	372.05
	400mm dia R.C.C. Pipes and Specials	Each Joint	401.52
	450mm dia R.C.C. Pipes and Specials	Each Joint	471.25
	500mm dia R.C.C. Pipes and Specials	Each Joint	520.06
	600mm dia R.C.C. Pipes and Specials	Each Joint	619.38
	700mm dia R.C.C. Pipes and Specials	Each Joint	720.82
	750mm dia R.C.C. Pipes and Specials	Each Joint	761.21
	800mm dia R.C.C. Pipes and Specials	Each Joint	790.68
	900mm dia R.C.C. Pipes and Specials	Each Joint	898.29
	1000mm dia R.C.C. Pipes and Specials	Each Joint	919.60
	1100mm dia R.C.C. Pipes and Specials	Each Joint	1006.30
	1200mm dia R.C.C. Pipes and Specials	Each Joint	1116.29
	1300mm dia R.C.C. Pipes and Specials	Each Joint	1234.69

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	NOTE: For depth between	% excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	15%	
	Each collar joint is to be treated as one joint only.		
10b	Jointing RCC pipes with lead and hemp yarn using steel collars including the cost of jointing materials and caulking the joints.		
	For depth upto 2m		
	150mm dia R.C.C. Pipes	Each steel collar	217.60
	200mm dia R.C.C. Pipes	Each steel collar	272.59
	250mm dia R.C.C. Pipes	Each steel collar	323.24
	300mm dia R.C.C. Pipes	Each steel collar	374.03
	350mm dia R.C.C. Pipes	Each steel collar	424.81
	400mm dia R.C.C. Pipes	Each steel collar	441.78
	450mm dia R.C.C. Pipes	Each steel collar	553.74
	500mm dia R.C.C. Pipes	Each steel collar	619.38
	600mm dia R.C.C. Pipes	Each steel collar	739.89
	700mm dia R.C.C. Pipes	Each steel collar	883.69
	800mm dia R.C.C. Pipes	Each steel collar	1016.96
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	15%	
11a	Lowering AC/ GRP pipes and specials into the trench carefully, laying to proper grade and alignment, jointing of A.C/ GRP pipes with simplex joints with rubber rings or with C.I. detachable joints or with M.S. couplers.		
	For depth upto 2m		
	80mm dia AC/ GRP Pipes	One metre	18.81
	100mm dia AC/ GRP Pipes	One metre	25.26
	125mm dia AC/ GRP Pipes	One metre	37.89
	150mm dia AC/ GRP Pipes	One metre	42.23
	200mm dia AC/ GRP Pipes	One metre	56.83
	250mm dia AC/ GRP Pipes	One metre	69.60
	300mm dia AC/ GRP Pipes	One metre	88.67
	350mm dia AC/ GRP Pipes	One metre	99.06
	400mm dia AC/ GRP Pipes	One metre	114.06
	450mm dia AC/ GRP Pipes	One metre	133.14

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	500mm dia AC/ GRP Pipes	One metre	158.40
	600mm dia AC/ GRP Pipes	One metre	190.24
	700mm dia AC/ GRP Pipes	One metre	234.57
	NOTE: For depth between	% excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	
11b (i)	Lowering PVC rigid pipes and specials to trench and laying to proper grade and alignment, jointing with PVC couplers with cement paste.		
	For depth upto 2m		
	Upto 40mm dia (OD) PVC pipe	One metre	8.10
	50mm to 75mm dia (OD) PVC pipe	One metre	13.51
	90mm to 110mm dia (OD) PVC pipe	One metre	13.64
	125mm to 160mm dia (OD) PVC pipe	One metre	19.10
	180mm to 250mm dia (OD) PVC pipe	One metre	25.16
	Over 250mm to 315mm dia (OD) PVC pipe	One metre	35.65
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	
11b (ii)	Lowering HDPE pipes and specials to trench and laying to proper grade and alignment and as directed by the TWAD Officers		
	For depth upto 2m		
	50mm to 75mm dia (OD) HDPE pipe	One metre	12.50
	90mm to 110mm dia (OD) HDPE pipe	One metre	12.50
	125mm to 160mm dia (OD) HDPE pipe	One metre	17.63
	180mm to 250mm dia (OD) HDPE pipe	One metre	22.63
	Over 250mm to 315mm dia (OD) HDPE pipe	One metre	32.89
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	
11c	Lowering PSC/ BWSC pipes and specials into the trench and laying to proper grade and alignment and Jointing with rubber gaskets		
	For depth upto 2m		
	Upto 350mm diameter	One metre	99.06

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	400mm diameter	One metre	116.04
	450mm diameter	One metre	135.11
	500mm diameter	One metre	158.40
	600mm diameter	One metre	192.08
	700mm diameter	One metre	215.63
	800mm diameter	One metre	234.57
	900mm diameter	One metre	255.62
	1000mm diameter	One metre	278.91
	1100mm diameter	One metre	300.22
	1200mm diameter	One metre	346.66
	1300mm diameter	One metre	384.68
	1400mm diameter	One metre	441.78
	1500mm diameter	One metre	490.32
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	
11d	Lowering CI collars with flange into the trench and laying to proper grade and alignment and jointing PSC pipes with 2 Nos of conical rubber rings and MS bolts and nuts excluding the cost of jointing materials.		
	For depth upto 2m		
	Upto 350mm diameter	Each collar	1054.98
	400mm diameter	Each collar	1234.69
	450mm diameter	Each collar	1414.40
	500mm diameter	Each collar	1591.88
	600mm diameter	Each collar	1940.90
	700mm diameter	Each collar	2469.51
	800mm diameter	Each collar	2653.30
	900mm diameter	Each collar	3006.54
	1000mm diameter	Each collar	3531.07
	1100mm diameter	Each collar	3888.12
	1200mm diameter	Each collar	4418.97
	1300mm diameter	Each collar	4956.00
	NOTE: For depth between	% excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
11e	Testing of M.S. / C.I. / D.I / P.V.C. / H.D.P.E / pipes with hydraulic testing equipment by filling with water (including cost of water @ Rs. 60/KL) and testing to recommended pressure in convenient stretches and attending the bursts if any occurred during the test, excluding the cost of pipes but including other incidental and operational charges etc., complete for the following diametres of pipes.		
	Up to 100mm	One metre	54.07
	125mm	One metre	63.68
	150mm	One metre	71.57
	200mm	One metre	87.49
	250mm	One metre	109.72
	300mm	One metre	133.66
	350mm	One metre	157.48
	400mm	One metre	183.00
	450mm	One metre	210.10
	500mm	One metre	256.28
	600mm	One metre	305.61
	700mm	One metre	388.37
	750mm	One metre	453.62
	900mm	One metre	523.61
	1050mm	One metre	674.90
	1200mm	One metre	848.43
12a	Cutting C.I. Pipes true to axis and filing smoothly and finishing the ends complete		
	80mm dia CI pipes	Each cutting	37.89
	100mm dia CI pipes	Each cutting	42.23
	125mm dia CI pipes	Each cutting	52.62
	150mm dia CI pipes	Each cutting	59.07
	175mm dia CI pipes	Each cutting	69.60
	200mm dia CI pipes	Each cutting	94.85
	250mm dia CI pipes	Each cutting	120.38
	300mm dia CI pipes	Each cutting	135.11
	350mm dia CI pipes	Each cutting	171.16
	375mm dia CI pipes	Each cutting	211.42
	400mm dia CI pipes	Each cutting	221.81
	450mm dia CI pipes	Each cutting	238.52
	500mm dia CI pipes	Each cutting	264.04
	525mm dia CI pipes	Each cutting	319.03

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	600mm dia CI pipes	Each cutting	325.61
	675mm dia CI pipes	Each cutting	388.89
	700mm dia CI pipes	Each cutting	410.07
	750mm dia CI pipes	Each cutting	422.83
	800mm dia CI pipes	Each cutting	443.88
	825mm dia CI pipes	Each cutting	484.01
	850mm dia CI pipes	Each cutting	507.30
	900mm dia CI pipes	Each cutting	520.06
12b	Cutting A.C. Pipes true to axis and finishing the ends complete		
	80mm dia AC pipes	Each cutting	14.60
	100mm dia AC pipes	Each cutting	16.84
	125mm dia AC pipes	Each cutting	18.81
	150mm dia AC pipes	Each cutting	23.15
	200mm dia AC pipes	Each cutting	31.44
	250mm dia AC pipes	Each cutting	50.65
	300mm dia AC pipes	Each cutting	52.62
	350mm dia AC pipes	Each cutting	63.28
	400mm dia AC pipes	Each cutting	77.88
	450mm dia AC pipes	Each cutting	88.67
	500mm dia AC pipes	Each cutting	101.43
	600mm dia AC pipes	Each cutting	116.04
	700mm dia AC pipes	Each cutting	128.80
12c	Cutting P.V.C. rigid pipes and specials true to axis and finishing the ends complete		
	Upto 75mm dia (OD) PVC pipe	Each cutting	4.87
	90mm dia PVC pipes	Each cutting	7.37
	110mm dia PVC pipes	Each cutting	7.37
	125mm dia PVC pipes	Each cutting	7.37
	140mm dia PVC pipes	Each cutting	7.37
	160mm dia PVC pipes	Each cutting	12.50
	180mm dia PVC pipes	Each cutting	15.00
	200mm dia PVC pipes	Each cutting	15.00
	250mm dia PVC pipes	Each cutting	17.63
	315mm dia PVC pipes	Each cutting	20.00
12d.	Cutting and Threading of GI pipes		
a.i	15mm dia GI pipe, Cutting	Each	6.20
ii.	15mm dia GI pipe, Threading	Each	8.70
b.i	20mm dia GI pipe, Cutting	Each	6.20
ii.	20mm dia GI pipe, Threading	Each	8.90
c.i	25mm dia GI pipe, Cutting	Each	7.40
ii.	25mm dia GI pipe, Threading	Each	18.40

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
d.i	32mm dia GI pipe, Cutting	Each	8.90
ii	32mm dia GI pipe, Threading	Each	24.80
e.i	40mm dia GI pipe, Cutting	Each	12.00
ii	40mm dia GI pipe, Threading	Each	27.90
f.i	50mm dia GI pipe, Cutting	Each	15.40
ii.	50mm dia GI pipe, Threading	Each	31.00
g.i	65mm dia GI pipe, Cutting	Each	16.70
ii	65mm dia GI pipe, Threading	Each	37.40
h.i	80mm dia GI pipe, Cutting	Each	21.80
ii.	80mm dia GI pipe, Threading	Each	47.10
i.i	100mm dia GI pipe, Cutting	Each	31.00
ii.	100mm dia GI pipe, Threading	Each	62.40
j.i.	125mm dia GI pipe, Cutting	Each	33.30
j.ii.	125mm dia GI pipe, Threading	Each	66.80
13	Cutting R.C.C. Pipes true to axis and finishing the ends complete		
	150mm dia R.C.C. Pipes	Each cutting	52.62
	200mm dia R.C.C. Pipes	Each cutting	59.07
	250mm dia R.C.C. Pipes	Each cutting	76.04
	300mm dia R.C.C. Pipes	Each cutting	99.06
	350mm dia R.C.C. Pipes	Each cutting	103.41
	400mm dia R.C.C. Pipes	Each cutting	132.88
	450mm dia R.C.C. Pipes	Each cutting	145.64
	500mm dia R.C.C. Pipes	Each cutting	162.61
	600mm dia R.C.C. Pipes	Each cutting	181.68
	650mm dia R.C.C. Pipes	Each cutting	190.24
	700mm dia R.C.C. Pipes	Each cutting	209.05
	750mm dia R.C.C. Pipes	Each cutting	215.63
	800mm dia R.C.C. Pipes	Each cutting	236.68
	900mm dia R.C.C. Pipes	Each cutting	251.28
	1000mm dia R.C.C. Pipes	Each cutting	270.62
	1100mm dia R.C.C. Pipes	Each cutting	289.43
	1200mm dia R.C.C. Pipes	Each cutting	310.61
	1300mm dia R.C.C. Pipes	Each cutting	323.24
14a	Removing the burst C.I. pipes from the pipe line and removal of slushy soil and baling out water and replacing the pipeline with sound pipe including jointing and cost of refilling the pipeline with water for retesting the pipe line etc complete. (excluding cost of sound pipe and jointing materials and earth work) and as directed by the TWAD Board Officers.		

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	For depth upto 2m		
	80mm dia C.I. Pipes	Each	978.94
	100mm dia C.I. Pipes	Each	1228.24
	125mm dia C.I. Pipes	Each	1604.51
	150mm dia C.I. Pipes	Each	2023.26
	200mm dia C.I. Pipes	Each	2822.49
	250mm dia C.I. Pipes	Each	3879.84
	300mm dia C.I. Pipes	Each	4936.92
	350mm dia C.I. Pipes	Each	5590.38
	400mm dia C.I. Pipes	Each	7142.26
	450mm dia C.I. Pipes	Each	7780.85
	500mm dia C.I. Pipes	Each	8730.19
	600mm dia C.I. Pipes	Each	10681.88
	700mm dia C.I. Pipes	Each	11660.69
	750mm dia C.I. Pipes	Each	13381.89
	800mm dia C.I. Pipes	Each	15113.61
	825mm dia C.I. Pipes	Each	17923.60
	900mm dia C.I. Pipes	Each	21867.11
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	
14b	Removing the burst A.C. Pipes from the pipe line and removal of slushy soil and baling out water and replacing the pipe line with sound pipe including jointing and cost of refilling the pipe line with water for retesting the pipe line etc complete (excluding cost of sound pipe and jointing materials and earth work) and as directed by the TWAD Board Officers		
	For depth upto 2m		
	80mm dia AC. Pipes	Each	566.50
	100mm dia AC. Pipes	Each	670.04
	125mm dia AC. Pipes	Each	843.30
	150mm dia AC. Pipes	Each	1080.24
	200mm dia AC. Pipes	Each	1515.83
	250mm dia AC. Pipes	Each	1938.67
	300mm dia AC. Pipes	Each	2414.52
	350mm dia AC. Pipes	Each	2651.46
	375mm dia AC. Pipes	Each	2983.12

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	400mm dia AC. Pipes	Each	3158.76
	450mm dia AC. Pipes	Each	3226.38
	500mm dia AC. Pipes	Each	3543.57
	600mm dia AC. Pipes	Each	4124.93
	700mm dia AC. Pipes	Each	5080.72
	NOTE: For depth between	% excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	
14c	Removing the burst P.V.C. Pipes from the pipe line and removal of slushy soil and baling out water and replacing the pipe line with sound pipe including jointing and cost of refilling the pipe line with water for retesting the pipe line etc., complete (excluding cost of sound pipe and jointing materials and earth work) and as directed by the TWAD Board Officers		
	Upto 63mm dia (OD) PVC Pipes	Each	289.43
	75mm dia (OD) PVC Pipes	Each	363.50
	90mm dia (OD) PVC Pipes	Each	484.01
	110mm dia (OD) PVC Pipes	Each	587.68
	125mm dia (OD) PVC Pipes	Each	697.66
	140mm dia to 160mm dia (OD) PVC Pipes	Each	860.53
	180mm dia to 200mm dia (OD) PVC Pipes	Each	1318.49
	250mm dia to 280mm dia (OD) PVC Pipes	Each	1606.87
	315mm dia (OD) PVC Pipes	Each	1790.66
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	
14d	Removing the burst R.C.C. pipes from the pipe line and removal of slushy soil and baling out water and replacing the pipe line with sound pipe including jointing and cost of refilling the pipe line with water for retesting the pipe line etc., complete. (excluding cost of sound pipe and jointing materials and earth work) and as directed by the TWAD Board Officers		

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
	For depth upto 2m		
	150mm dia RCC Pipes	Each	1573.06
	200mm dia RCC Pipes	Each	2211.52
	250mm dia RCC Pipes	Each	2748.68
	300mm dia RCC Pipes	Each	3264.40
	350mm dia RCC Pipes	Each	3864.97
	375mm dia RCC Pipes	Each	4592.36
	400mm dia RCC Pipes	Each	4945.34
	450mm dia RCC Pipes	Each	5528.94
	500mm dia RCC Pipes	Each	6152.80
	525mm dia RCC Pipes	Each	7002.81
	600mm dia RCC Pipes	Each	7193.04
	650mm dia RCC Pipes	Each	8026.21
	700mm dia RCC Pipes	Each	8186.85
	800mm dia RCC Pipes	Each	9034.75
	900mm dia RCC Pipes	Each	9979.88
	1000mm dia RCC Pipes	Each	10910.27
	1100mm dia RCC Pipes	Each	11887.10
	1200mm dia RCC Pipes	Each	12830.13
	1300mm dia RCC Pipes	Each	13460.30
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	
	For sewerline works (Except pumping main) 5% extra over the above rate may be adopted.		
14e	Charges for fixing MS Stepped split up collar in position in the spigot and socket ends of the PSC pipe carefully and caulking the sides of the collar using hemp yarn cement and hard concrete and pouring the cement slurry mixed with use of hard concrete in the stepped collar including cost of materials etc. complete but excluding cost of stepped collar as directed by the TWAD Board Officers		
	Upto 1500mm dia PSC pipes	Each	10349.83
	Upto 1000mm dia PSC pipes	Each	8273.41
	Upto 800mm dia PSC pipes	Each	4824.96
	Upto 700mm dia PSC pipes	Each	4763.39
	Upto 600mm dia PSC pipes	Each	4706.56
	Upto 500mm dia PSC pipes	Each	4560.53

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
Note:	For lighting arrangements during night works due to emergency actual expenditure incurred based on need for lighting may be given extra as certified by the Executive Engineer incharge of work at site		
14f	Charges for lowering, positioning and fixing MS steps collars in AC pipe line carefully and caulking the sides of collar using hemp yarn, cement and hard concrete into the stepped collar including cost of jointing materials such as cement, yarn, bolt and nuts, MS washers, RI sheet and hard concrete etc. but excluding cost of step collar and as directed by TWAD Officers		
	For 500mm dia AC pipe	Each	3448.32
	For 600mm dia AC pipe	Each	3790.77
	For 700mm dia AC pipe	Each	4311.09
i)	For removing the burst pipe in the maintenance works when burst occurs and replacing it with sound pipes including the cost of refilling the trench and the removal of slushy soil etc., Complete (Pipes and special jointing materials will be supplied with in 200m lead and at the respective TWAD Board divisional stores free of cost). 2 times ordinary rate allowed for the works are done during day time since the works are done in confined reaches.		
ii)	If the works are done in odd hours (i.e) 8.00 P.M. to 8.00 A.M. of the next day, 3 times of ordinary rate is allowed since the works are done in the confined reaches.		
	Slow Sand / Rapid Sand Filter Works		
15 a.i)	Labour for filling with broken stone of all sizes well washed and cleaned, to be free from impurities, including stacking and laying in bed	One cubic metre	111.83
ii)	Labour for filling the coarse sand passing through a sieve of 10 meshes to 2.5 cm and retained in 20 meshes to 2.5 cm well washed and cleaned to be free from impurities including stacking	One cubic metre	211.42

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
iii)	Labour for filling with fine sand passing through a sieve of ten meshes to 2.5cm and retained in a sieve of 40 meshes to 2.5 cm well washed and cleaned to be free from impurities including stacking	One cubic metre	18.42
15 b	Labour for scraping and removing silt only from the surface and sides of the filter basin carrying the same to a distance not exceeding 200 metres	One cubic metre	20.79
15c	Labour for removing dirty sand in layer of 25 mm uniform thickness from the slow sand filter, conveying, dropping the sand in a hopper with a lift of not exceeding 3 metres within a distance of 30 metres and delivering the washed sand in filter bed including removal and carrying the dirt from collecting chamber to a distance of upto 200 metres.	One square metre	25.13
	DRAINAGE WORKS		
16	Laying and jointing with cement mortar stoneware pipes and specials in dry condition and testing with water		
	100mm diameter stoneware pipes	One metre	
	150mm diameter stoneware pipes	One metre	
	200mm diameter stoneware pipes	One metre	
	225mm diameter stoneware pipes	One metre	
	250mm diameter stoneware pipes	One metre	
	300mm diameter stoneware pipes	One metre	
	375mm diameter stoneware pipes	One metre	
	450mm diameter stoneware pipes	One metre	
	NOTE : The rates to be worked out vide standard data appended as Item 17		
17	Jointing HDPE Pipes and Specials by butt fusion welding/ electro fusion welding joints using fusion equipment as per ISO 21307-2011 and as per IS 7634 (Part-2) : 2012 including cost of hire charges for butt fusion equipment power supply arrangements etc., complete as per directed by TWAD Board officers.		
1	50mm	Joint	67.05
2	63mm	Joint	83.49

Schedule Item No.	Description	Unit	Rate for 2019 - 20 in Rupees
3	75mm	Joint	99.94
4	90mm	Joint	121.44
5	110mm	Joint	146.74
6	125mm	Joint	166.98
7	140mm	Joint	187.22
8	160mm	Joint	212.52
9	180mm	Joint	245.41
10	200mm	Joint	271.98
11	225mm	Joint	307.40
12	250mm	Joint	341.55
13	280mm	Joint	380.77
14	315mm	Joint	428.84
15	355mm	Joint	483.23
16	400mm	Joint	545.22
17	450mm	Joint	612.26
18	500mm	Joint	680.57
19	560mm	Joint	786.83
20	630mm	Joint	899.42
18	Jointing of mechanical joint collar, nuts, gasket and fixing in position as directed by departmental officers.		
1	100mm	Joint	84.76
2	150mm	Joint	206.20
3	200mm	Joint	212.52
4	250mm	Joint	313.72
5	400mm	Joint	660.33
6	450mm	Joint	728.64
7	600mm	Joint	1335.84
19	Disjointing if GI pipes as directed by the departmental officers		
1	upto 80mm	Each	55.66
2	Above 80mm	Each	73.37
20	Welding of GI pipes as directed by the departmental officers for the sizes		
1	upto 80mm	One welding Joint	179.63
2	Above 80mm	One welding Joint	206.20
Note:	The Basic Rate adopted under this Head " Rates of Works" is exclusive of all taxes and GST		

**DATA ILLUSTRATION (RATES FOR ITEM No. 16) ITEM No. 17. LAYING AND JOINTING STONE WARE PIPES FOR ONE RUNNING METRE
(Only for illustration purpose assuming Conveyance charges for 20KM for Cement & Sand and 8KM for Stoneware pipes)**

Diameter (in mm)	Length of each pipe in cm	Weight of S.W pipes for 30m (As per Hand Book of PHE)	Quantity of cement in Kg for 50 joints	Cost of cement required for 50 joints (Rs.) 5530-20+111.70=5621.70)	Quantity of sand in cubic metres for 50 mortar joints	Cost of sand required for 50 mortar joints at Rs. Per cum (168+178.50=346.50)	Quantity of spun of tarred yarn in kg	Cost of yarn at Rs. 12.19 Kg	Total cost of materials (Total of columns 5,7,8, 9)	Labour for Laying and jointing								15	16	17	18	19	20
										Mason I Class		Filter II Class		Mazdoor I		Mazdoor II							
1	2	3	4	5	6	7	8	9	10	Nos.	Amount	Nos.	Amount	Nos.	Amount	Nos.	Amount	Cost of Labour for a length of 30m of SW pipes (Total No. of column 11,12,13 & 14) (Rs. P.)	Total cost of material and cost of Labour for 30 mts. (Total No. of Column 10 & 15) (Rs. P)	Conveyance of pipes from stock yard to site of work	Testing charges including conveyance of water tools and plants etc. (Rs.)	Total cost of laying and jointing SW pipes with CM and packing with spun or tarred yarn etc. complete for 30m length (Rs.P.)	Total cost of laying 4 joints stoneware pipes complete for 1 metre (Rs. P)
100	60	435	45	263.16	0.04	28.92	3.63	44.58	336.66	2	1304	1	560	5	2130	2	736	4730	5066.66	264.95	288.09	5619.70	187.32
150	60	750	68	397.66	0.07	50.61	5.45	66.93	515.20	3	1956	2	1120	6	2556	3	1104	6736	7251.20	456.82	390.26	8098.28	269.94
200	60	1043	98	573.1	0.08	57.84	6.90	84.73	715.67	4	2608	2	1120	6	2556	3	1104	7388	8103.67	635.28	393.61	9132.56	304.42
225	60	1185	104	608.19	0.10	72.3	8.17	100.33	780.82	5	3260	3	1680	7	2982	5	1840	9762	10542.82	864.33	455.58	11862.73	395.42
250	60	1375	115	672.52	0.11	79.53	8.35	102.54	854.59	5	3260	3	1680	7	2982	5	1840	9762	10616.59	1002.91	470.66	12090.16	403.01
300	60	2180	150	877.2	0.15	108.45	11.34	139.26	1124.91	6	3912	3	1680	12	5112	6	2208	12912	14036.91	1590.07	599.63	16226.61	540.89
375	60	2425	318	1859.66	0.28	202.44	18.14	222.76	2284.86	7	4564	3	1680	14	5964	7	2576	14784	17068.86	2050.48	673.32	19792.67	659.76

Note : 1. For other diameter of pipes now manufactured, the rates will be fixed in due course after observing data.

2. The rates arrived at adopting the data appended to this schedule of Rates is for works done in the first 2.00m depth extra percentage 5% for 2m to 2.5m, 7.50% for 2.50m to 3m, 10% for 3m to 3.50m 15% for 3.50m to 4m and 20% for above 4m depth over basic rates are allowed.

3. The above data does not include bailing charges, bailing charges to be added as extra as per rates given in the relevant PWD Schedule of Rates or as per actuals.

4. The conveyance charges adopted for Cement, Sand & Pipes are only for illustration purpose. The average lead for respective districts, as approved by the Chief Engineer shall be adopted for Cement & Sand. The lead for Pipe shall be adopted, as certified by the respective Assistant Executive Engineer.

5. The Basic Rate adopted under this Head " Rates of Works" is exclusive of all taxes and GST

BLANK

**IV (B) RATES FOR EARTH WORK
EXCAVATION OTHER THAN PIPE
LAYING WORKS AND OPEN WELLS**

BLANK

EARTH EXCAVATION OTHER THAN PIPE LAYING WORKS AND OPEN WELLS

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
	Earthwork excavating and depositing on bank with an initial lead of 10 metres and initial lift of 2 metres in		
1	Sand, silt or other loose soil, wet sand or silt not under water, light black cotton soil, sandy loam and ordinary soil including excavated earth SS 20 A	Cu.m	53.50
2	Sand, silt or other loose soil, wet sand or silt not under water, light black cotton soil, sandy loam and ordinary soil including excavated earth SS 20 B	Cu.m	48.80
3	Slush and silt under water upto 0.75 metre depth requiring the aid of baskets and vessels SS 20 B	Cu.m	61.10
4	Trimming the bed and side slope of the bank in all soils except hard rock upto a thickness of 7.5 cm and making it ready to receive the concrete.	Sq.m	12.50
4a	7.50 cm to 15cm thick	Sq.m	15.10
5	Sectioning during forming bunds when earth moving machinery, lorries and rollers are used for consolidation.	Cu.m	9.20
6	Hard stiff clay, stiff black cotton, hard red earth, shales, murram, gravel, stoney earth and earth mixed with small size boulders SS 20A	Cu.m	77.90
7	Hard stiff clay, stiff black cotton, hard red earth, shales, murram, gravel, stoney earth and earth mixed with small size boulders SS 20B	Cu.m	73.10
8	Soft disintegrated rock, laterite, soft rock or kankar, not requiring blasting	Cu.m	108.90
9	In loose boulders in excavation of various sizes 150mm to 625mm	Cu.m	172.80
10	Medium Rock and Dense Medium Rock not requiring blasting	Cu.m	191.20
11	Extra for every additional 10 metres lead or part thereof over the initial lead	Cu.m	8.90
12	Extra for every additional 1 metre lift or part thereof over the initial lift	Cu.m	7.10

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
13	Breaking clods, consolidating and sectioning	Cu.m	4.40
14	Breaking clods, consolidating and sectioning the earth scooped by bull dozers	Cu.m	13.50
15	Add relevant TNDSS No.20A, rates for new tank bunds and closing breaches for extra watering and consolidation.		
a)	By hand roller	Cu.m	15.10
b)	By power roller including hire charges	Cu.m	25.50
16	Benching old embankment slopes 45cm x 45cm	Sq.m	2.80
17	Puddle wall work	Cu.m	120.70
18	Turfing in slopes including watering and fixing with initial lead upto 50m.	Sq.m	25.50
19a	Refilling with excavated sand complying with standard specification for filling in foundation and basement	Cu.m	22.40
19.b	Refilling with excavated soil (other than sand) complying with the standard specification for filling in foundation and basement	Cu.m	25.50
20	QUARRYING AND BLASTING		
a)	Hard rock measured in solid including blasting and stacking	Cu.m	517.00
b)	Removing hard rock by wedging chiselling and trimming to proper shape where blasting is prohibited.	Cu.m	1035.00
c)	Medium rock and dense medium rock requiring blasting	Cu.m	264.00
d)	Extra for every additional 10 metres lead or part thereof over the initial lead for blasted materials	Cu.m	6.20
e)	Extra for every additional 1 metre lift or part thereof over the initial lift of 2 m for blasted materials	Cu.m	6.40
f)	Benching hard rock upto an average 10cm depth	Sq.m	500.00
g)	Drilling holes in hard granite 32mm diameter	RM	140.00
h)	Drilling holes in hard granite 40mm diameter	RM	166.70
i)	Drilling holes in hard granite 45mm diameter	RM	194.00
j)	Drilling holes in hard granite 50mm diameter	RM	233.00
k)	Drilling holes in hard granite 75mm diameter	RM	265.00

- Note:
- a) Standard specification No.20-A requires breaking clods, ramming and sectioning of spoil bank for which separate rate will not be paid.
 - b) Standard specification No.20-B does not require breaking clods, ramming and sectioning but requires neat banking in accordance with the standard specifications.
 - c) Double the relevant rate for standard specification No.20-B will apply to excavation in all the soils and rock classification given above for foundation of buildings, piers, wings and returns of bridges, culverts, sluices, regulators and cross masonry works, retaining walls, toe walls, cut-off walls and body walls of anicuts weirs, retaining walls of cause ways, bed dam, pits for avenue trees, and pits for poles and towards catch water pits and pipe laying trenches for water supply and sewerage works.
 - d) An extra 50 percent over the rates for ordinary excavation in all the soils and rock classification given above shall be allowed for the above said works having bed width 1.25 m and below. The extra percentage is applicable any for depth up to 2.00m the depth being measured from the bottom of excavation.
 - e) An extra 25 percent over the rates for ordinary excavation in all the soils and rock classification given shall be allowed for the above said works having bed width 1.25 m to 2.0m. The extra percentage is applicable only for depth up to 2.0m the depth being measured from the bottom of excavation.
 - f) These rates for earth work do not include baling charge. The bailing charges are to be paid as per actual in case bailing is done departmentally or at actual plus 10 percent extra in case bailing is done by other agencies. However for estimate purpose bailing charges are to be provided at 10 percent of the rates of respective items of excavation in all soils including medium rock and dense medium rock and at 5 percent of the rates for excavation in hard rock.
 - g) Double the relevant rate for standard specification No.20B for excavation in all soils and rock classification given above shall be allowed for circular trenches for soil and moisture conservation having bed width of 0.25m and below with side slope of 1/2: 1 and not less than 0.75 m in depth.
 - h
 - i) A deduction of 40 percent is to be made for the quantity of voids and stack measurement and payment is for the lesser of two viz. Solid measurement or stack measurements minus 40 percent of stack measurement for voids.
 - ii) The rates for extra lead and lift are on the quantity as per the solid measurement or stack measurement less 40 percent for voids whichever is less. These rates are applicable for head load only.
 - iii) Payment for blasting the rock in solid shall be made for the lesser of the two quantities obtained by a) Measurement recorded by levels or measurement and b) by stack measurement less deduction for voids (This foot note is applicable for all items of rock measured in solid)

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**IV (C) RATES FOR EARTH WORK
EXCAVATION PIPE LAYING WORKS FOR
WATER SUPPLY AND SEWERAGE WORKS**

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**EARTH WORK EXCAVATION FOR PIPE LAYING WORKS FOR WATER SUPPLY AND
SEWERAGE WORKS**

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
I	Earth work excavation and depositing on bank with initial lead of 10 m and lift of 2 M in narrow trenches having bed width 1.25m & below for laying of pipes for water supply and sewerage works in the following type of soils as directed by Departmental officers		
a	Sand, silt or other loose soil, wet sand or silt not under water light black cotton soil, sandy loam and ordinary soil.SS20B	One cubic metre	122.00
b	Hard stiff clay, stiff black cotton, hard red earth, shales, murram gravel, stoney earth and earth mixed with small size boulders and hard gravelly soil.SS20B	One cubic metre	182.75
II	Earth work excavation and depositing on bank with initial lead of 10m and lift of 2.00m in narrow trenches for laying of pipes for water supply and sewerage works in the following types of soil strata as directed by departmental officers		
a	In Soft Disintegrated Rock, Laterite, soft rock or kankar, not requiring blasting.	Cum	217.80
b	In Medium rock and dense medium rock not requiring blasting.	Cum	382.40
c	In Medium rock and Dense medium rock requiring blasting.	Cum	528.00
d	In hard rock including blasting, removal and stacking.	Cum	1034.00
III a)	Earth work excavation for Pipe Laying work by removing dense medium rock using controlled blasting method by drilling blast holes using compressor and jack hammer including dewatering wherever necessary, cost of gelatin, electric detonator, licensed shot fireman, labour for filling earth in gunny bags, labour for excavation of earth, conveyance of earth including cost of gunny bags, M.S. Plates, barricading, putting up road diversion boards and providing red light signal during night, removal of debris etc., where open blasting is prohibited and as directed by the TWAD Board Officers.	Cum	700.00

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
b	Earth work excavation for Pipe Laying work by removing hard rock using controlled blasting method by drilling blast holes using compressor and jack hammer including stacking, dewatering wherever necessary, cost of gelatin, electric detonator, licensed shot fireman, labour for filling earth in gunny bags, labour for excavation of earth, conveyance of earth including cost of gunny bags, M.S. Plates, barricading, putting up road diversion boards and providing red light signal during night, removal of debris etc., where upen blasting is prohibited and as directed by TWAD Board Officers.	Cum	1124.00

**IV (D) RATES FOR EARTH WORK
EXCAVATION AND REFILLING FOR
PIPELINE WORKS HAVING BED WIDTH OF
1.25M AND BELOW ON LINEAR
MEASUREMENT BASIS**

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**THE RATES FOR EARTH WORK EXCAVATION AND REFILLING FOR PIPE LINE WORKS
HAVING BED WIDTH OF 1.25M AND BELOW ON LINEAR MEASUREMENT BASIS**

Type	Pipe size in mm	Bed Width in 'm'	Depth in 'm'	Earth work qty. in cum/m	Outer dia of pipe in 'm'	Refilling Qty/ cum/m	Earth work rate for other than loose soil/m Rs.	Earth work rate for loose soil/m Rs.	Refilling rate/m Rs.
					Cost of EWE		182.75		
					Cost of refilling		22.50		
					Cost of loose soil		122.00		
CI/DI/	80	0.75	1.05	0.79	0.098	0.780	144.37	96.38	19.89
MS	100	0.75	1.05	0.79	0.118	0.777	144.37	96.38	19.81
	125	0.75	1.05	0.79	0.144	0.771	144.37	96.38	19.66
	150	0.75	1.05	0.79	0.170	0.765	144.37	96.38	19.51
	200	0.80	1.10	0.88	0.222	0.841	160.82	107.36	21.45
	250	0.80	1.20	0.96	0.274	0.901	175.44	117.12	22.98
	300	0.80	1.35	1.08	0.326	0.997	197.37	131.76	25.42
	350	0.90	1.45	1.31	0.378	1.193	239.40	159.82	30.42
	400	0.90	1.55	1.40	0.429	1.251	255.85	170.80	31.90
	450	1.00	1.70	1.70	0.480	1.519	310.68	207.40	38.73
	500	1.00	1.85	1.85	0.532	1.628	338.09	225.70	41.51
	525	1.00	1.85	1.85	0.532	1.628	338.09	225.70	41.51
AC CI 15	80	0.75	1.05	0.79	0.104	0.779	144.37	96.38	19.86
	100	0.75	1.05	0.79	0.124	0.775	144.37	96.38	19.76
	125	0.75	1.05	0.79	0.151	0.770	144.37	96.38	19.64
	150	0.75	1.05	0.79	0.178	0.763	144.37	96.38	19.46
	200	0.80	1.10	0.88	0.235	0.837	160.82	107.36	21.34
	250	0.80	1.20	0.96	0.286	0.896	175.44	117.12	22.85
	300	0.80	1.35	1.08	0.340	0.989	197.37	131.76	25.22
	350	0.90	1.45	1.31	0.396	1.162	239.40	159.82	29.63
	400	0.90	1.55	1.40	0.452	1.235	255.85	170.80	31.49
	450	1.00	1.70	1.70	0.502	1.502	310.68	207.40	38.30
	500	1.00	1.85	1.85	0.559	1.605	338.09	225.70	40.93
AC CI 10	80	0.75	1.05	0.79	0.104	0.779	144.37	96.38	19.86
	100	0.75	1.05	0.79	0.124	0.775	144.37	96.38	19.76
	125	0.75	1.05	0.79	0.149	0.770	144.37	96.38	19.64

Type	Pipe size in mm	Bed Width in 'm'	Depth in 'm'	Earth work qty. in cum/m	Outer dia of pipe in 'm'	Refilling Qty/ cum/m	Earth work rate for other than loose soil/m Rs.	Earth work rate for loose soil/m Rs.	Refilling rate/m Rs.
	150	0.75	1.05	0.79	0.175	0.763	144.37	96.38	19.46
	200	0.80	1.10	0.88	0.229	0.839	160.82	107.36	21.39
	250	0.80	1.20	0.96	0.281	0.898	175.44	117.12	22.90
	300	0.80	1.35	1.08	0.333	0.993	197.37	131.76	25.32
	350	0.90	1.45	1.31	0.389	1.186	239.40	159.82	30.24
	400	0.90	1.55	1.40	0.436	1.246	255.85	170.80	31.77
	450	1.00	1.70	1.70	0.486	1.515	310.68	207.40	38.63
	500	1.00	1.85	1.85	0.541	1.620	338.09	225.70	41.31
PVC/ HDPE/ GRP	40	0.60	1.05	0.63	0.040	0.629	115.13	76.86	16.04
	50	0.60	1.05	0.63	0.050	0.628	115.13	76.86	16.01
	63	0.60	1.05	0.63	0.063	0.627	115.13	76.86	15.99
	75	0.60	1.05	0.63	0.075	0.626	115.13	76.86	15.96
	90	0.60	1.05	0.63	0.090	0.624	115.13	76.86	15.91
	110	0.60	1.05	0.63	0.110	0.621	115.13	76.86	15.84
	125	0.60	1.05	0.63	0.125	0.618	115.13	76.86	15.76
	140	0.60	1.05	0.63	0.140	0.615	115.13	76.86	15.68
	160	0.60	1.05	0.63	0.160	0.610	115.13	76.86	15.56
	180	0.75	1.05	0.79	0.180	0.760	144.37	96.38	19.38
	200	0.80	1.10	0.88	0.200	0.850	160.82	107.36	21.68
PSC/ BWSC	350	0.90	1.45	1.31	0.464	1.136	239.40	159.82	28.97
	400	0.90	1.55	1.40	0.514	1.188	255.85	170.80	30.29
	450	1.00	1.70	1.70	0.564	1.450	310.68	207.40	36.98
	500	1.00	1.85	1.85	0.614	1.554	338.09	225.70	39.63
GI	15	0.75	1.05	0.79	0.020	0.787	144.37	96.38	20.07
	20	0.75	1.05	0.79	0.030	0.787	144.37	96.38	20.07
	25	0.75	1.05	0.79	0.030	0.787	144.37	96.38	20.07
	32	0.75	1.05	0.79	0.040	0.786	144.37	96.38	20.04

Type	Pipe size in mm	Bed Width in 'm'	Depth in 'm'	Earth work qty. in cum/m	Outer dia of pipe in 'm'	Refilling Qty/ cum/m	Earth work rate for other than loose soil/m Rs.	Earth work rate for loose soil/m Rs.	Refilling rate/m Rs.
	40	0.75	1.05	0.79	0.050	0.786	144.37	96.38	20.04
	50	0.75	1.05	0.79	0.060	0.786	144.37	96.38	20.04
	65	0.75	1.05	0.79	0.070	0.784	144.37	96.38	19.99
	80	0.75	1.05	0.79	0.090	0.781	144.37	96.38	19.92
	100	0.75	1.05	0.79	0.110	0.778	144.37	96.38	19.84
	125	0.75	1.05	0.79	0.140	0.772	144.37	96.38	19.69
	150	0.75	1.05	0.79	0.160	0.767	144.37	96.38	19.56

Note: (i) Earth work excavation for loose soil SS-20B and ordinary soil SS-20B having the bed width of

a) 1.25m and below and for a depth of beyond 2.00m and

b) 1.25m and above and for a depth of beyond 2.00m

(ii) Earth excavation in SDR, DMR, HR etc., the linear measurement rate may be worked out separately and to be approved by the SE concerned after verification of soil classifications by putting proper trial pits at closer intervals". (B.P.Ms.No.82 / COM Wing / dt.22.8.2008).

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**IV (E) RATES FOR MISCELLANEOUS
ITEMS**

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MISCELLANEOUS

Schedule Item No.	Description	Unit	Rates for 2018-19 in Rupees
	PLUMBING		
1. A	Laying of G.I. Pipes and specials to proper line and level including jointing but excluding cost of pipes and jointing materials for plumbing works for providing water supply and sanitary works in the premises of the building		
	6 mm to 32 mm dia	One metre	15.13
	40 mm to 50 mm dia	One metre	15.13
	65 mm to 150 mm dia	One metre	20.26
b	Bore cap using M.S. Flat of size 1 cm x 3 mm and M.S. sheet on top with bolting arrangements for securing the cap in position (Bore caps with M.S. Couplings need not be made)		
	5" Casing Pipes	Each	422.83
	6" Casing Pipes	Each	448.09
	8" Casing Pipes	Each	492.56
2	Labour for cutting open road for laying water mains or sewer.		
a.	B.T. Roads (or) Maccadam road	One cu.m	620.83
b.	Concrete Roads	One cu.m	869.48
3	Labour for drilling, cutting, Threading and Fixing Ferrules in distribution pipes.		
	10 mm dia	Each	64.86
	15 mm dia	Each	81.30
	20mm dia	Each	102.09
	25 mm dia	Each	120.77
4	Labour charges for Painting TWAD Board Emblem in accordance with the size and specifications as approved by the Board on the Service Reservoirs including cost of all consumables, one coat of base paint, scaffolding charges including painting NRDWP Logo on the Service Reservoirs.	Sqm	2280.20
5	Drilling holes in C.I./G.I. Dummy Flanges.		
	12 mm dia	Each	22.76
	15 mm dia	Each	45.78

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
	20 mm dia	Each	66.31
	22 mm dia	Each	89.33
	25 mm dia	Each	112.22
6	Labour for refilling with sand the socket hollows of pipes including conveyance and stacking	One cu.m	22.76
	NOTE : 1) For depth between	Percentage excess allowed over basic rate	
	2 m to 4 m	15%	
	4 m to 6 m	30%	
7	Lifting and positioning of C.I / G.I Pipes in vertical direction for service reservoir pipe connection		
	0 to 2 m	Qtl	192.87
	2 to 4 m	Qtl	290.48
	4 to 6 m	Qtl	455.59
	6 m to 8 m	Qtl	630.17
	8 m to 10 m	Qtl	804.62
	10 m to 12 m	Qtl	976.83
	12 m to 14 m	Qtl	1155.75
	14 m to 16 m	Qtl	1316.52
	16 m to 18 m	Qtl	1490.71
	18 m to 20 m	Qtl	1665.02
	20 m to 22 m	Qtl	1835.13
	22 m to 24 m	Qtl	2006.95
8.	DRILLING WORKS Using Hand Bore set		
a	Drilling of borewells of size 4" to 5" dia. in Sedimentary formation using hand boresets including insertion of casing pipes and removal of casing pipes etc., including supplying and packing of pebbles and conveyance of hand Boreset including loading and unloading	One metre	727.66
b	Drilling of borewells of size 6" to 8" dia. in sedimentary formation using hand boreset including insertion of casing pipe etc., and supplying and packing of pebbles (Conveyance of hand bore set including loading and unloading to be done by the contractor)	One metre	855.80

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
c	Using Hand Bore set (For Investigation purpose)		
i	Drilling of borewells of size 4" to 5" dia. in sedimentary formation using hand boresets including insertion of casing pipes and removal of casing pipes etc., including collection of samples as directed by the TWAD Board Officers.	One metre	541.76
ii	Drilling of borewells of size 6" to 8" dia. in sedimentary formation using hand boresets including insertion of casing pipes and removal of casing pipes etc., including collection of samples as directed by the TWAD Board Officers.	One metre	634.78
	Using Calyx Drill		
d	Drilling of 4 1/2" diameter borewell by using Calyx Drill including transporting charges and insertion of casing pipes (excluding cost of casing pipe)		
i.	For Hilly terrain area	One metre	2723.56
ii.	For Plain area	One metre	2250.33
e	Drilling 4 1/2" dia meter bores by using In-Well rig in Hilly areas	One metre	1146.15
f	Reaming from 6" Pilot bore to 12" size bore as directed by the TWAD Board Officers	One metre	299.17
g	Labour charges for inserting casing pipes assembly (With slot or without slot) in the drilled hole including welding the joint etc., complete and supplying and packing the annular space with pebbles of size and quality as approved by the Executive Engineer	One metre	286.54
9 a	Driving sheet piles for one metre length of gallery each side in sandy soil		
i.	First depth of 2 m	One metre	565.05
ii	Second depth of 2 m	One metre	862.77
iii	Third depth of 2 m	One metre	1620.42
b	Removing sheet piles from one metre length of gallery on each side including stacking the sheet piles properly		

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
i.	First depth of 2 m	One metre	87.88
ii	Second depth of 2m	One metre	134.59
iii	Third depth of 2 m	One metre	195.37
10	Drilling of borwell inside well 115mm dia.		
	a) Vertical	One metre	625.57
	b) Horizontal	One metre	686.09
11	Drilling of borewell inside well 150mm dia.		
	a) Vertical	One metre	783.18
	b)Horizontal	One metre	827.78
12	Drilling of Borewells anywhere in Tamilnadu including transportation from one place to another within Tamilnadu in alluvial soil sedimentary strata of clay and sand stone shale pebbles boulders etc. By first taking a pilot bore of 140 mm/150mm dia and then enlarging to required dia direct or reverse rotary mud circulation method using rotary rigs, fuel, labour and drilling bentonite and water required for drilling at site (Site will be shown by the TWAD Board Officers) including construction of mud pit.	P.S. to M.D.S.S. Special Specifications	
a.	Drilling of 140/150 mm pilot bore		
i.	Upto 60 m Depth ending below ground level	One metre	1308.23
ii	From 60 m upto 90 m Depth ending from ground level	One metre	1416.77
iii	From 90 m upto 120 m Depth ending from ground level	One metre	1502.15
iv	From 120 m upto 150 m Depth ending from ground level	One metre	1581.75
v	From 150 m upto 180 m Depth ending from ground level	One metre	1606.35
vi	From 180 m upto 210 m Depth ending from ground level	One metre	1658.45
vii	From 210 m upto 240 m Depth ending from ground level	One metre	1706.20
viii	From 240 m upto 270 m Depth ending from ground level	One metre	1765.54
ix	From 270 m upto 300 m Depth ending from ground level	One metre	1804.61
x	From 300 m upto 330 m Depth ending from ground level	One metre	1848.02

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
xi	From 330 m upto 360 m Depth ending from ground level	One metre	1887.10
12 b	Reaming 140/150 mm dia pilot bore to 300mm dia bore as directed by the TWAD Board Officer.		
i.	Upto 60 m depth ending below ground level	One metre	328.51
ii	From 60 m depth and upto 90 mt depth ending below ground level	One metre	348.77
iii	From 90 m upto 120 mt depth ending below ground level	One metre	371.92
iv	From 120 m upto 150 mt depth ending below ground level	One metre	377.71
v	From 150 m upto 180 mt depth ending below ground level	One metre	395.07
vi	From 180 m upto 210 mt depth ending below ground level	One metre	415.33
vii	From 210 m upto 240 mt depth ending below ground level	One metre	434.15
viii	From 240 m upto 270 mt depth ending below ground level	One metre	450.07
ix	From 270 m upto 300 mt depth ending below ground level	One metre	474.67
x	From 300 m upto 330 mt depth ending below ground level	One metre	493.48
xi	From 330 m upto 360 mt depth ending below ground level	One metre	510.85
12 c	Reaming 200 mm dia pilot bore to 350mm dia bore as directed by the TWAD Board Officer.		
i.	Upto 60 m depth ending below ground level	One metre	369.03
ii	From 60 m depth and upto 90 mt depth ending below ground level	One metre	390.73
iii	From 90 m upto 120 m depth ending below ground level	One metre	415.33
iv	From 120 m upto 150 m depth ending below ground level	One metre	428.36
v	From 150 m upto 180 m depth ending below ground level	One metre	442.83
vi	From 180 m upto 210 m depth ending below ground level	One metre	476.12
vii	From 210 m upto 240 m depth ending below ground level	One metre	544.13

Schedule Item No.	Description	Unit	Rates for 2018-19 in Rupees
viii	From 240 m upto 270 m depth ending below ground level	One metre	558.60
ix	From 270 m upto 300 m depth ending below ground level	One metre	571.63
x	From 300 m upto 330 m depth ending below ground level	One metre	590.44
xi	From 330 m upto 360 m depth ending below ground level	One metre	604.91
12 d	Reaming 300 mm dia pilot bore to 400mm/ 450mm dia bore as directed by the TWAD Board Officer.		
i.	Upto 60 m depth ending below ground level	One metre	506.51
ii	From 60 m depth and upto 90 m depth ending below ground level	One metre	567.29
iii	From 90 m upto 120 m depth ending below ground level	One metre	604.91
iv	From 120 m upto 150 m depth ending below ground level	One metre	641.09
v	From 150 m upto 180 m depth ending below ground level	One metre	667.14
vi	From 180 m upto 210 m depth ending below ground level	One metre	685.95
vii	From 210 m upto 240 m depth ending below ground level	One metre	701.87
viii	From 240 m upto 270 m depth ending below ground level	One metre	735.16
ix	From 270 m upto 300 m depth ending below ground level	One metre	762.65
x	From 300 m upto 330 m depth ending below ground level	One metre	800.28
xi	From 330 m upto 360 m depth ending below ground level	One metre	827.78
12 e	Labour Charges for inserting 150 mm/200mm/ 250 mm dia (M.S. Casing pipes assembly with slots or with out slots) in the drilled hole including welding the joints etc., complete and supplying and packing the annular space with pebbles of size and quality as approved by the Executive Engineers of TWAD Board.		

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
i.	150 mm dia Casing Pipes assembly	One metre	294.96
ii	200 mm dia Casing Pipes assembly	One metre	294.96
iii	250 mm dia Casing Pipes assembly	One metre	299.96
13 a	Labour Charges for inserting PVC Casing pipes assembly (with slots or without slots) in the drilled hole including jointing the pipes with PVC Couplers with Cement paste etc., complete, supply and packing the annular space with pebbles of size and quality as approved by the Executive Engineers of TWAD Board		
i.	150 mm dia Casing Pipes assembly	One metre	285.88
ii	200 mm dia Casing Pipes assembly	One metre	294.96
iii	250 mm dia Casing Pipes assembly	One metre	294.96
13 b	Charges for developing the Borewell with air compressor of 600 CFM capacity (Minimum 8 Hours) including transportation, labour and fuel charges for compressor as directed by TWAD Officers and conducting yield test by 'V' notch method.	One hour	1928.01
	Note : I) 150 mm dia bore, reaming should be done upto 300mm dia.		
14	II) 200 mm dia bore, reaming should be done upto 300mm dia and thereafter 400,450 etc. Drilling of borewell anywhere in Tamilnadu including transportation from one place to another place within Tamilnadu in alluvial soil or sedimentary strata of clay and sand or sand, stone, shale, pebbles, boulders etc., by first taking a pilot bore of 140 mm/150mm dia and then enlarging to required dia by direct or reverse rotary mud and circulation method using Contractor's rig, fuel, labour, drilling, bentonite mud and water required for drilling at the site shown by the TWAD Officers including construction of mud pit (only Calyx drills are to be used).		
a.	Drilling 140 / 150 mm dia Pilot Bore upto 60m depth ending below ground level.	One metre	953.68

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
b.	Reaming from 140/150 mm dia pilot bore to 300 mm dia bore as directed by the TWAD Board Officers upto 60 m Depth ending from ground level	One metre	269.17
c.	Labour charges for inserting 150 mm dia M.S. Casing pipes assembly (With slots or without slots) in the drilled hole including welding the joints and packing annular space with pebbles of size and quality as approved by the Executive Engineer / TWAD Board	One metre	241.94
d.	Labour Charges for inserting PVC casing pipes assembly (with slots or without slots) in the drilled hole including jointing the pipes with PVC couplers with cement paste etc. complete		
i.	140 mm OD PVC Casing Pipes Assembly	One metre	206.94
ii	165 mm/168 mm dia PVC Casing pipes Assembly	One metre	241.94
e.	Charges for developing the borewell with air compressor of 300 CFM capacity (Minimum 8 Hours) including transportation labour and fuel charges for compressor as directed by TWAD Board Officers and conducting yield test by 'V' notch method.	One hour	1499.52
f.	Drilling of 12" dia vertical borewell so as to have a finished size of 6" dia borewell in boulder area to any required depth as decided by the TWAD Board Officers including Transportation from one place to another place with in Tamilnadu State by direct or reverse rotary mud circulation method using Contractor's rig tools, fuel, labourers, bentonite mud and water required for drilling at the site shown by the TWAD Officers including construction of mud pit etc. using only calyx rigs.	One metre	1835.39
15 a.	Conveyance of Hand Pumps and its accessories from divisional stores to site of works		
i.	Conveyance upto 10 Kms	Each Hand Pump and its accessories	549.79
ii	Conveyance 10 to 20 Kms		690.03
ii	Conveyance 20 to 40 Kms		840.93
iv	Conveyance above 40 Kms		974.60

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
	Note : i) Conveyance of Filter Point, Handpump with GI Pipes and its accessories from divisional stores to site of works. 50% of the rate of conveyance of hand pumps, with its accessories is applicable for this item for the respective leads as indicated above		
	ii) If the Mark II hand pump is conveyed in cart track even for part distance 20 % extra over the above rate shall be adopted.		
b i.	Erection of deep well hand pumps upto 40 m	Each	974.33
ii	Above 40 m	Each	1111.55
c.	Erection of shallow well hand pumps	Each	430.07
d.	Erection Extra deep well hand pumps	Each	1258.11
e.	Removal of deep well hand pumps from borewell		
i.	Up to 40 m	Each	974.33
ii	Above 40 m	Each	1227.85
f)	Attending repairs to deep well handpumps for borewells inclusive of removal of G.I. Pipes, Plunger rods, Cylinder and re-erection of hand pumps inclusive of lowering the GI Pipes Plunger rods cylinder, jointing etc.		
i.	Upto 30 M	Each	1034.72
ii)	Above 30 M	Each	1209.83
16 a	Erection of filter point with G.I. Pipes of 32 mm to 65 mm dia.	Each	281.28
b	Removing the choked filter point with G.I. Pipes of 32 mm to 65 mm dia and re-erecting in another place within 1.00 KM radius after cleaning the filter points G.I. Pipes etc., Complete upto 8 m depth	Each	467.43
17a	ERECTION OF POWER PUMPSET IN BORE/OPENWELL		
	Labour Charges for erection of Horizontal shaft, centrifugal pumpset (Coupled/Monoblock) in bore well/Open well including fixing of suction pipe and foot valve upto a maximum depth		

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
	of 7 metres and delivery pipes to the required length with valves, pressure gauges upto the exterior wall of pump room and erection of panel board consisting of TPIC switches starter, Voltmeter, Ammeter, Capacitor single phasing preventor and laying and jointing the cables and twin earthing as per IE rules including providing bed blocks etc., complete and operating the pumps and trial run for 10 days including signing of completion of reports as required by EB authorities.		
i.	Upto 3 HP	Each	6295.15
ii	Above 3 HP upto 7.5 HP	Each	8102.65
iii	Above 7.5 HP to 20 HP	Each	9494.82
iv.	Above 20 HP to 30 HP	Each	10626.00
v.	Above 30 HP to 40 HP	Each	13766.00
vi.	Above 40 HP to 50 HP	Each	19199.00
17 b	ERECTION OF POWER PUMPS IN BORE WELL		
	Labour charges for erection of twin packer duplex type jet pumps in borewells upto 150 mm dia including fixing of Suction pipe regulating valves with jet assembly upto a maximum depth of 30 m and delivery pipe valves pressure gauges upto the exterior wall of pump room and erection of panel board consisting of TPICN switches starter, Voltmeter, Ammeter, three indicator lamps capacitor and laying and jointing the cables and twin earthing as per IE rules etc., complete and testing the pumps and trail run for 10 days including signing of completion of reports as required by EB authorities and finishing the pipe holes including the foundation bolts, nuts and earth pits.		
i.	Upto 3 HP	Each	8421.02
ii	Above 3 HP upto 7.5 HP	Each	9839.24
iii	Beyond 7.5 HP upto 20 HP	Each	11250.22
	Note : If depth of erection exceeds beyond 30 m 10% increase over the basic rate is allowed		

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
17 c	Labour charges for the erection of submersible pumpset in borewell/openwell including fixing and jointing submersible cable with proper clamps upto the starter to required depth and also fixing of riser pipes to the required depth valves erection clamps, pressure gauges upto the exterior wall of pump room and erection of panel board consisting of TPICN switches starter, Voltmeter, Ammeter, three pilot (indicating) lamps capacitor single phasing preventor, water level guard and laying and jointing the cables and twin earthing as per IE rules etc., complete and testing the pumpset and trial run for 10 days.		
i.	Upto 5 HP	Each	8559.95
ii.	Above 5.00 HP to 10.00 HP	Each	9808.85
iii.	Above 10.00 HP to 20.00 HP	Each	10882.64
iv.	Above 20 HP to 30 HP	Each	11834.00
v.	Above 30 HP to 40 HP	Each	15080.00
vi.	Above 40 HP to 50 HP	Each	19924.00
17 d	Conveyance of power pumpset (centrifugal, jet and submersible) and its accessories from divisional stores to site of works.		
i)	Conveyance upto 10 Kms	Each	1196.80
ii)	Conveyance 10 to 20 Kms	Each	1315.47
iii)	Conveyance 20 to 40 Kms	Each	1947.22
iv)	Conveyance 40 to 60 Kms	Each	2374.26
v)	Conveyance 60 to 80 Kms	Each	3116.13
vi)	Conveyance above 80 Kms	Each	3573.43
	Note : For item 17 (a), (b) and (c) i. Removal of centrifugal pumpset/ jet pumps/ submersible pumpsets and its accessories from borewell/ open well for attending repairs 50% of the rates mentioned under item 17 (a), (b) and (c) may be allowed for the respective Horse power.		

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
	ii Re-erection of centrifugal pumpsets, jet pumpsets and its accessories into the borewell/ openwell after attending the repairs 50% of the rate mentioned under item 17 (a), (b) and (c) may be allowed for respective Horse power.		
18	Hire charges :		
a	Sheet piles (Larsen)	Per Pile/ Per day	4.87
b	Sheet piles (For dingham)	Per Pile/ Per day	7.50
c	Compartment sheet with Grills (3' - 0" Wide)	Per sheet/ Per day	7.50
d	Rate for flushing of borewell of 6" dia requiring less than 4 hours operation using drill rods/ hose with required size of pipes for various capacity compressor including transportation, labour, and fuel charges for compressors as directed by the TWAD Officer and conducting yield test by 'V' notch method if required.		
i.	600 Cfm (100 /150 PSI)	1 hour (or) Part there of	1927.75
ii)	300/250 Cfm (100 PSI)	1 hour (or) Part there of	1499.52
iii)	125 Cfm (100 PSI)	1 hour (or) Part there of	1373.75
	Note : Minimum charges for 8 (eight) hours will be levied if the air compressor issued for other departmental works or if the air compressor is hired to other departments.		
e	Helmet	Per day/ 8 hours	7.33
f	Hand test pump	Per day/ 8 hours	69.68
g	Pile hammer	Per day/ 8 hours	7.33
h	Concrete mixer 5 Cft. With driver(Excluding cost of fuel)	Per day/ 8 hours	657.93
i.	Concrete mixer 7 Cft. With driver(Excluding cost of fuel)	Per day/ 8 hours	992.88
j	Hand operated winch	Per day/ 8 hours	64.80
k	Pile cap	Per day/ 8 hours	17.36

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
I	Dewatering using 3hp to 70hp diesel engine pumpset including Hire charges, cost of Diesel, Engine oil, pump operator, labour charges, conveyance of pumpset and fuel to site and back, loading, unloading and any other incidental charges etc., complete.		
(i)	Hire charges for Diesel Pump set For 3 HP	Per Hour	185.38
(ii)	Hire charges for Diesel Pump set For 5 HP	Per Hour	238.05
(iii)	Hire charges for Diesel Pump set For 7.5 HP	Per Hour	333.89
(iv)	Hire charges for Diesel Pump set For 10 HP	Per Hour	434.73
(v)	Hire charges for Diesel Pump set For 12.5HP	Per Hour	500.57
(vi)	Hire charges for Diesel Pump set For 15 HP	Per Hour	561.41
(vii)	Hire charges for Diesel Pump set For 20 HP	Per Hour	683.09
(viii)	Hire charges for Diesel Pump set For 40 HP	Per Hour	1134.80
(ix)	Hire charges for Diesel Pump set For 50 HP	Per Hour	1343.16
(x)	Hire charges for Diesel Pump set For 60 HP	Per Hour	1586.52
(xi)	Hire charges for Diesel Pump set For 70 HP	Per Hour	1839.88
m	Hire charges for Centrifugal sludge removal pumpset with fuel and crew charges including transportations, fixing and dismantling.		
a	Upto 2 HP	per hour	190.00
b	Above 2 HP to 5 HP	per hour	247.00
19 a	Labour for tying barbed wire fencing horizontally through the holes in RCC posts with required tension.	One metre	7.50
b	Labour for tying barbed wire fencing vertically with required tension	One metre	7.50
20	Labour charges for putting bore holes of size 3" to 4" in river bed in sandy and other loose soils using hand boring sets including the cost of hire charges, conveyance charges of hand boring sets, collection of soil sample at frequent intervals and as directed by TWAD Board Officers.	One metre	392.84
21	Desilting light or sandy soil or silt from infiltration wells below water level including the charges for special T&P and air compressor etc. complete.	One cu.m.	1562.54

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
22	Surveying and levelling for the proposed alignment of pipe line by Total station method by engaging qualified Engineers with minimum qualification of B.E. (Civil), Technical Asistant Grade I & II and Mazdoor category I, using the contractor own survey instruments, Special tools and plants vehicle hire charges, transportation, initial incidental charges such as jungle clearance etc. Preparation of Tree map and alignment plan, duly incorporating salient details, such as topographical features, permanent land marks, bench marks etc. at appropriate points, alignment plans and longitudinal section plan at 30 m intervals in addition to other salient locations such as branches, bends, culverts, river crossing etc, with all field particulars in Auto Cad and submission of plan 3 set, along with LF books with making all entries with certification by above qualified Engineers with soft copy and marking TBM stones at required places with bench mark registers soft copies 3 set and hard copy 5 set etc., complete as directed by TWAD Board officers. (The rate is net inclusive of all taxes	1 Km	3834.97
23	Dismantling		
	Dismantling, clearing away and carefully stacking materials useful for reuse for any thickness of walls		
i	Brick / stone in clay walls under 3 m high	cu.m	44.80
ii	Brick / stone in clay walls, add for every additional 3 m or part there of over the initial height of 3 m	cu.m	14.90
iii	Mud / sun dried brick walls under 3 m high	cu.m	30.00
iv	Mud / sun dried brick walls, add for every additional 3 m or part thereof over the initial height of 3 m	cu.m	8.60
v	Brick / stone masonry in lime mortar walls under 3 m high	cu.m	137.00
vi	Brick / stone masonry in lime mortar walls, add for every additional 3 m or part thereof over the initial height of 3 m	cu.m	15.20

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
vii	Brick / stone masonry in Cement mortar walls under 3 m high	cu.m	168.00
viii	Brick / stone masonry in Cement mortar walls, add for every additional 3 m or part thereof over the initial height of 3 metre	cu.m	17.80
ix	Terracing work in roof or floor	sqm	45.50
x	Flag stone in roof or floor including lifting	sqm	24.00
xi	Cut stone slab over culverts upto 3.3.m height below ground level	cu.m	700.00
xii	Cut stone slab over culverts over 3.3.m height below ground level	cu.m	730.00
xiii	Removal of cut stone slabs / RCC Cover slabs	sqm	305.00
xiv	Refixing cut stone slabs/ RCC Cover slab	sqm	334.00
xv	Pantile or Mangalore tiled roof without roof timbers	sqm	11.90
xvi	Flat and Pan tiles or Mangalore tiles over flat tiles, without roof timbers	sqm	16.60
xvii	Asbestos cement sheets roofing without roof timbers	sqm	10.60
xviii	Corrugated iron sheet roofing over pan tiles, without roof timbers	sqm	17.80
xix	Old Thatched roof, including tying materials into small bundles for reuse	sqm	5.20
xx	Wrought and put up framed timbers in roofs/floors	cu.m	440.00
xxi	Doors and windows including removal of frames, hinges and fastenings	sqm	91.10
xxii	Drystone apron or revetment, stacking within 40m lead	cu.m	78.00
xxiii	Grouted stones apron or revetment, stacking within 40 m lead	cu.m	91.10
xxiv	Dry stone masonry walls	cu.m	66.50
xxv	*Dismantling lime concrete	cu.m	211.00
xxvi	*Dismantling plain cement concrete	cu.m	289.00
xxvii	*Dismantling reinforced cement concrete	cu.m	4390.00
	Note* 1) The rate for dismantling lime concrete, cement concrete and R.C. concrete are exclusive of bailing charges. The rate is same in all floors.		
	2) For dismantling below ground level 25% extra over the basic rates (i.e. the rates already available in the schedule of rate) for dismantling is allowed.		

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
	3. Add 25% extra for cause of restricted partial dismantling in existing structure where extra care is required for safeguarding the main structure.		
	New Item		
xxviii	Dismantling RCC using deploying machineries	cu.m	3229.00
xxix	Chipping of concrete and roughening the surface	sqm	24.00
xxx	Pressed tiles & weathering course	sqm	27.30
xxxi	One course of pressed tile roof finish in Cement Mortar	sqm	15.20
xxxii	One course of terrace bricks roof finish in Cement Mortar	sqm	17.80
xxxiii	Two course of flat tiles roof finish in Cement Mortar	sqm	17.80
xxxiv	Mosaic-in-situ finish in cement mortar in flooring and in wall surface	sqm	37.60
xxxv	Floor finish and dadoing walls in Cement Mortar with mosaic tiles/ glazed tiles/ cuddapah slabs.	sqm	36.20
xxxvi	Clearing the site		
a	Clearing Heavy jungle	sqm	5.20
b	Clearing Light jungle	sqm	3.90
c	Clearing Scrub jungle	sqm	3.60
d	Uprooting and removing large palmyrah/ coconut stumps	each	105.00
e	Uprooting and removing small palmyrah/ coconut stumps	each	75.40
f	Removing weeds in channel and drain	sqm	1.40
g	Cleaning juliflora jungle with uprooting	sqm	5.90
h	Cleaning juliflora jungle without uprooting	sqm	4.50
	Note : Definition of large and small stumps : The Diameter of Stumps shall be 1/3 of the circumference at a point 0.6 m above the highest ground level at the stump or the circumference near the top of the stump if the stump is less than 0.60 m in height (The measurement for circumference and determination of the diameter will be to the nearest full centimetre). Only stumps with		

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
	Circumference of 30 cm and more will be measured for payment. The Sl. No d, is for Stumps of Diameter above 30 cm and Sl. No. e is for stumps of diameter 15 to 30 cm.		
24.	OPEN WELL EXCAVATION		
1	Earth work open well excavation, complying with relevant clauses of T.N.D.S.S. Well sinking and with lead up to 10 metres in sand, silt or other loose soil, Wet sand or silt not under water, light black cotton soil, sandy loam and ordinary soil - First depth of 2 metres.	Cu.m	48.80
2	Earth work open well excavation, complying with relevant clauses of T.N.D.S.S. Well sinking and with lead upto 10 metres in Hard stiff clay, stiff black cotton soil, hard red earth, shales, murrums gravel, stoney earth and earth mixed with small size boulders and hard gravelly soil - First depth of 2 metres	Cu.m	72.90
3	Earth work open well excavation, complying with relevant clauses of T.N.D.S.S. Well sinking and with lead up to 10 metres in soft disintegrated rock, laterite, soft rock or kankar, not requiring blasting - First depth of 2 metres	Cu.m	112.30
4	Open well excavation, complying with relevant clauses of T.N.D.S.S. Well sinking and with lead up to 10m in Medium rock and Dense medium rock not requiring blasting. First depth of 2 metres	Cu.m	180.70
5	Open well excavation complying with relevant clauses of T.N.D.S.S. well sinking and with lead up to 10m in Medium rock and Dense medium rock requiring blasting. First depth of 2 metres	Cu.m	271.00
6	Open well excavation complying with relevant clauses of T.N.D.S.S. well sinking and with lead up to 10m in hard granite measured in solid including blasting and stacking - First depth of 2 metres	Cu.m	530.00

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
7	Sinking well in loose soils, light black cotton soil, sandy loam and ordinary soil under water including bailing or pumping charges if necessary etc., complete - First depth of 2 metres	Cu.m	75.70
8	Sinking well in sand, including bailing or pumping charges if necessary etc. complete - First depth of 2 metres	Cu.m	106.20
9	Sinking well in hard stiff clay, light black cotton soil, hard red earth, shales, murram, gravel, stoney earth and earth mixed with small size boulders and hard gravelly soil including bailing or pumping charges if necessary etc. complete - First depth of 2 metres	Cu.m	106.20

Note : Open well Excavation

- a) Up to 2m diameter of wells, 10 percent excess will be allowed over the basic rates for open well excavation.
- b) The rates do not include bailing charges. If the dewatering is to be done departmentally, 10 percent of cost of excavation shall be allowed for dewatering for estimate purposes. Actual or 10 percent whichever is less to be allowed for dewatering charges. For any expenditure above this percentage prior approval of the competent authority should be obtained.
- c) Stage depth rates for well excavation" The stage depth for adopting the rates from the schedule of rates should be reckoned from ground level only irrespective of the fact, whether there is parapet wall or not.
- d) For open well excavation for rates up to 12m depth, the progression would be x, 2x, 3x, 4x, 5x, and 6x and rate beyond 12 metre depth, the progression should be 8x, 10x, 12x, 14x and 16x and so on.

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
25.	RATE FOR EARTH WORK BY DEPLOYING MACHINERIES		
1	Earth work in all soils except hard rock requiring blasting and conveying for formation of bund with lead of 0 to 100 metre deploying earth moving machineries and tippers including benching, formation of bunds, breaking clods, sectioning etc., complete.	Cu.m	45.55
1.a.	Earth work in all soils except hard rock requiring blasting and conveying for formation of bund with an extra lead of every 100 metre or part thereof deploying earth moving machineries and tippers including benching, formation of bunds, breaking clods, sectioning etc., complete.	Cu.m	3.60
2	Earth work deploying earth moving machineries for desilting channel and forming bund on either side and depositing the earth on banks including jungle clearance etc., complete.		
a.	Having width upto 3 m	Cu.m	26.85
b.	Having width of 3 m – 10 m	Cu.m	32.95
3	Earth work excavation deploying earth moving machineries for desilting channel having a width of more than 10 m and forming bund on either side and depositing the earth on banks including jungle clearance etc., complete.	Cu.m	38.30
26	Lift charges - concrete - Brick or stone Masonry above or below ground level		
	Note: The rate for lime concrete, cement concrete, reinforced cement concrete, brick work and stone masonry worked out as per Standard Data will apply to basement and foundation up to a depth of 1.50 m below ground level only (basic rate)		
	Statement I		
a)	Concrete above ground level		
1	Add to the basic rate for works up to 4.50m height in ground floor (height to be reckoned from floor level i.e. plinth level in ground level)	Cu.m	78.20
2	Add for works in every upper floor over the rate of preceding floor	Cu.m	154.00

Schedule Item No.	Description	Unit	Rates for 2018-19 in Rupees
3	Brick or stone masonry above ground level		
i.	Add to the basic rates for works up to 4.50m height in ground floor (height to be reckoned from floor level i.e. plinth level in ground level)	Cu.m	51.50
ii.	Add for works in every upper floor over the rate of preceeding floor	Cu.m	103.80
Note: i)	For the works above 4.5m height in individual floor the rate of next floor may be taken. The extra rates allowed for building works are applicable to irrigation works and road works also. The extra rates may be allowed for the structures beyond 1.00m above ground level.		
ii)	The extra rates may be allowed considering the ground level as datum in respect of service reservoirs (where there is no plinth level)		
	Statement II		
a)	Concrete below ground level		
1	Add the basic rate for works above 1.5m depth and upto 4.5m depth below ground level	Cu.m	77.00
2	Add the basic rate for works above 4.5m depth and upto 9.0 m depth below ground level	Cu.m	154.50
3	Add extra over the above item 2 for every additional 4.5m depth beyond 9m depth below ground level	Cu.m	154.50
B)	Brick or stone masonry below ground level		
1	Add the basic rates for works above 1.5m depth and up to 4.5m depth below ground level	Cu.m	51.70
2	Add the basic rates for works above 4.5m depth and up to 9.0m depth below ground level	Cu.m	103.80
3	Add extra over the above item 2 for every additional 4.5m depth beyond 9m depth below ground level	Cu.m	103.80
	Note :		
	1. The above extra rates are applicable for buildings, irrigations, and road works.		
	2. First Grade stone includes hard granite, trap, etc. second Grade stone includes gneiss, lime stone etc.		
	3. The class of materials to be used should always be defined in the items, description in tender schedules, contract schedules etc.		

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
	4. For reinforced cement concrete work, only the hardest locally available stone will be used, if it has good bonding surface and is otherwise suitable proportions for concrete are defined in the relevant standard specification.		
	5. Note under Sl.No.179 to 187 in the standard data book applies to arches over doors and windows. For large arches in bridges and irrigation works, addition to this rate, extra cost of centering is to be made.		
6	For concrete mix		
a.	Equal mixes (i.e.) 50 percent mortar mixes only should be adopted for plain concrete for foundation, flooring and RC Concrete for roofs, lintels, etc. wherever cement is used with hard broken stones or brick jelly.		
b.	40 percent or 50 percent mortar mixer may be adopted where lime concrete with brick aggregate is used according to the condition at site.		
27	CONCRETE VIBRATORS		
1	Where vibrators are specified for consolidation in plain Cement concrete, this rate per cu.m over and above the provision made in the standard data book for consolidation with manual labour may be allowed.	Cu.m	45.60
2	Where vibrators are specified for consolidation in RCC, this rate per cu. m over and above the provision made in the standard data book for consolidation with manual labour may be allowed.	Cu.m	61.50
28	Plastering		
1	Clean removal of lime plaster from walls and racking out joints 20mm deep or from terraced roofs racking out joints 12mm deep	sq.m	6.20
2	Clean removal of lime plaster from walls	sq.m	4.80
3	Clean removal of cement plaster from walls	sq.m	5.10
4	Clean removal of cement plaster from walls and racking out joints 20mm deep	sq.m	6.70

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
29	White washing and colour washing and distempering		
1	Thorough scrapping of old plastered surface	sq.m	2.80
2	Washing of plastered surface with soap, soda and water(or with soda, lime, brush and water)	sq.m	3.50
30	Painting, Wood Oiling, Tarring, Varnishing, Bee's Waxing etc		
1	Removing old paint from doors and windows by blow lamp and scrapping, including removal and refitting of shutters	sq.m	22.60
2	Removing old paint from doors and windows by scrapping and refitting of shutters	sq.m	9.50
3	Removing paint from doors, windows and wood works by manual labour	sq.m	6.50
4	Removing old paint from structural steel by blow lamp or sand paper	sq.m	13.50
5	Scrapping and removing old paint from structural steel by manual labour	sq.m	6.00
6	Removing old paint from iron surface with sand paper	sq.m	5.70
7	Repolishing the mosaic flooring including polishing stone and hire charges for polishing machine but excluding cost of electrical charges.	sq.m	13.30
31	Miscellaneous		
i.	Supplying & filling up the empty Cement gunny bags with sand, stitching them conveying the same to site and stacking as directed within a lead of 10m excluding cost of bags, jute, thread, needle, sand etc. (labour only)	Bag	5.70
ii.	Driving piles upto 15 cm dia in river bed	RM	17.70
iii.	Pointing the edge and driving bamboo / casurina/ eucalyptus piles into river bed for the first 1m depth below groundlevel	Each	15.10
iv.	Driving bamboo/ Casurina/ eucalyptus piles into ground beyond 1m depth from ground level. For every 1m (or) part thereof	RM	15.10
32	River Conservancy of Korambu Works		
v.	Brush wood bundles one metre girth and one metre long within an initial lead of 1.6 KM	One bundle	2.90
vi.	Extra for every additional lead of 1.6 KM (for the above item)	One bundle	0.34

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
vii.	Driving casurina piles into bed including scaffolding etc., complete	RM	7.30
viii.	Casurina walling pieces 40mm to 50mm diameter including fixing with nails and tying with ropes.	RM	10.20
33	Labour wrought and put up for Doors, Windows and Ventilators		
1	Labour wrought and put up in position of frames inclusive of fixing holdfasts for doors, windows and ventilators etc.	Cu.m	8935.00
2	Labour wrought and put up in position of shutters for fully panelled doors (external or internal) moulded panels including labour charges for fixing furniture fittings, complying with standard drawings and standard specification.	sq.m	1005.00
3	Labour wrought and put up in position of shutters for fully panelled doors internal five plywood panels including labour charges for fixing furniture fittings, complying with standard drawings and standard specification.	sq.m	838.00
4	Labour wrought and put up in position of shutters for glazed and panelled doors including labour charges for fixing furniture fittings, complying with standard drawings and standard specification.	sq.m	938.00
5	Labour wrought and put up in position of shutters for framed and planked doors including labour charges for fixing furniture fittings, complying with standard drawings and standard specification.	sq.m	783.00
6	Labour wrought and put up in position of shutters for ledged and braced and planked doors including labour charges for fixing furniture fittings complying with standard drawings and standard specification.	sq.m	529.00
7	Labour wrought and put up in position of shutters for glazed windows including labour charges for fixing furniture fittings, complying with standard drawings and standard specification.	sq.m	938.00

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
8	Labour wrought and put up in position of shutters for windows panelled including labour charges for fixing furniture fittings, complying with standard drawings and standard specification.	sq.m	1009.00
9	Labour wrought and put up in position of shutters for windows, ledged, braced and planked doors including labour charges for fixing furniture fittings, complying with standard drawings and standard specification.	sq.m	529.00
10	Labour wrought and put up in position frames, shutters for ventilators glazed fixed double frames and with wire netting complete fixed in position in accordance with standard drawings and standard specification.	sq.m	838.00
11	Labour wrought and put up in position frames shutters for swing ventilators and fixed in position in accordance with standard drawings and standard specification.	sq.m	784.00
12	Labour charges for fixing doors along with frames in position etc. complete(finished work)	sq.m	149.00
13	Labour charges for fixing windows and ventilators along with frames in position etc. complete	sq.m	187.00
14	Labour wrought and put up in position flush shutters for single leaf shutters.	sq.m	140.00
15	Labour wrought and put up in position flush shutters for Double leaf shutters	sq.m	216.00
16	Labour wrought and put up in position fly proof wire gauge shutters for doors, windows and ventilators	sq.m	501.00
17	Labour wrought and put up for providing teak wood weld mesh screen with frames 3"x3" (0.075mx0.075m)	sq.m	700.00
18	Labour charges for fixing aluminium doors, windows and ventilators	sq.m	478.00

Schedule Item No.	Description	Unit	Rates for 2019-20 in Rupees
34	Breaking metals		
i.	Labour charges for breaking 40mm metal from departmental blasted stones	Cu.m	266.00
ii.	Labour charges for breaking 20mm metal from departmental blasted stones	Cu.m	397.00
iii.	Labour charges for breaking 50mm metal from departmental blasted stones	Cu.m	159.00
35	Cement Mortar		
i.	Grinding Mortar (Special Grinding lime)	Cu.m	241.00
ii.	Grinding Mortar (Ordinary Grinding lime)	Cu.m	184.00
iii.	Mixing Mortar – Cement by manual	Cu.m	75.70
iv.	Mixing Mortar- Cement by Machine Mixing	Cu.m	100.00
36	Metal & Iron works		
i.	Petty iron work for truss, straps etc. (Wrought & fixed) labour only	Kg	36.20
ii.	Iron works for trusses & record racks (labour only)	kg	33.40
iii.	Fixing in position mild steel grills for windows, ventilators, etc.	Kg	20.90
iv.	Fixing MS rods round/square for windows	Kg	19.40
v.	Fixing iron bars in windows and ventilators	Kg	19.40
37	Conveyance of excavated earth from the narrow street (width less than 3.75m) to stock yard at nearest place (up to a lead of 5.00Km) including Head load charges from 10 meters to 100 meters and conveyance charges.	Cum	97.80
38	Re-Conveyance of earth from the stock yard to the narrow street (width less than 3.75m) for refilling the trenches after laying the pipe line (up to a lead of 5.00Km) including Head load charges from 10 meters to 100 meters and conveyance charges.	Cum	97.80
39	Disposal of surplus earth including loading and conveyance within a distance of 5 km (basic cost of earth is zero) including loading charges and Conveyance Charges of 5 kms distance.	Cum	84.11
40	Lighting arrangements (maintenance works) with genset :		
	Hire charges for portable Genset 1.00 KVA with 2 Nos. of 150W flood light including all incidental charges, transportation, crew charges and fuel charges etc., complete.	Per day	2050.00

Schedule Item No.	Description	Unit	Rates for 2018-19 in Rupees
41	Hire charges for deploying earth moving machinery (JCB/Poclain) for earthwork including diesel, oil and labour charges etc., complete.		
a	JCB	Per Hour	847.00
b	Poclain	Per Hour	2050.00
42	Supply delivery of natural Pebbles filter media for Filter bed operation & sedimentary bore well of spherical in shape and allow even distribution in support bed with good flow. The media should be double washed, screened, kiln dried and classified into various sizes to meet specification including all incidental charges, conveyance, loading & unloading etc., as directed by the TWAD Board officers.		
a	Size : 5 mm to 8mm	Cum	4095.00
b	Size : 20 mm to 70 mm	Cum	3745.00

43. BARRICADING FOR PIPELINE WORKS FOR THE WSS / UGSS WORKS

S. No.	Description	Unit	TWAD Rate/m
i	Barricading work (Where, there is less traffic areas and broader roads etc.) for laying of pipe line using casurina poles at 1.50m center to center (8cm to 10cm dia and 1.80m height) vertical with horizontal poles in three rows including painting the vertical poles in the road facing sides with ready mix paint, tying the vertical and horizontal poles with coir rope including fixing charges and fixing 75mm dia reflectors including earth work excavation for fixing vertical posts and finally removing and stacking the materials safely for further use etc., complete and as directed by TWAD Board officers.	RM	Rs.44.00
ii	Barricading work (Where the lines are in narrow width of municipality area, busy streets like Market, Bus-stand and in the Highways etc.) for laying of pipe line using casurina poles at 1.50m center to center (8cm to 10cm dia. and 1.80m height) vertical with horizontal poles in two rows, painting the vertical poles in the road facing sides with ready mix paint, tying the vertical and horizontal poles with coir rope including supplying, delivery and fixing of GI sheet (0.90m x 0.8mm thick) in the horizontal poles and fixing 75mm dia. reflectors including earth work excavation for fixing vertical posts and finally removing and stacking the materials safely for further use etc., complete and as directed by TWAD Board officers.	RM	Rs.85.00

44. SHORING AND STRUTTING FOR THE WSS / UGSS WORKS

S. No.	Description	Unit	TWAD Rate/m
	Shoring, and strutting with sheet piles of size width 400 mm x height of 3m x thickness of 9mm as per IS 2314-1986 by driving on both sides of the trench from Ground Level up to the required depth and connecting the above sheet piles by horizontal strutting with sheet piles at an interval of 1.0m, fixing the sheet piles by connecting the horizontal strutting with casurina poles of 8cm to 10cm dia. at 1.50m interval and including removing the sheet piles after the pipelines are laid, jointed, tested, and stacking it safely for other uses. It includes the cost of sheet piles and casurina poles including labour charges for erecting the sheet piles, driving the sheet piles, removing the sheet piles, fixing Casurina poles, etc., complete and all other incidental charges for the depths (i) 0-3mts., (ii) 0-4mts., (iii) 0-5mts., (iv) 0-6mts., (v) 0-7mts. and (vi) 0-8mts.		
a	0 to 3 m	RM	2208.18
b	0 to 4 m	RM	2992.24
c	0 to 5 m	RM	3792.80
d	0 to 6 m	RM	4576.85
e	0 to 7 m	RM	5377.41
f	0 to 8 m	RM	6253.67

**45. RATES FOR TRENCHLESS TECHNOLOGY FOR PIPE LAYING WORK IN RAILWAY/
NHAI /SH/NH CROSSINGS.**

S. No.	Description	Unit	TWAD Rate/m
i	Excavating of driving pit and receiving pit of size 3.00m (length) x 3.50m (breadth), upto 5m depth in all soil strata including shoring and strutting using 6mm tk MS Plate of size 3.50m x 3.50m usable for 20 operations and providing 16mm thickness MS plate of size 3.00m x 3.50m with 100mm x100mm x 12mm angles of 4m length for holding the MS plates for Thrust arrangements to receive the impacts during pushing operation of encasing pipe. Lowering the following size of MS encasing pipe by using Contractor's crane and machineries and jointing MS pipes by welding, across the National Highways/ State Highways/ Railways/Canal crossing etc and driving the horizontal bore by pushing / jacking method (trenchless technology method) using contractor's machineries such as cranes, jacks, jacking materials, generator, welding machineries, compressor, jack hammer and other equipments etc. without interfering and causing any hindrance to the movement of traffic or any other vehicles, without any disturbances to the railway/road/canal formation etc. including bailing / pumping of water where ever necessary without affecting any installation like water supply pipeline/telephone cable, electric cables etc. passing nearby area and scooping the earth inside the pipes and pit and depositing the surplus earth in a convenient place and leveling the site after completion of entire work as directed by TWAD Engineers. The rate includes the cost of driving pit, thrust bed/wall and receiving pit to the depth of om to 2m excluding the cost of MS pipes.		
a	For 200mm dia MS encasing pipe for various thickness	RM	8090.00
b	For 250mm dia MS encasing pipe for various thickness	RM	8170.00
c	For 300mm dia MS encasing pipe for various thickness	RM	8260.00
ii	Excavating of driving pit and receiving pit of size 3.00m (length) x 3.50m (breadth), depth upto 5m in all soil strata including shoring and strutting using 6mm tk MS Plate of size 3.50m x 3.50m usable for 15 operations and providing 16mm thickness MS		

S. No.	Description	Unit	TWAD Rate/m
	plate of size 3.00m x 3.50m with 100mm x100mm x 12mm angles of 4m length for holding the MS plates for Thrust arrangements to receive the impacts during pushing operation of encasing pipe. Lowering the following size of MS encasing pipe by using Contractor's crane and machineries and jointing MS pipes by welding, across the National Highways/ State Highways/ Railways/Canal crossing etc and driving the horizontal bore by pushing / jacking method (trenchless technology method) using contractor's machineries such as cranes, jacks, jacking materials, generator, welding machineries, compressor, jack hammer and other equipments etc. without interfering and causing any hindrance to the movement of traffic or any other vehicles, without any disturbances to the railway/road/canal formation etc. including bailing / pumping of water where ever necessary without affecting any installation like water supply pipeline/telephone cable, electric cables etc. passing nearby area and scooping the earth inside the pipes and pit and depositing the surplus earth in a convenient place and leveling the site after completion of entire work as directed by TWAD Engineers. The rate includes the cost of driving pit, thrust bed/wall and receiving pit to the depth of om to 2m excluding the cost of MS pipes.		
a	For 350mm dia MS encasing pipe for various thickness	RM	9470.00
b	For 400mm dia MS encasing pipe for various thickness	RM	9770.00
c	For 450mm dia MS encasing pipe for various thickness	RM	10000.00
d	For 500mm dia MS encasing pipe for various thickness	RM	10170.00
e	For 600mm dia MS encasing pipe for various thickness	RM	10500.00
f	For 700mm dia MS encasing pipe for various thickness	RM	11350.00
g	For 800mm dia MS encasing pipe for various thickness	RM	11670.00
h	For 900mm dia MS encasing pipe for various thickness	RM	11960.00
iii	Excavating of driving pit and receiving pit of size 3.00m (length) x 3.50m (breadth), depth upto 5m in all soil strata including shoring and strutting using 6mm tk MS Plate of size 3.50m x 3.50m usable for 10 operations and providing 16mm thickness MS plate of size 3.00m x 3.50m with 100mm x100mm x 12mm angles of 4m length for holding the MS plates for Thrust arrangements to receive the impacts during		

S. No.	Description	Unit	TWAD Rate/m
	pushing operation of encasing pipe. Lowering the following size of MS encasing pipe by using Contractor's crane and machineries and jointing MS pipes by welding, across the National Highways/ State Highways/ Railways/Canal crossing etc and driving the horizontal bore by pushing / jacking method (trenchless technology method) using contractor's machineries such as cranes, jacks, jacking materials, generator, welding machineries, compressor, jack hammer and other equipments etc. without interfering and causing any hindrance to the movement of traffic or any other vehicles, without any disturbances to the railway/road/canal formation etc. including bailing / pumping of water where ever necessary without affecting any installation like water supply pipeline/telephone cable, electric cables etc. passing nearby area and scooping the earth inside the pipes and pit and depositing the surplus earth in a convenient place and leveling the site after completion of entire work as directed by TWAD Engineers. The rate includes the cost of driving pit, thrust bed/wall and receiving pit to the depth of om to 2m excluding the cost of MS pipes.		
a	For 1000mm dia MS encasing pipe for various thickness	RM	13270.00
b	For 1050mm dia MS encasing pipe for various thickness	RM	13590.00
c	For 1100mm dia MS encasing pipe for various thickness	RM	14640.00
d	For 1200mm dia MS encasing pipe for various thickness	RM	15760.00
e	For 1400mm dia MS encasing pipe for various thickness	RM	17010.00
f	For 1600mm dia MS encasing pipe for various thickness	RM	18290.00
g	For 1800mm dia MS encasing pipe for various thickness	RM	19750.00
h	For 2000mm dia MS encasing pipe for various thickness	RM	21250.00
i	For 2200mm dia MS encasing pipe for various thickness	RM	23660.00

46. REPLACEMENT OF UNDER GROUND UTILITIES (HSC PIPES, DISTRIBUTION SYSTEM & PUMPING MAIN PIPES, Etc.)

S. No.	Description	Unit	TWAD Rate/m
i.	Replacement of Underground Utilities (GI Pipe) damaged during earthwork excavations for pipe laying works including cost of additional earthwork excavation in all soil strata, including BT/CC road cutting, removal of slushy soil and replacing the pipeline with sound pipe, including supply and delivery of GI pipes, coupler, Union, jointing materials and required specials, cutting, threading, conveying , laying, jointing and cost of refilling for the additional earthwork etc complete and as directed by the TWAD board officers.		
a.	15mm Dia GI Pipe	1RM	393.11
b.	20mm Dia GI Pipe	1RM	427.78
c.	25mm Dia GI Pipe	1RM	520.44
d.	32mm Dia GI Pipe	1RM	612.78
e.	40mm Dia GI Pipe	1RM	697.44
f.	50mm Dia GI Pipe	1RM	874.78
g.	65mm Dia GI Pipe	1RM	1317.67
h.	80mm Dia GI Pipe	1RM	1598.33
i.	100mm Dia GI Pipe	1RM	2245.00
j.	125mm Dia GI Pipe	1RM	3017.67
ii.	Replacement of Underground Utilities (PVC Pipe) damaged during earthwork excavation for pipe laying works including cost of additional earthwork excavation in all soil strata, including BT/CC road cutting, removal of slushy soil and replacing the pipeline with sound pipe, including supply and delivery of PVC pipes, couplers, jointing materials and required specials, cutting, conveying , laying, jointing and cost of refilling for the additional earthwork etc complete and as directed by the TWAD board officers.		
a.	15mm Dia PVC Pipe (10 KSC)	1RM	201.1
b.	20mm Dia PVC Pipe (10 KSC)	1RM	208.9
c.	25mm Dia PVC Pipe (10 KSC)	1RM	225.03
d.	32mm Dia PVC Pipe (10 KSC)	1RM	244.93
e.	40mm Dia PVC Pipe (10 KSC)	1RM	280.13
f.	50mm Dia PVC Pipe (10KSC)	1RM	259.10

S. No.	Description	Unit	TWAD Rate/m
g.	63mm Dia PVC Pipe (10KSC)	1RM	310.17
h.	75mm Dia PVC Pipe (10KSC)	1RM	353.17
i.	90mm Dia PVC Pipe (10KSC)	1RM	441.50
j.	110mm Dia PVC Pipe (10KSC)	1RM	636.44
k.	140mm Dia PVC Pipe (10KSC)	1RM	917.44
l.	160mm Dia PVC Pipe (10KSC)	1RM	1131.11
m.	180mm Dia PVC Pipe (10KSC)	1RM	1385.96
n.	200mm Dia PVC Pipe (10KSC)	1RM	1810.63
	Replacement of Underground Utilities (PVC Pipe) damaged during earthwork excavation for pipe laying works including cost of additional earthwork excavation in all soil strata, including BT/CC road cutting, removal of slushy soil and replacing the pipeline with sound pipe, including supply and delivery of PVC pipes, couplers, jointing materials and required specials, cutting, conveying, laying, jointing and cost of refilling for the additional earthwork etc complete and as directed by the TWAD board officers.		
a.	50mm Dia PVC Pipe (6KSC)	1RM	228.83
b.	63mm Dia PVC Pipe (6KSC)	1RM	259.83
c.	75mm Dia PVC Pipe (6KSC)	1RM	294.17
d.	90mm Dia PVC Pipe (6KSC)	1RM	343.50
e.	110mm Dia PVC Pipe (6KSC)	1RM	428.78
f.	140mm Dia PVC Pipe (6KSC)	1RM	646.44
g.	160mm Dia PVC Pipe (6KSC)	1RM	783.78
h.	180mm Dia PVC Pipe (6KSC)	1RM	983.63
i.	200mm Dia PVC Pipe (6KSC)	1RM	1284.96
iv	Replacement of Underground Utilities (PVC Pipe) damaged during earthwork excavation for pipe laying works including cost of additional earthwork excavation in all soil strata, including BT/CC road cutting, removal of slushy soil and replacing the pipeline with sound pipe, including supply and delivery of PVC pipes, couplers, jointing materials and required specials, cutting, conveying, laying, jointing and cost of refilling for the additional earthwork etc complete and as directed by the TWAD board officers.		

S. No.	Description	Unit	TWAD Rate/m
a.	63mm Dia PVC Pipe (4KSC)	1RM	236.50
b.	75mm Dia PVC Pipe (4KSC)	1RM	258.83
c.	90mm Dia PVC Pipe (4KSC)	1RM	293.17
d.	110mm Dia PVC Pipe (4KSC)	1RM	404.44
e.	140mm Dia PVC Pipe (4KSC)	1RM	518.44
f.	160mm Dia PVC Pipe (4KSC)	1RM	623.44
g.	180mm Dia PVC Pipe (4KSC)	1RM	789.30
h.	200mm Dia PVC Pipe (4KSC)	1RM	985.30
v	Replacement of Underground Utilities (AC Pipe) damaged during earthwork excavation for pipe laying works including cost of additional earthwork excavation in all soil strata, including BT/CC road cutting, removal of slushy soil and replacing the pipeline with next available higher size PVC pipe, including supply and delivery of PVC pipes, couplers, jointing materials and required specials, cutting, conveying , laying, jointing and cost of refilling for the additional earthwork etc complete and as directed by the TWAD board officers.		
a.	80mm Dia AC Pipe	1RM	591.41
b.	100mm Dia AC Pipe	1RM	724.56
c.	125mm Dia AC Pipe	1RM	1040.15
vi	Replacement of Underground Utilities (AC Pipe) damaged during Earthwork excavation for pipe laying works including cost of additional earthwork excavation in all soil strata, including BT/CC road cutting , removal of slushy soil and replacing the pipeline with sound DI s/s pipe, including supply and delivery of DI s/s pipes, D/S collars, jointing materials and required specials, cutting, conveying , laying, jointing and cost of refilling for the additional earthwork etc complete and as directed by the TWAD board officers.		
a.	150mm Dia AC Pipe	1RM	2570.34
b.	200mm Dia AC Pipe	1RM	3185.63
c.	250mm Dia AC Pipe	1RM	3924.96
d.	300mm Dia AC Pipe	1RM	4695.29
e.	350mm Dia AC Pipe	1RM	5540.41
f.	400mm Dia AC Pipe	1RM	6471.68

S. No.	Description	Unit	TWAD Rate/m
vii	Replacement of Underground Utilities (HDPE Pipes) damaged during Earthwork excavations for pipe laying works including cost of additional earthwork excavation in all soils, including BT cutting, CC roads , removal of slushy soil and replacing the pipeline with sound pipe, including supply and delivery of HDPE pipes, couplers, jointing materials and required specials, cutting, threading, conveying , laying, jointing and cost of refilling for the additional earthwork etc complete and as directed by the TWAD board officers.		
a.	50mm Dia HDPE Pipe	1RM	333.10
b.	63mm Dia HDPE Pipe	1RM	392.03
c.	75mm Dia HDPE Pipe	1RM	457.97
d.	90mm Dia HDPE Pipe	1RM	543.03
e.	110mm Dia HDPE Pipe	1RM	737.31
f.	125mm Dia HDPE Pipe	1RM	855.84
g.	140mm Dia HDPE Pipe	1RM	984.38
h.	160mm Dia HDPE Pipe	1RM	1171.04
i.	200mm Dia HDPE Pipe	1RM	1642.19