

# **TAMILNADU WATER SUPPLY AND DRAINAGE BOARD**



## **STANDARD SCHEDULE OF RATES FOR THE YEAR 2021-22**





## **TAMILNADU WATER SUPPLY AND DRAINAGE BOARD**

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### **FOREWORD**

**Thiru. V. Dakshinamoorthy, I.A.S., Managing Director**



I earnestly acknowledge updating of TWAD SoR for 2021-22 which is revised on yearly basis for formulating the detailed estimates of the Government projects. It is a meticulous drive processed with systematic aggregating of input data derived from whole sale price index, PWD SoR, rate quoted by the authorized manufactures, feedback from the authenticated proposals originated from the Chief Engineers and rate approved by the Superintending Engineers. Arduous efforts of gleaning of data , constellation of rates in endorsed format requiring committed team work by CoM Wing for preparation of **“TWAD SoR for 2021-‘22”** is commendable.

I expound immense pleasure in releasing the **“TWAD Board Schedule of Rates for 2021-‘22”**, for adoption in the preparation of detailed estimates for Water Supply and Sewerage projects.

I felicitate the Joint Managing Director, TWAD Board, Engineering Director, TWAD Board and their dedicated teams for the strenuous efforts put forth for the compilation of **TWAD Board SoR for 2021-‘22”**.

I request the TWAD Board Engineers, to adhere to the specifications and rates in preparing the project estimates.

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





## **TAMILNADU WATER SUPPLY AND DRAINAGE BOARD**

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### **Foreword**

**Thiru. M. Pradeep Kumar, I.A.S.,** Joint Managing Director



It's been over 50 years since the establishment of TWAD Board where the Design, Execution, Operation and Maintenance of Water Supply & under Ground Sewage Schemes as its core Strength. The Schedule of Rates (SoR) of the Products and Services are very essential for Designing and Execution of all the works economically which in turns benefits the end users. The Quality in execution of works can only be achieved by effectively finalizing the Schedule of Rates by including the latest Modern Engineering Components and excluding the obsolete Components rationally.

Considering the importance of the SoR 2021-22, the commercials of the products have been finalized by analyzing the Trends of Products & Services in the Global and Domestic Financial Markets. At this juncture, I thank the Managing Director, TWAD Board for his valuable Guidance and Direction, my Engineering Team, Product Vendors, Consultants and all those who worked tirelessly for finalizing the SoR 2021-2022.

***" Design is not just what it looks like and feels like  
Design is how it works "- Steve Jobs***

*Happy Engineering*

**M. Pradeep Kumar IAS  
Joint Managing Director,  
TWAD Board, Chennai - 600005**



**PROCEEDING OF THE JOINT MANAGING DIRECTOR, TWAD BOARD,  
HEAD OFFICE, CHEPAUK, CHENNAI-5  
PRESENT: THIRU. M. PRADEEP KUMAR, I.A.S.,  
JOINT MANAGING DIRECTOR**

**Proc. No. 01/Sch.rate /CM /AE5 /2021 /Dt. 07.10.2021**  
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Sub: TWAD Board-Schedule of Rates for the year 2021-22 – State Level Technical Committee - Rates finalized – Communicated – reg.

- Ref: 1. Resolution No. 3.2 / Dt: 10.12.2001 of 369<sup>th</sup> Board meeting.  
2. Joint Managing Director, TWAD Board, Chennai-5, Proc. No. 01 / SoR / CoM / AE5 / 2020 / dt: 07.08.2020.  
3. Office of the Engineer-in-Chief, (Buildings) & Chief Engineer (Buildings), Chennai Region, PWD, Chennai, Proceedings. No. HDO (A) / 00926 / 2021-1, Dt: 13.09.2021.  
4. Office of the Engineer-in-Chief, WRD & Chief Engineer (General), PWD, Chennai, Proc. No. HDO/ SrDO-2/SSR 2021-22/ 21022/2021 / Dt: 13.09.2021.  
5. Minutes of the State Level Technical Committee meeting held on 05.10.2021 at TWAD Board, Head Office, Chennai-5.

.....  
TWAD Board communicated the approved Schedule of Rates for the year 2020-21 vide reference 2<sup>nd</sup> 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 the year 2021-22 was placed before the State Level Technical Committee. The State Level Technical Committee of TWAD Board during the meeting held on 05.10.2021, deliberated and approved the proposals concerning the Standard Schedule of Rates for the year 2021-22 in sequel to the publication of Schedule of Rates for PWD vide reference 3<sup>rd</sup> & 4<sup>th</sup> cited.

Accordingly, the approved Standard Schedule of Rates of TWAD Board for the year 2021-22 is communicated herewith for adoption in the preparation of cost estimates **with effect from 01.10.2021.**

The receipt of Standard Schedule of Rates for the year 2021-22 may be acknowledged.

Encl: TWAD Board Standard Schedule of Rates for the year 2021-22

  
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**





## **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, Dindigul, Thanjavur, Nagercoil 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, Manholes in UGSS 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.

## **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 13<sup>th</sup> 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 13<sup>th</sup> 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**

- I. District-wise average lead shall be approved by the concerned Chief Engineers based on the approved quarry by the PWD for CWSS.
- II. Lead for respective local body such as Town Panchayats, Municipalities and Corporation shall be adopted separately for the stand alone water supply schemes/ UGSS and approved by the Executive Engineers concerned.

**STATEMENT SHOWING THE EXTRA PERCENTAGE ALLOWABLE AS PER GENERAL NOTE  
TO REVISED SCHEDULE OF RATES FOR THE YEAR 2021-22**

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, Dindigul, Thanjavur, Nagercoil and Vellore Corporation limits.	5%	--	5%	-	5%
3.	<b>Restricted Areas</b>					
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	<b>Hills</b>					
i	For works in Nilgiris District	40%	25%	40%	--	40%
ii	For works at Mudumalai Sanctuary, Shandy Nalla Sheep Form, 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, Chenni Malai 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%
	<b>In Madurai, Theni &amp; Dindigul Districts.</b>					
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%	--	--	--	--

Sl. No.	Area	Percentage extra allowable on				
		Labour	Material	Rate of work (where human labour involved)	Conveyance	Head load
x	For works at Lower Camp above Kuruvanthu Bridge, Bodi Hills, Cumbum Mettu, Sirumalai, Pachai Kamatchi Hills, Palani Hills, Tiruparankundram Hills, Irdumban 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%
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%



Sl. No.	Area	Percentage extra allowable on				
		Labour	Material	Rate of work (where human labour involved)	Conveyance	Head load
xviii	For works at Pachamalai Hills in Trichy, Karur and Perambalur Districts.	40%	25%	40%	--	40%
5	<b>ISLANDS</b>					
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, Kasuvar, Karaichalli and Vilankurichi Islands in Thoothukudi District.	125%	125%	125%	125%	125%
6	<b>TUNNELS</b>					
i	Where human labour alone is involved	15%	-	15%	-	-
7	<b>DAM SITES UNDER HANGING CONDITION</b>					
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%	-	-	-	-



## **II. RATES FOR LABOUR**



## TWAD BOARD

### II. RATES FOR LABOUR

Schedule Item No.	Description	Unit	Rate for 2021-22 in Rupees
1	Driller	Day	800.00
2	Assistant Driller	Day	656.00
3	Special heavy labour for driving sheet pile	Day	800.00
4	Boring Attendant	Day	584.00
5	Water Meter Reader	Day	558.00
6	Helper for Rig	Day	584.00
7	Laboratory Attender SSLC/ 10th Std passed	Day	473.00
8	a. Filter Bed Operator with D.M.E.	Day	979.00
	b. Filter Bed Operator with ITI	Day	800.00
	c. Filter Bed operator without I.T.I.	Day	681.00
9	Cleaner for Treatment Unit, Pump and vehicles	Day	558.00
10	Boring Mechanic for Hand Boring set	Day	681.00
11	Turn Cock (Experience in pipe line Operation and maintenance)	Day	558.00
12	Fitter (Pipe laying / Bar bending) I Class	Day	747.00
13	Fitter (Pipe laying / Bar bending) II Class	Day	724.00
14	Sewer Cleaner	Day	558.00
15	Store Attender SSLC /10th Std Passed	Day	558.00
16	Divers and Well Sinkers	Day	765.00
17	Hammer Man (Geophysical survey)	Day	530.00
18	Geological Assistant	Day	817.00
19	Maintenance Assistant	Day	584.00
20	Plant Operator, SSLC passed with 3 years experience	Day	655.00
21	Reverse Osmosis (R.O.) Plant Operator SSLC passed with 3 years experience	Day	800.00
22	Mechanic with ITI	Day	657.00
23	a. Carpenter I Class	Day	842.00
	b. Carpenter II Class	Day	804.00
24	a. Cleaner I Gr.	Day	448.00
	b. Cleaner II Gr.	Day	443.00
25	a. Fitter I Class	Day	760.00
	b. Fitter II Class	Day	739.00
26	Floor Polisher	Day	663.00
27	Gardener	Day	525.00
28	Head Mazdoor for Well sinking	Day	556.00
29	a. Driver (Light duty)	Day	663.00
	b. Driver (Heavy duty)	Day	708.00

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
30	Jumper Mazdoor	Day	525.00
31	a. Maistry, Road Inspector & Work Inspector	Day	639.00
	b. Maistry, Road Inspector & Work Inspector (Degree holder)	Day	708.00
32	a. Mason for Brick Work - I Class	Day	861.00
	b. Mason for Brick Work - II Class	Day	804.00
33	a. Mason for Stone Work - I Class	Day	861.00
	b. Mason for Stone Work - II Class	Day	804.00
34	a. Mazdoor Category I	Day	562.00
	b. Mazdoor Category II	Day	461.00
	c. Head Mazdoor	Day	581.00
35	a. Moplah - I Class	Day	661.00
	a. Moplah - II Class	Day	637.00
36	a. Painter/Varnisher-I Class	Day	688.00
	b. Painter/Varnisher-II Class	Day	666.00
37	Pile Driver	Day	611.00
38	a. Plumber I Class	Day	747.00
	b. Plumber II Class	Day	724.00
39	Pump Driver	Day	581.00
40	a. Stone cutter- I Class	Day	661.00
	b. Stone cutter- II Class	Day	637.00
41	a. Welder/ Bracer - I Class	Day	661.00
	b. Welder/ Bracer - II Class	Day	637.00
42	Well sinking Diver working with Helmet (above two metres depth of water)	Day	771.00
	<b>Technical Assistant</b>		
43	a. Technical Assistant Gr.I (BE passed)	Day	1049.00
	b. Technical Assistant- Gr.II (Diploma in Engg. Passed/ B.E. failed/ Degree in Geology for ground water works)	Day	945.00
	c. Technical Assistant Gr.III (Diploma in Engg. Failed / ITI (Civil) passed)	Day	799.00
44	a. Laboratory Assistant. Gr.I (Post Graduate in Science)	Day	799.00
	b. Laboratory Assistant. Gr.II (Degree in Science/ Degree in Geology for ground water)	Day	732.00
	c. Laboratory Assistant Grade III (with Degree qualification to work as works clerk)	Day	659.00
45	a. Mazdoor employed for Geological mapping	Day	562.00
	b. Mazdoor employed for Pitting, Trenching, Sampling and Drilling works	Day	562.00

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
	c. Mazdoor employed for Geophysical Investigation works	Day	562.00
	d. Head Mazdoor to supervise exploratory works	Day	594.00
46	Mixer Operator (including concrete mixer )	Day	611.00
47	Mixer Driver	Day	581.00
48	Compressor Operator	Day	584.00
49	Computer Operator		
	a. Gr.I [B.E. (Computer Science)/ M.Sc., (Computer Science)]	Day	1049.00
	b. Gr.II [B.Sc., (Computer Science)/ Diploma in Computer Science]	Day	945.00
50	Stone & Crusher Operator	Day	584.00
51	Heavy Mazdoor	Day	611.00
52	Wireman Grade I/ Electrician Grade I	Day	712.00
53	Wireman Grade II/ Electrician Grade II	Day	708.00
54	Electrical Helper	Day	556.00
55	Laboratory Attendant	Day	476.00
56	Electrical Maistry	Day	817.00
57	Axe Mazdoor	Day	525.00
58	Blacksmith - 1st Class	Day	663.00
59	Blacksmith - 2nd Class	Day	637.00
60	Boat Mazdoor	Day	556.00
61	Bullocks pair with driver (with bandy)	Day	1039.00
62	Bullocks single with driver (with bandy)	Day	747.00
63	Caulker	Day	581.00
64	Ferry Mazdoor	Day	581.00
65	Hammer Mazdoor	Day	533.00
66	Mechanic - 1st Class	Day	663.00
67	Mechanic - 2nd Class	Day	637.00
68	Navagonies or Javali Man - 1st Class	Day	556.00
69	Sawyer	Day	611.00
70	Smith 1st Class	Day	661.00
71	Smith 2nd Class	Day	637.00
72	Sprayer Mazdoor (for bitumen, tar etc.,)	Day	525.00
73	Syrang-1st Class	Day	661.00
74	Syrang-2 nd Class	Day	637.00
75	Thatcher	Day	556.00
76	Tinker 1 st Class	Day	533.00
77	Tinker 2 nd Class	Day	525.00
78	Turner 1 st Class	Day	611.00
79	Turner 2 nd Class	Day	581.00

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
80	Time Keeper 1st Class	Day	661.00
81	Time Keeper 2nd Class	Day	637.00
82	Well Diver for removing silt - 1 st Class	Day	661.00
83	Well Diver for removing silt - 2nd Class	Day	637.00
81	Well sinker - 1st Class	Day	747.00
85	Well sinker - 2nd Class	Day	724.00
86	Wodder	Day	556.00
87	Cinema Operator (ITI Passed)	Day	659.00
88	B.Sc., (Agriculture) Passed- Technical Assistant	Day	945.00
89	Irrigation Community Organiser Grade I [B.E(Agri) passed/B.Sc.,(Agri)Passed/PG (Geology) & Rural Development]	Day	1011.00
90	Irrigation Community Organiser Grade II [B.E(Agri) failed / B.Sc.,(Agri)failed /Diploma in Agri. Passed]	Day	842.00
91	HeatMaster Operator	Day	557.00
92	Raker	Day	581.00
93	Lift Operator	Day	639.00
94	Sound Service Operator	Day	533.00



**III(A) RATES FOR MATERIALS**



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

Sl. No	Description	Unit	Rate for 2021-22 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
<b>I</b>	<b>4KSC</b>					
1	63mm	Metre			68.00	
2	75mm	Metre			94.00	
3	90mm	Metre			130.00	
4	110mm	Metre			186.00	
5	140mm	Metre			308.00	
6	160mm	Metre			400.00	
7	180mm	Metre			516.00	
8	200mm	Metre			621.00	
<b>II</b>	<b>6KSC</b>					
1	50mm	Metre			60.00	
2	63mm	Metre			95.00	
3	75mm	Metre			132.00	
4	90mm	Metre			186.00	
5	110mm	Metre			262.00	
6	140mm	Metre			448.00	
7	160mm	Metre			567.00	
8	180mm	Metre			733.00	
9	200mm	Metre			909.00	
<b>III</b>	<b>10KSC</b>					
1	50mm	Metre			94.00	
2	63mm	Metre			144.00	
3	75mm	Metre			202.00	
4	90mm	Metre			291.00	
5	110mm	Metre			437.00	
6	140mm	Metre			711.00	
7	160mm	Metre			903.00	
8	180mm	Metre			1159.00	
9	200mm	Metre			1428.00	

- 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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.  
3) GST extra applicable as per GO

### 1.1 PVC CASING PIPE AS PER IS 12818 / 2010

Sl.No	Description	Unit	Rate for 2021 -22 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
1	150mm CS	Metre			618.00	
2	150mm CM	Metre			807.00	
3	150mm RS	Metre			969.00	
4	200mm CS	Metre			1146.00	
5	200mm CM	Metre			1481.00	
6	200mm RS	Metre			1689.00	

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

2) 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**

<b>SI No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees</b>
<b>I</b>	<b>SN8-SDR 34(S 16.5)</b>		
1	110mm	Per Metre	277.00
2	125mm	Per Metre	362.00
3	160mm	Per Metre	581.00
4	200mm	Per Metre	906.00
5	250mm	Per Metre	1405.00
6	315mm	Per Metre	2252.00
<b>II</b>	<b>SN4-SDR 41(S 20)</b>		
1	125mm	Per Metre	310.00
2	160mm	Per Metre	476.00
3	200mm	Per Metre	751.00
4	250mm	Per Metre	1177.00
5	315mm	Per Metre	1829.00
<b>III</b>	<b>SN2-SDR 51(S 25)</b>		
1	160mm	Per Metre	401.00
2	200mm	Per Metre	618.00
3	250mm	Per Metre	956.00
4	315mm	Per Metre	1532.00

- 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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.  
3) GST extra applicable as per GO.

### 1.3 UPVC - Column pipe

<b>Sl No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees</b>
1	25mm	Per Metre	77.00
2	32mm	Per Metre	124.00
3	40mm	Per Metre	166.00
4	50mm	Per Metre	270.00
5	65mm	Per Metre	347.00
6	80mm	Per Metre	479.00
7	100mm	Per Metre	719.00

- Note: 1) The above rates are basic rates inclusive of transportation charges 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 2021-22 in Rupees
	<b>PVC THREADED COUPLER</b>		
1	63 mm x 50 mm	Each	46.00
2	75 mm x 50 mm	Each	70.00
3	90 mm x 80 mm	Each	89.00
4	110 mm x 100 mm	Each	159.00
5	140 mm x 125 mm	Each	222.00
	<b>UNEQUAL TEE</b>		
1	63 mm x 50 mm	Each	35.00
2	75 mm X 50 mm	Each	42.00
3	90 mm x 50 mm	Each	101.00
4	90 mm x 63 mm	Each	94.00
5	90 mm x 75 mm	Each	100.00
6	110 mm x 50 mm	Each	88.00
7	110mm x 63 mm	Each	89.00
8	110 mm x 90mm	Each	178.00
9	140mm x 50 mm	Each	360.00
10	140 mm x 63 mm	Each	325.00
11	140 mm x 90 mm	Each	338.00
12	140 mm x 110 mm	Each	287.00
13	160 mm x 50 mm	Each	459.00
14	160 mm x 63 mm	Each	459.00
15	160 mm x 90 mm	Each	236.00
16	160 mm x 110mm	Each	271.00
17	160 mm x140 mm	Each	679.00
	<b>PVC REDUCER COUPLER</b>		
1	63 mm x 50 mm	Each	16.00
2	75 mm x 63 mm	Each	13.00
3	90 mm x 63 mm	Each	26.00
4	90 mm x 75 mm	Each	21.00
5	110 mm x 63 mm	Each	38.00
6	110 mm x 75 mm	Each	43.00
7	110 mm x 90 mm	Each	33.00
8	140 mm x 63 mm	Each	117.00
9	140 mm x 90 mm	Each	83.00
10	140 mm x 110 mm	Each	52.00
11	160 mm x 110 mm	Each	117.00
12	160 mm x 140 mm	Each	96.00

Sl.No.	Description	Unit	Rate for 2021-22 in Rupees
	<b>PVC REDUCER MULTI STAGE</b>		
1	90 mm x 63 mm	Each	26.00
2	110 mm x 63 mm	Each	38.00
3	110 mm x 75 mm	Each	43.00
4	110 mm x 90 mm	Each	44.00
5	140 mm x 90 mm	Each	217.00
	<b>PVC REDUCER FABRICATED</b>		
1	75 mm x 63 mm	Each	13.00
2	90 mm x 75 mm	Each	21.00
3	110 mm x 90 mm	Each	33.00
4	140 mm x 110 mm	Each	52.00
5	160 mm x 140 mm	Each	96.00
	<b>SADDLE PIECE</b>		
1	63 mm x 20 mm	Each	55.00
2	75 mm x 20 mm	Each	64.00
3	90 mm x 20 mm	Each	74.00
4	110 mm x 20 mm	Each	86.00
5	140 mm x 20 mm	Each	107.00
6	160 mm x 20 mm	Each	122.00

- Note: 1) The above rates are basic rates inclusive of transportation charges 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 2021-22 in Rupees											
		20mm	25mm	32mm	40mm	50mm	63mm	75mm	90mm	110mm	140mm	160mm	200mm
1	PVC Couplers fabricated 4 KSC	-	-	-	-	7	9	13	21	33	60	93	197
2	PVC Couplers fabricated 6 KSC	-	-	-	-	7	14	21	33	50	87	139	287
3	PVC Bends fabricated 4 KSC	-	-	-	-	21	26	43	65	111	274	375	722
4	PVC Bends fabricated 6 KSC	-	-	-	-	21	40	67	102	173	397	553	1071
5	PVC Equal Tee Fabricated 4 KSC	-	-	-	-	37	54	59	131	187	311	392	485
6	PVC Equal Tee Fabricated BIS 10124/1982 PartV 6 KSC	-	-	-	-	39	66	95	144	257	456	503	615
7	PVC Couplers (Mould) BIS 7834/1975 Part VI	3	3	5	5	10	22	34	50	77	166	214	480
8	PVC Elbow (Mould) BIS 7834/1975 Part VI	3	5	10	13	28	44	57	99	146	167	271	627
9	PVC Equal tee (Mould) BIS 7834/1975	4	8	12	21	34	54	71	117	195	250	367	1092
10	PVC Male Threaded Adopter	-	-	-	-	16	22	35	54	85	135	207	346
11	PVC End Cap	2	3	5	8	11	17	20	29	54	76	105	311
12	PVC Tail piece without flange (BIS marks)	-	-	-	-	38	20	29	47	71	117	172	285
13	PVC flanged Tail piece	-	-	-	-	-	211	254	316	369	614	805	1205

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

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

Sl. No	Description	Unit	Rate for 2021 -22 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
<b>I</b>	<b>PN 12.5 Class 500</b>					
1	110mm	Metre			755.00	
2	160mm	Metre			1265.00	
3	200mm	Metre			1697.00	
4	250mm	Metre			2293.00	
5	315mm	Metre			2890.00	
6	400mm	Metre			4352.00	
<b>II</b>	<b>PN 16 Class 500</b>					
1	110mm	Metre			831.00	
2	160mm	Metre			1407.00	
3	200mm	Metre			1890.00	
4	250mm	Metre			2580.00	
5	315mm	Metre			3490.00	
6	400mm	Metre			5317.00	

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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.

3) GST extra applicable as per GO

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

SI No	Description	Unit	Rate for 2021 -22 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
	<b>PN 6</b>					
1	50 mm	Metre			78.00	
2	63 mm	Metre			121.00	
3	75 mm	Metre			172.00	
4	90 mm	Metre			238.00	
5	110 mm	Metre			352.00	
6	125 mm	Metre			457.00	
7	140 mm	Metre			573.00	
8	160 mm	Metre			747.00	
9	180 mm	Metre			940.00	
10	200 mm	Metre			1162.00	
11	225 mm	Metre			1474.00	
12	250 mm	Metre			1809.00	
13	280 mm	Metre			2268.00	
14	315 mm	Metre			2872.00	
15	355 mm	Metre			3638.00	
16	400 mm	Metre			4596.00	
17	450 mm	Metre			5824.00	
18	500 mm	Metre			7186.00	
19	560 mm	Metre			8997.00	
20	630 mm	Metre			11365.00	
	<b>PN 8</b>					
1	50 mm	Metre			97.00	
2	63 mm	Metre			151.00	
3	75 mm	Metre			214.00	
4	90 mm	Metre			305.00	
5	110 mm	Metre			458.00	
6	125 mm	Metre			588.00	
7	140 mm	Metre			736.00	
8	160 mm	Metre			964.00	
9	180 mm	Metre			1214.00	
10	200 mm	Metre			1496.00	
11	225 mm	Metre			1898.00	
12	250 mm	Metre			2335.00	
13	280 mm	Metre			2929.00	
14	315 mm	Metre			3705.00	
15	355 mm	Metre			4689.00	
16	400 mm	Metre			5737.00	
17	450 mm	Metre			7248.00	
18	500 mm	Metre			8960.00	
19	560 mm	Metre			11218.00	
20	630 mm	Metre			14186.00	

SI No	Description	Unit	Rate for 2021 -22 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
	<b>PN 10</b>					
1	50 mm	Metre			118.00	
2	63 mm	Metre			183.00	
3	75 mm	Metre			263.00	
4	90 mm	Metre			373.00	
5	110 mm	Metre			553.00	
6	125 mm	Metre			712.00	
7	140 mm	Metre			889.00	
8	160 mm	Metre			1164.00	
9	180 mm	Metre			1478.00	
10	200 mm	Metre			1696.00	
11	225 mm	Metre			2295.00	
12	250 mm	Metre			2830.00	
13	280 mm	Metre			3544.00	
14	315 mm	Metre			4488.00	
15	355 mm	Metre			5707.00	
16	400 mm	Metre			6932.00	
17	450 mm	Metre			8743.00	
18	500 mm	Metre			10801.00	
19	560 mm	Metre			13536.00	
20	630 mm	Metre			17145.00	
	<b>PN 12.5</b>					
1	50 mm	Metre			140.00	
2	63 mm	Metre			225.00	
3	75 mm	Metre			317.00	
4	90 mm	Metre			454.00	
5	110 mm	Metre			676.00	
6	125 mm	Metre			878.00	
7	140 mm	Metre			1101.00	
8	160 mm	Metre			1435.00	
9	180 mm	Metre			1810.00	
10	200 mm	Metre			2232.00	
11	225 mm	Metre			2843.00	
12	250 mm	Metre			3494.00	
13	280 mm	Metre			4386.00	
14	315 mm	Metre			5554.00	
15	355 mm	Metre			7045.00	
16	400 mm	Metre			8265.00	
17	450 mm	Metre			10455.00	
18	500 mm	Metre			12921.00	
19	560 mm	Metre			16183.00	
20	630 mm	Metre			20487.00	

SI No	Description	Unit	Rate for 2021 -22 in Rupees			
			I Quarter	II Quarter	III Quarter	IV Quarter
<b>PN 16</b>						
1	50 mm	Metre			169.00	
2	63 mm	Metre			266.00	
3	75 mm	Metre			378.00	
4	90 mm	Metre			541.00	
5	110 mm	Metre			810.00	
6	125 mm	Metre			1042.00	
7	140 mm	Metre			1310.00	
8	160 mm	Metre			1707.00	
9	180 mm	Metre			2157.00	
10	200 mm	Metre			2669.00	
11	225 mm	Metre			3425.00	
12	250 mm	Metre			4232.00	
13	280 mm	Metre			5314.00	
14	315 mm	Metre			6709.00	
15	355 mm	Metre			8534.00	
16	400 mm	Metre			9788.00	
17	450 mm	Metre			12371.00	
18	500 mm	Metre			15283.00	

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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.

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)**

SI No	Description	Unit	Rate for 2021 -22 in Rupees	
			90 Degree Bend	Equal Tee
	<b>PN 6</b>			
1	50 mm	Each	39.00	59.00
2	63 mm	Each	62.00	94.00
3	75 mm	Each	107.00	163.00
4	90 mm	Each	215.00	310.00
5	110 mm	Each	397.00	505.00
6	125 mm	Each	527.00	543.00
7	140 mm	Each	726.00	745.00
8	160 mm	Each	1052.00	1098.00
9	180 mm	Each	1210.00	1561.00
10	200 mm	Each	1651.00	2079.00
11	225 mm	Each	2370.00	2934.00
12	250 mm	Each	3262.00	3986.00
13	280 mm	Each	4511.00	5542.00
14	315 mm	Each	6535.00	7644.00
15	355 mm	Each	9159.00	10690.00
16	400 mm	Each	13537.00	15634.00
17	450 mm	Each	19164.00	22196.00
18	500 mm	Each	25190.00	34856.00
19	560 mm	Each	34943.00	47928.00
20	630 mm	Each	53634.00	66368.00
	<b>PN 8</b>			
1	125 mm	Each	503.00	576.00
2	140 mm	Each	671.00	788.00
3	160 mm	Each	955.00	1140.00
4	180 mm	Each	1333.00	1591.00
5	200 mm	Each	1728.00	2125.00
6	225 mm	Each	2464.00	2963.00
7	250 mm	Each	3317.00	3998.00
8	280 mm	Each	4588.00	5524.00
9	315 mm	Each	9534.00	7568.00
10	355 mm	Each	13597.00	10527.00
11	400 mm	Each	19846.00	15266.00
12	450 mm	Each	28270.00	21560.00
13	500 mm	Each	38776.00	38996.00
14	560 mm	Each	54492.00	48824.00
15	630 mm	Each	77587.00	62167.00
	<b>PN 10</b>			
1	50 mm	Each	55.00	91.00
2	63 mm	Each	93.00	145.00
3	75 mm	Each	155.00	246.00
4	90 mm	Each	304.00	421.00
5	110 mm	Each	534.00	723.00
6	125 mm	Each	733.00	1000.00
7	140 mm	Each	1075.00	1392.00
8	160 mm	Each	1518.00	2135.00

SI No	Description	Unit	Rate for 2021 -22 in Rupees	
			90 Degree Bend	Equal Tee
9	180 mm	Each	1889.00	2584.00
10	200 mm	Each	2582.00	3521.00
11	225 mm	Each	3703.00	4894.00
12	250 mm	Each	5078.00	6772.00
13	280 mm	Each	7019.00	9467.00
14	315 mm	Each	10176.00	12825.00
15	355 mm	Each	14308.00	19153.00
16	400 mm	Each	21188.00	27644.00
17	450 mm	Each	29905.00	36698.00
18	500 mm	Each	39284.00	54359.00
19	560 mm	Each	54533.00	82463.00
20	630 mm	Each	80880.00	121319.00
	<b>PN 12.5</b>			
1	125 mm	Each	740.00	985.00
2	140 mm	Each	1032.00	1390.00
3	160 mm	Each	1477.00	2068.00
4	180 mm	Each	2051.00	2964.00
5	200 mm	Each	2742.00	4060.00
6	225 mm	Each	3903.00	5344.00
7	250 mm	Each	4985.00	7292.00
8	280 mm	Each	7135.00	10278.00
9	315 mm	Each	15138.00	13495.00
10	355 mm	Each	20029.00	19307.00
11	400 mm	Each	28279.00	25817.00
12	450 mm	Each	41215.00	48862.00
13	500 mm	Each	56487.00	70066.00
14	560 mm	Each	79272.00	98366.00
15	630 mm	Each	112897.00	140036.00
	<b>PN 16</b>			
1	50 mm	Each	80.00	126.00
2	63 mm	Each	132.00	204.00
3	75 mm	Each	220.00	343.00
4	90 mm	Each	430.00	579.00
5	110 mm	Each	775.00	666.00
6	125 mm	Each	1006.00	1029.00
7	140 mm	Each	1404.00	1478.00
8	160 mm	Each	2375.00	2097.00
9	180 mm	Each	3294.00	2972.00
10	200 mm	Each	4413.00	4057.00
11	225 mm	Each	6283.00	5620.00
12	250 mm	Each	8032.00	7837.00
13	280 mm	Each	11484.00	10959.00
14	315 mm	Each	19827.00	14805.00
15	355 mm	Each	27811.00	22419.00
16	400 mm	Each	41206.00	32348.00
17	450 mm	Each	58426.00	44971.00
18	500 mm	Each	89161.00	78336.00

Note: 1) The above rates are basic rates inclusive of transportation charges 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 2021-22 in Rupees
<b>I</b>	<b>Class 15</b>		
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
<b>II</b>	<b>Class 20</b>		
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**

<b>Sl.No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
<b>I</b>	<b>Class 15</b>		
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
<b>II</b>	<b>Class 20</b>		
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 2021 -22 in Rupees
<b>I</b>	<b>Class 15</b>		
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
<b>II</b>	<b>Class 20</b>		
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	1950.00
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**

<b>Sl.No.</b>	<b>Size of pipes</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees.</b>
<b>I</b>	<b>LA Class</b>		
1	80mm	Metre	1154.00
2	100mm	Metre	1430.00
3	125mm	Metre	1864.00
4	150mm	Metre	2213.00
5	200mm	Metre	3198.00
6	250mm	Metre	4310.00
7	300mm	Metre	5559.00
8	350mm	Metre	7192.00
9	400mm	Metre	8751.00
10	450mm	Metre	10553.00
11	500mm	Metre	12354.00
12	600mm	Metre	16464.00
13	700mm	Metre	21130.00
14	750mm	Metre	23746.00
<b>II</b>	<b>A Class</b>		
1	80mm	Metre	1255.00
2	100mm	Metre	1575.00
3	125mm	Metre	2036.00
4	150mm	Metre	2423.00
5	200mm	Metre	3472.00
6	250mm	Metre	4682.00
7	300mm	Metre	6077.00
8	350mm	Metre	7801.00
9	400mm	Metre	9564.00
10	450mm	Metre	11594.00
11	500mm	Metre	13458.00
12	600mm	Metre	17973.00
13	700mm	Metre	23013.00
14	750mm	Metre	25850.00

<b>III</b>	<b>B Class</b>		
1	80mm	Metre	1346.00
2	100mm	Metre	1680.00
3	125mm	Metre	2193.00
4	150mm	Metre	2608.00
5	200mm	Metre	3756.00
6	250mm	Metre	5077.00
7	300mm	Metre	6586.00
8	350mm	Metre	8461.00
9	400mm	Metre	10324.00
10	450mm	Metre	12508.00
11	500mm	Metre	14559.00
12	600mm	Metre	19471.00
13	700mm	Metre	24796.00
14	750mm	Metre	27966.00

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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.

3) GST extra applicable as per GO

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

Sl. No	Size	Unit	Rate for 2021 -22 in Rupees.
<b>I</b>	<b>STANDARD</b>		
1	80mm to 200mm	Kg	79.00
2	250mm to 400mm	Kg	83.00
3	450mm to 750mm	Kg	87.00
<b>II</b>	<b>NON-STANDARD</b>		
1	80mm to 200mm	Kg	85.00
2	250mm to 400mm	Kg	87.00
3	450mm to 750mm	Kg	92.00

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

Sl. No	Size	Unit	Rate for 2020 -21 in Rupees.
<b>I</b>	<b>STANDARD</b>		
1	80mm to 200mm	Kg	75.00
2	250mm to 400mm	Kg	87.00
3	450mm to 750mm	Kg	95.00
<b>II.</b>	<b>NON-STANDARD</b>		
1	80mm to 200mm	Kg	79.00
2	250mm to 400mm	Kg	92.00
3	450mm to 750mm	Kg	98.00

- 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

SI No	Description	Unit	Rate for 2021 -22 in Rupees.
1	15mm	Metre	107.00
2	20mm	Metre	140.00
3	25mm	Metre	208.00
4	32mm	Metre	260.00
5	40mm	Metre	303.00
6	50mm	Metre	412.00
7	65mm	Metre	527.00
8	80mm	Metre	653.00
9	100mm	Metre	930.00
10	125mm	Metre	1336.00
11	150mm	Metre	1495.00

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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.

3) GST extra applicable as per GO

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

<b>Sl.No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021 -22 in Rupees</b>
	<b>GI REDUCER (HEAVY)</b>		
1	150 mm x 125 mm	Each	884.00
2	150 mm x 100 mm	Each	910.00
3	150 mm x 80 mm	Each	910.00
4	125 mm x 100 mm	Each	803.00
5	125 mm x 80 mm	Each	819.00
6	125 mm x 65 mm	Each	811.00
7	125 mm x 50 mm	Each	819.00
8	100 mm x 80 mm	Each	564.00
9	100 mm x 65 mm	Each	564.00
10	100 mm x 50 mm	Each	552.00
11	80 mm x 65 mm	Each	342.00
12	80 mm x 50 mm	Each	352.00
13	80 mm x 40 mm	Each	345.00
14	80 mm x 32 mm	Each	352.00
15	65 mm x 50 mm	Each	241.00
16	65 mm x 40 mm	Each	237.00
17	65 mm x 32 mm	Each	241.00
18	65 mm x 20 mm	Each	239.00
19	50 mm x 40 mm	Each	133.00
20	50 mm x 32 mm	Each	129.00
21	50 mm x 20 mm	Each	133.00
22	40 mm x 32 mm	Each	91.00
23	40 mm x 20 mm	Each	93.00
	<b>GI REDUCER (MEDIUM)</b>		
1	150 mm x 125 mm	Each	740.00
2	150 mm x 100 mm	Each	725.00
3	150 mm x 80 mm	Each	740.00
4	125 mm x 100 mm	Each	608.00
5	125 mm x 80 mm	Each	626.00
6	125 mm x 65 mm	Each	619.00
7	125 mm x 50 mm	Each	626.00
8	100 mm x 80 mm	Each	399.00
9	100 mm x 65mm	Each	407.00
10	100 mm x 50 mm	Each	407.00
11	80 mm x 65 mm	Each	222.00
12	80 mm x 50 mm	Each	178.00
13	80 mm x 40 mm	Each	172.00
14	80 mm x 32 mm	Each	174.00
15	65 mm x 50 mm	Each	127.00
16	65 mm x 40 mm	Each	127.00
17	65 mm x 32 mm	Each	127.00
18	65 mm x 20 mm	Each	124.00
19	50 mm x 40 mm	Each	86.00
20	50 mm x 32 mm	Each	84.00

Sl.No.	Description	Unit	Rates for 2021 -22 in Rupees
21	50 mm x 20 mm	Each	86.00
22	40 mm x 32 mm	Each	55.00
23	40 mm x 20 mm	Each	55.00
	<b>G I UNEQUAL TEE (HEAVY)</b>		
1	150 mm x 125 mm	Each	1886.00
2	150 mm x 100 mm	Each	1905.00
3	150 mm x 80 mm	Each	1942.00
4	125 mm x 100 mm	Each	1578.00
5	125 mm x 80 mm	Each	1578.00
6	125 mm x 65 mm	Each	1563.00
7	125 mm x 50 mm	Each	1578.00
8	100 mm x 80 mm	Each	1075.00
9	100 mm x 65mm	Each	1096.00
10	100 mm x 50 mm	Each	1096.00
11	80 mm x 65 mm	Each	621.00
12	80 mm x 50 mm	Each	639.00
13	80 mm x 40 mm	Each	627.00
14	80 mm x 32 mm	Each	637.00
15	65 mm x 50 mm	Each	470.00
16	65 mm x 40 mm	Each	461.00
17	65 mm x 32 mm	Each	470.00
18	65 mm x 20 mm	Each	466.00
19	50 mm x 40 mm	Each	279.00
20	50 mm x 32 mm	Each	272.00
21	50 mm x 20 mm	Each	279.00
22	40 mm x 32 mm	Each	173.00
23	40 mm x 20 mm	Each	177.00
24	32 mm x 20 mm	Each	126.00
	<b>G.I UNEQUAL TEE(MEDIUM)</b>		
1	150 mm x 125 mm	Each	1165.00
2	150 mm x 100 mm	Each	1165.00
3	150 mm x 80 mm	Each	1143.00
4	125 mm x 100 mm	Each	945.00
5	125 mm x 80 mm	Each	945.00
6	125 mm x 65 mm	Each	936.00
7	125 mm x 50 mm	Each	945.00
8	100 mm x 80 mm	Each	622.00
9	100 mm x 65mm	Each	622.00
10	100 mm x 50 mm	Each	610.00
11	80 mm x 65 mm	Each	297.00
12	80 mm x 50 mm	Each	306.00
13	80 mm x 40 mm	Each	306.00
14	80 mm x 32 mm	Each	306.00
15	65 mm x 50 mm	Each	216.00
16	65 mm x 40 mm	Each	212.00
17	65 mm x 32 mm	Each	216.00
18	65 mm x 20 mm	Each	216.00
19	50 mm x 40 mm	Each	124.00



<b>Sl.No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021 -22 in Rupees</b>
20	50 mm x 32 mm	Each	125.00
21	50 mm x 20 mm	Each	127.00
22	40 mm x 32 mm	Each	93.00
23	40 mm x 20 mm	Each	93.00
24	32 mm x 20 mm	Each	92.00
<b>MS BOLTS AND NUTS</b>			
1	16 mm dia x 65 to 90 mm length fully threaded bolts and nuts with 2 Nos.	Kg.	111.00
2	20mm dia and above x 90mm to 120mm length fully	Kg.	116.00
<b>RUBBER INSERTION SHEET</b>			
1	3 Ply R.I. Sheet	Kg.	96.00
<b>AC COWL</b>			
1	80 mm dia	Each	34.00
2	100 mm dia	Each	58.00

- 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 2021 -22 in Rupees										
		15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm	125mm	150mm
1	G.I. Equal Elbow plain	25.00	34.00	53.00	90.00	112.00	168.00	302.00	446.00	796.00	821.00	1969.00
2	G.I. Equal Tee plain	40.00	49.00	70.00	103.00	151.00	249.00	392.00	557.00	997.00	1436.00	2011.00
3	G.I. Coupling	24.00	24.00	31.00	58.00	90.00	135.00	225.00	276.00	552.00	832.00	1678.00
4	G.I. Flange set	--	--	--	--	--	79.00	97.00	112.00	185.00	270.00	956.00
5	G.I. Cross	58.00	73.00	121.00	195.00	251.00	379.00	586.00	926.00	1219.00	1532.00	--
6	G.I. Hex Nipple	24.00	42.00	42.00	66.00	83.00	114.00	195.00	274.00	407.00	434.00	935.00
7	G.I.Three Way Elbow	51.00	78.00	116.00	183.00	237.00	381.00	--	--	--	--	--
8	G.I.Plug Dia Head Taper Thread	10.00	23.00	23.00	39.00	39.00	45.00	83.00	113.00	163.00	228.00	--
9	G.I.Bend	24.00	42.00	66.00	78.00	103.00	154.00	262.00	395.00	694.00	1003.00	2375.00
10	G.I.Union	69.00	73.00	125.00	176.00	223.00	318.00	595.00	830.00	1232.00	1648.00	2449.00
11	G.M. Ferrule	379.00	571.00	840.00	--	--	--	--	--	--	--	--
12	G.I.stop cock	184.00	246.00	446.00	664.00	988.00	1429.00	1822.00	2406.00	3688.00	5277.00	--
13	Rubber sheet for Flange set		--	--	--	--	16.00	16.00	23.00	44.00	46.00	107.00
14	G.I. Reduced Elbow Plain	32.00	36.00	61.00	97.00	127.00	186.00	325.00	496.00	854.00	1231.00	1661.00
15	G.I.Reduced Tee Plain	44.00	60.00	91.00	130.00	165.00	251.00	384.00	595.00	1121.00	1583.00	1890.00
16	G.I. Reduced Socket Plain	25.00	51.00	55.00	78.00	120.00	171.00	219.00	338.00	476.00	616.00	889.00
17	G.I. Check Nut	16.00	23.00	30.00	45.00	60.00	82.00	135.00	178.00	237.00	300.00	866.00
18	G.I.Reduced Nipple	24.00	27.00	50.00	96.00	114.00	174.00	324.00	375.00	527.00	748.00	935.00
19	G.I. Dummy (Heavy)	--	--	--	--	25.00	40.00	50.00	66.00	116.00	166.00	--
20	G.I.Dummy (Medium)	--	--	--	--	23.00	32.00	45.00	55.00	107.00	164.00	--
21	M.S.Saddle Piece	--	--	--	--	--	97.00	103.00	123.00	164.00	211.00	651.00
22	Waste Not Tap	--	139.00	--	--	--	--	--	--	--	--	--
23	C.I.Footvalve with stainer	--	--	--	--	--	434.00	--	645.00	--	--	--
24	M.S.Clampset	--	--	--	--	193.00	223.00	383.00	538.00	639.00	--	937.00

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 Specifications**

SI.No.	Description	Rate for 2021 -22 in Rupees									
		15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm	125mm
1	G.M. Gate valves	--	539.00	722.00	941.00	1296.00	2062.00	3157.00	5113.00	8592.00	12465.00
2	G.M. Non Return valves	--	--	--	--	--	2082.00	2131.00	3344.00	--	--

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**

<b>SI No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees</b>
1	100 mm	Metre	1138.00
2	150 mm	Metre	1615.00
3	200 mm	Metre	2120.00
4	250 mm	Metre	2797.00
5	300 mm	Metre	3528.00
6	350mm	Metre	4336.00
7	400 mm	Metre	5207.00
8	450 mm	Metre	6155.00
9	500 mm	Metre	7250.00
10	600 mm	Metre	9560.00
11	700 mm	Metre	11731.00
12	750 mm	Metre	13467.00
13	800 mm	Metre	15066.00
14	900 mm	Metre	17565.00
15	1000 mm	Metre	22869.00

- 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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.  
3) GST extra applicable as per GO

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

<b>SI No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees</b>
1	100 mm	Metre	1289.00
2	150 mm	Metre	1870.00
3	200 mm	Metre	2507.00
4	250 mm	Metre	3367.00
5	300 mm	Metre	4251.00
6	350mm	Metre	5188.00
7	400 mm	Metre	6226.00
8	450 mm	Metre	7485.00
9	500 mm	Metre	8654.00
10	600 mm	Metre	11461.00
11	700 mm	Metre	13218.00
12	750 mm	Metre	14821.00
13	800 mm	Metre	16214.00
14	900 mm	Metre	19864.00
15	1000 mm	Metre	23807.00

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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.

3) GST extra applicable as per GO

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

<b>SI No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees</b>
<b>I</b>	<b>1 m length of pipes</b>		
1	80 mm	Each	2938.00
2	100 mm	Each	3303.00
3	150 mm	Each	4578.00
4	200 mm	Each	6092.00
5	250 mm	Each	8189.00
6	300 mm	Each	10677.00
7	350mm	Each	13597.00
8	400 mm	Each	18478.00
9	450 mm	Each	22643.00
10	500 mm	Each	25804.00
11	600 mm	Each	32792.00
12	700 mm	Each	43790.00
13	750 mm	Each	50308.00
14	800 mm	Each	56826.00
15	900 mm	Each	79053.00
16	1000mm	Each	91764.00
<b>II</b>	<b>1.5 m length of pipes</b>		
1	80 mm	Each	3622.00
2	100 mm	Each	3772.00
3	150 mm	Each	5238.00
4	200 mm	Each	7002.00
5	250 mm	Each	9357.00
6	300 mm	Each	12148.00
7	350 mm	Each	15852.00
8	400 mm	Each	21171.00
9	450 mm	Each	25847.00
10	500 mm	Each	29525.00
11	600 mm	Each	37725.00
12	700 mm	Each	50514.00
13	750 mm	Each	58386.00
14	800 mm	Each	66257.00
15	900 mm	Each	91597.00
16	1000 mm	Each	106672.00
<b>III</b>	<b>2 m length of pipes</b>		
1	80 mm	Each	4304.00
2	100 mm	Each	4243.00
3	150 mm	Each	5899.00
4	200 mm	Each	7912.00
5	250 mm	Each	10522.00
6	300 mm	Each	13620.00

<b>SI No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees</b>
7	350mm	Each	18106.00
8	400 mm	Each	23869.00
9	450 mm	Each	29051.00
10	500 mm	Each	33244.00
11	600 mm	Each	42660.00
12	700 mm	Each	57234.00
13	750 mm	Each	66460.00
14	800 mm	Each	75688.00
15	900 mm	Each	104148.00
16	1000mm	Each	121587.00
<b>IV</b>	<b>2.5 m length of pipes</b>		
1	80 mm	Each	4987.00
2	100 mm	Each	4714.00
3	150 mm	Each	6559.00
4	200 mm	Each	8820.00
5	250 mm	Each	11686.00
6	300 mm	Each	15092.00
7	350 mm	Each	20358.00
8	400 mm	Each	26566.00
9	450 mm	Each	32256.00
10	500 mm	Each	36965.00
11	600 mm	Each	47597.00
12	700 mm	Each	63958.00
13	750 mm	Each	72689.00
14	800 mm	Each	81420.00
15	900 mm	Each	111624.00
16	1000 mm	Each	130572.00
<b>V</b>	<b>3 m length of pipes</b>		
1	80 mm	Each	5388.00
2	100 mm	Each	5183.00
3	150 mm	Each	7220.00
4	200 mm	Each	9730.00
5	250 mm	Each	12931.00
6	300 mm	Each	16603.00
7	350mm	Each	22614.00
8	400 mm	Each	29257.00
9	450 mm	Each	35461.00
10	500 mm	Each	40683.00
11	600 mm	Each	52535.00
12	700 mm	Each	70685.00
13	750 mm	Each	80565.00
14	800 mm	Each	90445.00
15	900 mm	Each	123622.00
16	1000mm	Each	144842.00

SI No	Description	Unit	Rate for 2021 -22 in Rupees
<b>VI</b>	<b>3.5 m length of pipes</b>		
1	80 mm	Each	5764.00
2	100 mm	Each	5656.00
3	150 mm	Each	7880.00
4	200 mm	Each	10639.00
5	250 mm	Each	14247.00
6	300 mm	Each	18267.00
7	350 mm	Each	24870.00
8	400 mm	Each	31953.00
9	450 mm	Each	38663.00
10	500 mm	Each	44402.00
11	600 mm	Each	57469.00
12	700 mm	Each	77408.00
13	750 mm	Each	88436.00
14	800 mm	Each	99462.00
15	900 mm	Each	135630.00
16	1000 mm	Each	159097.00
<b>VII</b>	<b>4 m length of pipes</b>		
1	80 mm	Each	6320.00
2	100 mm	Each	6757.00
3	150 mm	Each	9731.00
4	200 mm	Each	13086.00
5	250 mm	Each	17237.00
6	300 mm	Each	22181.00
7	350mm	Each	29895.00
8	400 mm	Each	38287.00
9	450 mm	Each	46349.00
10	500 mm	Each	54211.00
11	600 mm	Each	70164.00
12	700 mm	Each	93326.00
13	750 mm	Each	108273.00
14	800 mm	Each	120173.00
15	900 mm	Each	163992.00
16	1000mm	Each	192429.00
<b>VIII</b>	<b>5 m length of pipes</b>		
1	80 mm	Each	7329.00
2	100 mm	Each	8775.00
3	150 mm	Each	12780.00
4	200 mm	Each	16888.00
5	250 mm	Each	22940.00
6	300 mm	Each	29308.00
7	350 mm	Each	35380.00
8	400 mm	Each	44535.00
9	450 mm	Each	53679.00



<b>SI No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees</b>
10	500 mm	Each	61855.00
11	600 mm	Each	81094.00
12	700 mm	Each	102553.00
13	750 mm	Each	116967.00
14	800 mm	Each	131019.00
15	900 mm	Each	178165.00
16	1000 mm	Each	209436.00

- 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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.
  - 3) GST extra applicable as per GO

### 6.3 DUCTILE IRON SPECIALS AS PER IS 9523/2000

SI No	Description	Unit	Rate for 2021 -22 in Rupees
	<b>ALL SOCKET</b>		
1	100mm - 200 mm dia	Kg	128.00
2	250 mm - 300 mm dia	Kg	128.00
3	350 mm - 450 mm dia	Kg	128.00
4	500 mm - 600 mm dia	Kg	128.00
5	700 mm - 750 mm	Kg	188.00
6	800mm	Kg	188.00
7	900 mm	Kg	197.00
8	1000 mm	Kg	214.00
	<b>ALL FLANGE</b>		
1	100mm - 200 mm dia	Kg	134.00
2	250 mm - 300 mm dia	Kg	134.00
3	350 mm - 450 mm dia	Kg	134.00
4	500 mm - 600 mm dia	Kg	134.00
5	700 mm - 750 mm	Kg	197.00
6	800 mm	Kg	197.00
7	900 mm	Kg	215.00
8	1000 mm	Kg	215.00

Note: In respect of flanged and spigot, flanged and socketted type specials, the rate applicable for flanged type specials is allowed.

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

### 7.0. HOUSE SERVICE CONNECTION IN WSS.

S.No	Description	Unit	Rate for 2021-22 in Rupees
1	<b>HSC Connection in HDPE Mains for Water Supply Scheme</b>		
	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.	575.00
	25mm (3/4")	1 No.	575.00
	32mm (1")	1 No.	575.00
2	<b>HSC Connection in DI Mains for Water Supply Scheme</b>		
	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.		
	20mm (1/2")	1 No.	740.00
	25mm (3/4")	1 No.	850.00
	32mm (1")	1 No.	880.00
3	<b>Common Items for HSC Connection</b>		
i	Brass Ferrule as per IS 319 grade of sizes 15mm, 20mm and 25mm size and threaded as per IS:1554 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.	150.00
	20mm (3/4")	1 No.	250.00
	25mm (1")	1 No.	320.00
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.		
	20mm (1/2")	1 No.	125.00
	25mm (3/4")	1 No.	160.00
	32mm (1")	1 No.	190.00
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.	70.00
	25mm (3/4")	1 No.	90.00
	32mm (1")	1 No.	145.00

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.	130.00
	25mm (3/4")	1 No.	160.00
	32mm (1")	1 No.	200.00
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.	114.00
	25mm (3/4")	1 No.	150.00
	32mm (1")	1 No.	185.00
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	20.00
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	30.00
	32mm (1")	1M	33.00
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		
	20mm (1/2")	1 No.	117.00
	25mm (3/4")	1 No.	150.00
	32mm (1")	1 No.	178.00
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.	390.00

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

2) GST extra applicable as per GO

<b>8.0 BAR WRAPPED STEEL CYLINDER PIPES AS PER IS 15155 - 2002</b>			
<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
	<b>4 Ksc Pipe</b>		
1	350mm	Metre	3660.00
2	400mm	Metre	4052.00
3	450mm	Metre	4657.00
4	500mm	Metre	5079.00
5	600mm	Metre	6526.00
6	700mm	Metre	7577.00
7	800mm	Metre	8671.00
8	900mm	Metre	10767.00
9	1000mm	Metre	12469.00
10	1100mm	Metre	17842.00
11	1200mm	Metre	19806.00
12	1300mm	Metre	21893.00
13	1400mm	Metre	24440.00
14	1500mm	Metre	29096.00
	<b>6 Ksc Pipe</b>		
1	350mm	Metre	3662.00
2	400mm	Metre	4058.00
3	450mm	Metre	4663.00
4	500mm	Metre	5090.00
5	600mm	Metre	6535.00
6	700mm	Metre	7597.00
7	800mm	Metre	8683.00
8	900mm	Metre	10778.00
9	1000mm	Metre	12486.00
10	1100mm	Metre	17854.00
11	1200mm	Metre	19972.00
12	1300mm	Metre	21905.00
13	1400mm	Metre	24457.00
14	1500mm	Metre	29119.00
	<b>8 Ksc Pipe</b>		
1	350mm	Metre	3665.00
2	400mm	Metre	4065.00
3	450mm	Metre	4669.00
4	500mm	Metre	5104.00
5	600mm	Metre	6544.00
6	700mm	Metre	7621.00
7	800mm	Metre	8696.00
8	900mm	Metre	10786.00
9	1000mm	Metre	12504.00
10	1100mm	Metre	17871.00
11	1200mm	Metre	19806.00
12	1300mm	Metre	21918.00
13	1400mm	Metre	24479.00
14	1500mm	Metre	29144.00

<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
	<b>10 Ksc Pipe</b>		
1	350mm	Metre	3667.00
2	400mm	Metre	4069.00
3	450mm	Metre	4679.00
4	500mm	Metre	5118.00
5	600mm	Metre	6556.00
6	700mm	Metre	7650.00
7	800mm	Metre	8712.00
8	900mm	Metre	10793.00
9	1000mm	Metre	12527.00
10	1100mm	Metre	17894.00
11	1200mm	Metre	19806.00
12	1300mm	Metre	21935.00
13	1400mm	Metre	24507.00
14	1500mm	Metre	29172.00
	<b>12 Ksc Pipe</b>		
1	350mm	Metre	3671.00
2	400mm	Metre	4078.00
3	450mm	Metre	4686.00
4	500mm	Metre	5135.00
5	600mm	Metre	6573.00
6	700mm	Metre	7683.00
7	800mm	Metre	8857.00
8	900mm	Metre	10818.00
9	1000mm	Metre	12698.00
10	1100mm	Metre	17922.00
11	1200mm	Metre	19928.00
12	1300mm	Metre	21958.00
13	1400mm	Metre	24542.00
14	1500mm	Metre	29214.00
	<b>14 Ksc Pipe</b>		
1	350mm	Metre	3674.00
2	400mm	Metre	4092.00
3	450mm	Metre	4700.00

<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
4	500mm	Metre	5158.00
5	600mm	Metre	6590.00
6	700mm	Metre	8028.00
7	800mm	Metre	9696.00
8	900mm	Metre	11547.00
9	1000mm	Metre	13967.00
10	1100mm	Metre	17991.00
11	1200mm	Metre	20088.00
12	1300mm	Metre	22339.00
13	1400mm	Metre	25800.00
14	1500mm	Metre	31491.00
	<b>16 Ksc Pipe</b>		
1	350mm	Metre	3680.00
2	400mm	Metre	4109.00
3	450mm	Metre	4712.00
4	500mm	Metre	5381.00
5	600mm	Metre	6953.00
6	700mm	Metre	8686.00
7	800mm	Metre	10535.00
8	900mm	Metre	12587.00
9	1000mm	Metre	15271.00
10	1100mm	Metre	18409.00
11	1200mm	Metre	21462.00
12	1300mm	Metre	24507.00
13	1400mm	Metre	28368.00
14	1500mm	Metre	36369.00
	<b>18 Ksc Pipe</b>		
1	350mm	Metre	3686.00
2	400mm	Metre	4121.00
3	450mm	Metre	4903.00
4	500mm	Metre	4903.00
5	600mm	Metre	7273.00
6	700mm	Metre	9097.00
7	800mm	Metre	11094.00
8	900mm	Metre	13264.00
9	1000mm	Metre	15348.00
10	1100mm	Metre	19419.00
11	1200mm	Metre	22628.00
12	1300mm	Metre	25914.00
13	1400mm	Metre	29937.00
14	1500mm	Metre	36483.00
<p>Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamil nadu. 2) GST extra applicable as per GO</p>			

### 9.0. PIPES FOR UGSS

S.No	Description	Unit	Rate for 2021 -22 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) ( <b>SN 8 Class</b> ) for non-pressure underground sewerage, drainage application generally as per IS-16098 (Part-2) type B.		
a	150mm ID SN 8 pipe	Per M	235.00
b	200mm ID SN 8 pipe	Per M	417.00
c	250mm ID SN 8 pipe	Per M	680.00
d	300mm ID SN 8 pipe	Per M	915.00
2	Supply and delivery of HDPE pipes for sewerage PE 100 PN 6 conforming to IS : 14333/1996 (amended in 2009)		
a	355 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	4445.00
b	400 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	5776.00
c	450 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	7296.00
d	500 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	9016.00
e	560 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	11269.00
f	630 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	14272.00
g	710 mm/ PN.6/HDPE Pipe 'ISI'(PE 100 Grade)	Per M	18113.00

- 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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.
- 3) GST extra applicable as per GO



**10.0 M.S. PIPES- SPIRAL/LONGITUDIDNAL 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 2021 -22 in Rupees							
		Bare pipe per metre	CML Internal 6mm to 12mm thick per metre as per table of IS 3589: 2001	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 Polyethy line Sheathing per metre	Transportation in anywhere in Tamilnadu Per metre
1	168.3X2.6	719.00	348.00	558.00	594.00	754.00	655.00	906.00	342.00
2	168.3X3.2	838.00	348.00	558.00	594.00	754.00	655.00	906.00	342.00
3	168.3X4	1099.00	348.00	558.00	594.00	754.00	655.00	906.00	342.00
4	168.3X4.5	1235.00	348.00	558.00	594.00	754.00	655.00	906.00	342.00
5	219.1X2.6	941.00	472.00	743.00	769.00	982.00	851.00	1182.00	342.00
6	219.1X3.6	1294.00	472.00	743.00	769.00	982.00	851.00	1182.00	342.00
7	219.1X4.5	1558.00	472.00	743.00	769.00	982.00	851.00	1182.00	342.00
8	219.1X6.3	2157.00	472.00	743.00	769.00	982.00	851.00	1182.00	342.00
9	273X3.6	1620.00	587.00	905.00	959.00	1201.00	1092.00	1504.00	342.00
10	273X4	1800.00	587.00	905.00	959.00	1201.00	1092.00	1504.00	342.00
11	273X5	2217.00	587.00	905.00	959.00	1201.00	1092.00	1504.00	342.00
12	273X6.3	2696.00	587.00	905.00	959.00	1201.00	1092.00	1504.00	342.00
13	323.9X4	2136.00	699.00	1042.00	1147.00	1417.00	1303.00	1788.00	342.00
14	323.9X4.5	2215.00	699.00	1042.00	1147.00	1417.00	1303.00	1788.00	342.00
15	323.9X5.6	2816.00	699.00	1042.00	1147.00	1417.00	1303.00	1788.00	342.00
16	323.9X7.1	3714.00	699.00	1042.00	1147.00	1417.00	1303.00	1788.00	342.00
17	355.6X4	2275.00	763.00	1160.00	1147.00	1518.00	1374.00	1929.00	342.00

Sl.No.	Dia metre & thickness of pipe in mm	Rate for 2021 -22 in Rupees							
		Bare pipe per metre	CML Internal 6mm to 12mm thick per metre as per table of IS 3589: 2001	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 Polyethy line Sheathing per metre	Transportation in anywhere in Tamilnadu Per metre
18	355.6X5	2876.00	763.00	1160.00	1147.00	1518.00	1374.00	1929.00	342.00
19	355.6X5.6	3235.00	763.00	1160.00	1147.00	1518.00	1374.00	1929.00	342.00
20	355.6X8	4433.00	763.00	1160.00	1147.00	1518.00	1374.00	1929.00	342.00
21	406.4X4	2577.00	880.00	1314.00	1450.00	1747.00	1488.00	2170.00	364.00
22	406.4X5	2995.00	880.00	1314.00	1450.00	1747.00	1488.00	2170.00	364.00
23	406.4X6.3	4074.00	880.00	1314.00	1450.00	1747.00	1488.00	2170.00	364.00
24	406.4X8.8	5631.00	880.00	1314.00	1450.00	1747.00	1488.00	2170.00	364.00
25	457X4	2995.00	981.00	1341.00	1450.00	2020.00	1371.00	2236.00	364.00
26	457X5	3714.00	981.00	1341.00	1450.00	2020.00	1371.00	2289.00	364.00
27	457X6.3	4495.00	981.00	1341.00	1450.00	2020.00	1371.00	2289.00	364.00
28	457X10	7189.00	981.00	1341.00	1450.00	2020.00	1371.00	2289.00	364.00
29	508X5	4134.00	1002.00	1416.00	1521.00	2054.00	1469.00	2355.00	431.00
30	508X5.6	4553.00	1002.00	1416.00	1521.00	2054.00	1469.00	2355.00	431.00
31	508X6.3	5093.00	1002.00	1416.00	1521.00	2054.00	1469.00	2355.00	431.00
32	508X11	8747.00	1002.00	1416.00	1521.00	2054.00	1469.00	2355.00	431.00
33	610X5.8	5692.00	1230.00	1691.00	1748.00	2577.00	1743.00	3135.00	546.00
34	610X6.3	6291.00	1234.00	1695.00	1752.00	2581.00	1747.00	3135.00	546.00
35	610X12.5	11980.00	1234.00	1695.00	1752.00	2581.00	1747.00	3135.00	546.00
36	711X6.3	7069.00	1517.00	2019.00	2084.00	2775.00	2056.00	3617.00	546.00
37	711X7.1	8026.00	1517.00	2019.00	2084.00	2891.00	2056.00	3617.00	546.00
38	711X14.2	16174.00	1517.00	2019.00	2084.00	2968.00	2056.00	3617.00	546.00
39	813X7.1	8147.00	1742.00	2287.00	2413.00	3206.00	2198.00	4100.00	726.00
40	813X8	11053.00	1742.00	2287.00	2413.00	3206.00	2198.00	4100.00	726.00
41	813X18	23961.00	1744.00	2287.00	2429.00	3222.00	2214.00	4100.00	726.00
42	914X8	11381.00	1853.00	2446.00	2650.00	3700.00	2599.00	4703.00	971.00
43	914X8.8	12579.00	1853.00	2446.00	2650.00	3811.00	2599.00	4703.00	971.00
44	914X10	14196.00	1853.00	2446.00	2650.00	3811.00	2599.00	4703.00	971.00
45	914X17.5	24560.00	1853.00	2446.00	2650.00	3811.00	2599.00	4703.00	971.00
46	1016X8.8	14137.00	2070.00	2871.00	3137.00	4092.00	3026.00	5387.00	1942.00
47	1016X10	16174.00	2041.00	2871.00	3137.00	4355.00	3026.00	5387.00	1942.00
48	1016X20	31150.00	2070.00	2871.00	3137.00	4355.00	3026.00	5387.00	1942.00
49	1067X8.8	14736.00	2128.00	2925.00	3141.00	4465.00	3090.00	5886.00	1942.00

Sl.No.	Dia metre & thickness of pipe in mm	Rate for 2021 -22 in Rupees							
		Bare pipe per metre	CML Internal 6mm to 12mm thick per metre as per table of IS 3589: 2001	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 Polyethy line Sheathing per metre	Transportation in anyware in Tamilnadu Per metre
50	1067X10	16773.00	2128.00	2925.00	3141.00	4465.00	3090.00	5886.00	1942.00
51	1067X11	18211.00	2128.00	2925.00	3143.00	4467.00	3061.00	5886.00	1942.00
52	1118X8.8	15412.00	2289.00	2976.00	3249.00	4630.00	3157.00	6029.00	1942.00
53	1118X10	17371.00	2289.00	2976.00	3249.00	4630.00	3157.00	6029.00	1942.00
54	1118X11	18331.00	2289.00	2976.00	3249.00	4630.00	3157.00	6029.00	1942.00
55	1219X10	18989.00	2561.00	3084.00	3360.00	4879.00	3574.00	6270.00	1942.00
56	1219X11	20965.00	2561.00	2882.00	3360.00	4879.00	3574.00	6270.00	1942.00
57	1219X12.5	23961.00	2561.00	2882.00	3348.00	4867.00	3562.00	6270.00	1942.00
58	1422X12.5	27734.00	2834.00	3827.00	3794.00	6002.00	3906.00	7235.00	1942.00
59	1422X14.2	31749.00	2834.00	3827.00	4562.00	6002.00	3906.00	7235.00	1942.00
60	1626X14.2	36061.00	3378.00	4359.00	4671.00	6876.00	4867.00	8440.00	2481.00
61	1626X16	41333.00	3378.00	4359.00	4671.00	6876.00	4867.00	8440.00	2481.00
62	1829X14.2	41333.00	3474.00	4891.00	5112.00	7640.00	5013.00	9645.00	2605.00
63	1829X16	46245.00	3474.00	4891.00	5100.00	7640.00	5001.00	9015.00	2605.00
64	1829X17.5	50570.00	3474.00	4891.00	5100.00	7640.00	5001.00	9645.00	2605.00
65	2032X16	51516.00	4088.00	5529.00	5982.00	8513.00	5664.00	10367.00	2850.00
66	2032X17.5	55829.00	4088.00	5529.00	5982.00	8513.00	5664.00	10489.00	3102.00
67	2032X20	63018.00	4088.00	5529.00	5982.00	8513.00	5664.00	10489.00	3102.00
68	2235X17.5	62299.00	4578.00	6061.00	6534.00	9279.00	6216.00	11273.00	3136.00
69	2235X20	71884.00	4578.00	6061.00	6526.00	9279.00	6208.00	11454.00	3136.00
70	2235X22.2	77874.00	4578.00	6061.00	6526.00	9279.00	6208.00	11454.00	3136.00
71	2540X20	83864.00	5232.00	6912.00	7408.00	10806.00	7202.00	13263.00	3451.00
72	2540X22.2	89855.00	5232.00	6912.00	7408.00	10806.00	7202.00	13263.00	3451.00
73	2540X25	101835.00	5232.00	6912.00	7408.00	10806.00	7202.00	13263.00	3451.00

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 2021 -22 in Rupees
1	Supply and Delivery of MS specials with inside lining/epoxy coating as per IS 13260-1993 and outside coating with cement mortar 20mm thick as per IS 1916-1989 and IS 7322-1985.	Kg	121.00
2	Supply and Delivery of MS specials as per IS 7322-1985 without inside lining and outside coating.	Kg	111.00
3	Supply and Delivery of MS specials without inside lining and outside coating but with anti rust painting as per IS 14589 -1999.	Kg	114.00

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 with rubber ring joints.

Sl. No.	Internal Dia.	Unit	Rate for 2021-22 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	1573.00	2220.00	2423.00
7	500mm	One Metre	2070.00	2515.00	2796.00
8	600mm	One Metre	1990.00	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	2970.00	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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.

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 2021-22 in Rupees		
			NP2 Class	NP3 Class	NP4 Class
1	200mm	Each	34.00	39.00	46.00
2	250mm	Each	39.00	46.00	54.00
3	300mm	Each	46.00	54.00	60.00
4	350mm	Each	54.00	66.00	73.00
5	400mm	Each	74.00	88.00	93.00
6	450mm	Each	95.00	105.00	106.00
7	500mm	Each	105.00	126.00	126.00
8	600mm	Each	126.00	158.00	164.00
9	700mm	Each	165.00	193.00	206.00
10	800mm	Each	189.00	226.00	233.00
11	900mm	Each	222.00	276.00	292.00
12	1000mm	Each	234.00	288.00	318.00
13	1100mm	Each	257.00	318.00	350.00
14	1200mm	Each	288.00	354.00	390.00
15	1400mm	Each	384.00	474.00	522.00
16	1500mm	Each	768.00	989.00	989.00
17	1600mm	Each	482.00	600.00	660.00

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

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**

<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	50 mm	Each	3855.00
2	65mm	Each	4425.00
3	80mm	Each	4568.00
4	100mm	Each	6366.00
5	125mm	Each	7993.00
6	150mm	Each	9421.00
7	200mm	Each	16986.00
8	250mm	Each	25265.00
9	300mm	Each	32545.00
10	350mm	Each	47675.00
11	400mm	Each	64576.00
12	450mm	Each	81505.00
13	500mm	Each	102345.00
14	600mm	Each	142313.00
15	700mm	Each	318355.00
16	750mm	Each	355024.00
17	800mm	Each	433078.00
18	900mm	Each	567874.00
19	1000mm	Each	839743.00
20	1100mm	Each	1016456.00
21	1200mm	Each	1197024.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.

**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**

<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	50 mm	Each	4301.00
2	65 mm	Each	4793.00
3	80 mm	Each	5820.00
4	100 mm	Each	7518.00
5	125 mm	Each	9523.00
6	150 mm	Each	11376.00
7	200 mm	Each	23955.00
8	250 mm	Each	35315.00
9	300 mm	Each	45849.00
10	350 mm	Each	72596.00
11	400 mm	Each	95381.00
12	450 mm	Each	133695.00
13	500 mm	Each	192567.00
14	600 mm	Each	248857.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.



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

Sl. No.	Description	Unit	Rate for 2021-22 in Rupees
1	40 mm	Each	3855.00
2	50 mm	Each	4283.00
3	80 mm	Each	7542.00
4	100 mm	Each	9606.00
5	150mm	Each	19413.00
6	200mm	Each	27548.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.

### 12.3 CI SINGLE AIR VALVE AS PER ISI 14845/2000

Sl. No	Description	Unit	Rate for 2021-22 in Rupees
1	15mm	Each	1184.00
2	25 mm	Each	1703.00
3	40 mm	Each	2128.00
4	50 mm	Each	2358.00
5	80 mm	Each	3159.00
6	100 mm	Each	3439.00
7	150mm	Each	6121.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.

**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 2021-22 in Rupees
1	50mm	1 No.	11276.00
2	80mm	1 No.	13989.00
3	100mm	1 No.	17557.00
4	150mm	1 No.	28691.00
5	200mm	1 No.	51788.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
 2) GST extra applicable as per GO  
 3) Supply of valves includes 5 years warranty.

**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 2021-22 in Rupees
1	100mm	1No.	9078.00
2	125mm	1No.	11244.00
3	150mm	1No.	14041.00
4	200mm	1No.	25026.00
5	250mm	1No.	33717.00
6	300mm	1No.	46536.00
	With spur gear arrangements		
7	350mm	1No.	71056.00
8	400mm	1No.	96243.00
9	450mm	1No.	118953.00
10	500mm	1No.	149283.00
11	600mm	1No.	212101.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
 2) GST extra applicable as per GO  
 3) Supply of valves includes 5 years warranty.

**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 2021-22 in Rupees
1	100mm	1 No.	3112.00
2	150mm	1 No.	4412.00
3	200mm	1 No.	7302.00
4	250mm	1 No.	13717.00
5	300mm	1 No.	15709.00

**12.6.2 D/F GEAR OPERATED**

Sl.No.	Description	Unit	Rate for 2021-22 in Rupees
1	400mm	1 No.	64033.00
2	450mm	1 No.	79103.00
3	500mm	1 No.	90401.00
4	600mm	1 No.	119276.00

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 2021-22 in Rupees
1	100mm	1 No.	3754.00
2	150mm	1 No.	7642.00
3	200mm	1 No.	14654.00
4	250mm	1 No.	24439.00
5	300mm	1 No.	34130.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.

**12.7.2 DOUBLE FLANGED (DUAL PLATE CHECK VALVE)**

Sl. No.	Description	Unit	Rate for 2021-22 in Rupees
1	400mm	1 No.	79939.00
2	450mm	1 No.	85283.00
3	500mm	1 No.	98773.00
4	600mm	1 No.	122058.00
5	700mm	1 No.	170361.00
6	800mm	1 No.	237314.00
7	900mm	1 No.	262094.00
8	1000mm	1 No.	343564.00
9	1100mm	1 No.	369264.00
10	1200mm	1 No.	394963.00

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  
3) Supply of valves includes 5 years warranty.

### 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.

Sl.No.	Description	Unit	Rate for 2021-22 in Rupees
1	300mm	1 No.	61477.00
2	350mm	1 No.	93835.00
3	400mm	1 No.	113218.00
4	450mm	1 No.	157181.00
5	500mm	1 No.	206018.00
6	600mm	1 No.	295177.00
7	700/750mm	1 No.	496558.00
8	800mm	1 No.	576462.00
9	900mm	1 No.	1024940.00
10	1000mm	1 No.	1109440.00
11	1100mm	1 No.	1613940.00
12	1200mm	1 No.	1774764.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.

### 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 10/16 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 2021-22 in Rupees
1	50mm	each	12215.00
2	80mm	each	15529.00
3	100mm	each	17450.00
4	150mm	each	32847.00
5	200mm	each	35857.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.

### 12.9 DI D/F GATE VALVES

Supply and delivery of DI D/F Gate sluice valves (soft seated) resilient seated soft sealing Gate Valves(Sluice Valves) with body Bonnet of Ductile cast iron ofGrade GGG 40 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 4846-2000/DIN 3202 F4. All the valves should be with electrostatic powder coating both inside and out side with pocket less straight through body passage. All the valves are to be compatible for buried application with pressure rating PN 10/16

Sl.No.	Description	Unit	Rate for 2021-22 in Rupees
1	50mm	1 No.	7657.00
2	80mm	1 No.	9810.00
3	100mm	1 No.	12929.00
4	150mm	1 No.	20364.00
5	200mm	1 No.	32583.00
6	250mm	1 No.	46865.00
7	300mm	1 No.	70836.00
8	350mm	1 No.	206448.00
9	400mm	1 No.	221335.00

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

2) GST extra applicable as per GO

3) Supply of valves includes 5 years warranty.

### 12.10 DI D/F BUTTERFLY VALVES

Supply and delivery of DI D/F Butterfly Valves with GGG 40 or equivalent grade as per IS3896 (Part 2) 1985 and subsequent revisions Double eccentrically disc with renewable soft seal on the disc and body seat face of Stainless Steel / nickel weld overlay micro finished 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 2021-22 in Rupees	
			PN 10	PN 16
1	400mm	1 No.	152208.00	178093.00
2	450mm	1 No.	195516.00	195516.00
3	500mm	1 No.	197380.00	197380.00
4	600mm	1 No.	258694.00	258694.00
5	700mm	1 No.	422219.00	495835.00
6	800mm	1 No.	531254.00	553655.00
7	900mm	1 No.	684196.00	724068.00
8	1000mm	1 No.	881153.00	907654.00
9	1100mm	1 No.	1043810.00	1043810.00
10	1200mm	1 No.	1216154.00	1216154.00

### 12.11 DI Non - Return Valve

Manufacture, Supply and Delivery of DI D/F Slanted seat Swing Check Valve. Body of ductile cast iron of Grade 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 2021-22 in Rupees
1	40mm	1 No.	10767.00
2	50mm	1 No.	10919.00
3	65mm	1 No.	12135.00
4	80mm	1 No.	15053.00
5	100mm	1 No.	12365.00
6	125 mm	1 No.	27737.00
7	150mm	1 No.	34827.00
8	200 mm	1 No.	36979.00
9	250mm	1 No.	94020.00
10	300mm	1 No.	119467.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.

### 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 2021-22 in Rupees
1	40mm	1 No.	9952.00
2	50mm	1 No.	10196.00
3	65mm	1 No.	10419.00
4	80mm	1 No.	11343.00
5	100mm	1 No.	13307.00
6	125 mm	1 No.	15084.00
7	150mm	1 No.	22242.00
8	200 mm	1 No.	26294.00
9	250mm	1 No.	43905.00
10	300mm	1 No.	73409.00
11	350mm	1 No.	112130.00
12	400mm	1 No.	153039.00
13	450mm	1 No.	256172.00
14	500mm	1 No.	262301.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.

### 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 2021-22 in Rupees	
			PN 10	PN 16
1	200mm	1 No.	397866.00	398253.00
2	250mm	1 No.	400474.00	400864.00
3	300mm	1 No.	402642.00	402642.00
4	350mm	1 No.	445123.00	445123.00
5	400mm	1 No.	448469.00	448469.00
6	450mm	1 No.	558616.00	599248.00
7	500mm	1 No.	546900.00	603872.00
8	600mm	1 No.	743809.00	756946.00
9	700mm	1 No.	1639763.00	1679762.00
10	800mm	1 No.	1906064.00	1980679.00
11	900mm	1 No.	2170471.00	2209782.00
12	1000mm	1 No.	2655583.00	2691916.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
 2) GST extra applicable as per GO  
 3) Supply of valves includes 5 years warranty.

### 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 2021-22 in Rupees
1	50mm	1 No.	99775.00
2	65mm	1 No.	102309.00
3	80mm	1 No.	112710.00
4	100mm	1 No.	140481.00
5	150mm	1 No.	184722.00
6	200 mm	1 No.	285666.00
7	250mm	1 No.	351248.00
8	300mm	1 No.	544557.00
9	350mm	1 No.	807791.00
10	400mm	1 No.	1374154.00

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

2) GST extra applicable as per GO

3) Supply of valves includes 5 years warranty.

**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 2021-22 in Rupees
1	50mm	1 No.	63230.00
2	65mm	1 No.	64360.00
3	80mm	1 No.	76166.00
4	100mm	1 No.	87655.00
5	150mm	1 No.	124420.00
6	200 mm	1 No.	202100.00
7	250mm	1 No.	271917.00
8	300mm	1 No.	455390.00
9	350mm	1 No.	644229.00
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

3) Supply of valves includes 5 years warranty.



**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 2021-22 in Rupees
1	50mm	1 No.	80237.00
2	65mm	1 No.	82769.00
3	80mm	1 No.	94763.00
4	100mm	1 No.	101468.00
5	150mm	1 No.	157853.00
6	200 mm	1 No.	241975.00
7	250mm	1 No.	307467.00
8	300mm	1 No.	490284.00
9	350mm	1 No.	656569.00
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

3) Supply of valves includes 5 years warranty.

**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 2021-22 in Rupees
1	50mm	1 No.	63195.00
2	65mm	1 No.	65366.00
3	80mm	1 No.	76166.00
4	100mm	1 No.	87655.00
5	150mm	1 No.	124420.00
6	200 mm	1 No.	202100.00
7	250mm	1 No.	271917.00
8	300mm	1 No.	455390.00
9	350mm	1 No.	644229.00
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

3) Supply of valves includes 5 years warranty.

**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 2021-22 in Rupees
1	50mm	1 No.	107283.00
2	65mm	1 No.	109816.00
3	80mm	1 No.	120219.00
4	100mm	1 No.	130434.00
5	150mm	1 No.	240257.00
6	200 mm	1 No.	298017.00
7	250mm	1 No.	362865.00
8	300mm	1 No.	557221.00
9	350mm	1 No.	688658.00
10	400mm	1 No.	1281337.00

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

2) GST extra applicable as per GO

3) Supply of valves includes 5 years warranty.

**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 2021-22 in Rupees
1	50mm	1 No.	106472.00
2	65mm	1 No.	112507.00
3	80mm	1 No.	126302.00
4	100mm	1 No.	134045.00
5	150mm	1 No.	212195.00
6	200 mm	1 No.	273545.00
7	250mm	1 No.	339037.00
8	300mm	1 No.	521193.00
9	350mm	1 No.	757498.00
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

3) Supply of valves includes 5 years warranty.

**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 2021-22 in Rupees
1	50mm	1 No.	131867.00
2	65mm	1 No.	134119.00
3	80mm	1 No.	146582.00
4	100mm	1 No.	153578.00
5	150mm	1 No.	224175.00
6	200 mm	1 No.	275636.00
7	250mm	1 No.	333851.00
8	300mm	1 No.	505681.00
9	350mm	1 No.	720207.00
10	400mm	1 No.	1237466.00

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

2) GST extra applicable as per GO

3) Supply of valves includes 5 years warranty.

### 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 2021-22 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

3) Supply of valves includes 5 years warranty.

### 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 2021-22 in Rupees
1	50mm	1 No.	96900.00
2	80mm	1 No.	105918.00
3	100mm	1 No.	134254.00
4	150mm	1 No.	191029.00
5	200 mm	1 No.	280848.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.

### 12.17 OHT FLOW CONTROL VALVE

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

Sl. No.	Description	Unit	Rate for 2021-22 in Rupees
a	40mm (1 lpm to 400lpm adjustable type arrangements)	Each	5296.00
b	100mm (20 lpm to 2000 lpm adjustable type arrangements)	Each	19551.00

- Note : 1) The above rates are basic rates inclusive of transportation charges anywhere in Tamilnadu.  
2) GST extra applicable as per GO  
3) Supply of valves includes 5 years warranty.

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

Sl.No.	Description	Unit	Rate for 2021 -22 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 2021 -22 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 2021 -22 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 (maximum of 8Km radius) are extra. This item should be included in the Estimate and BoQ as a separate item.  
3) GST extra applicable as per GO

**14.0 SULPHATE RESISTANT CEMENT AS PER IS 12330/1988**

<b>Sl.No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees</b>
1	Sulphate Resistant Cement as per IS 12330/1988 and as amended from time to time.	50kg/bag	308.00

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

2) The rate is subject to revision by PWD.

3) GST extra applicable as per GO

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

<b>Sl.No.</b>	<b>Description</b>	<b>Rate for 2021 -22 in Rupees</b>	
	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	794.00	916.00
2	450mm dia FRC manhole frame to have clear opening of 450mm dia to suit 450mm dia FRC Cover	991.00	1147.00
3	600mm dia FRC manhole cover to suit 600 mm clear opening manhole frame	1023.00	1181.00
4	600mm dia FRC manhole frame to have clear opening of 600mm dia to suit 600mm dia FRC Cover	1461.00	1688.00

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 IS 2373 / ISO 4064 &  
DIRT BOX STRAINER**

Supply and delivery of Woltman model with removal mechanism water meters, (no domestic use) conforming to ISO 4064 part I, II, III Class B and IS-2373 with life cycle test certificate from FCRI/ NABL accredited lab. The watermeter 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 specification. Dry dial excavated counter housing fully protected against flooding ensuring easy reading in all climates.

Sl.No	Description	Unit	Rate for 2021-22 in Rupees		
			Water meter	Dirt Box	Erection Charges
1	50mm	Each	9447.00	3064.00	3195.00
2	80mm	Each	11751.00	4962.00	3986.00
3	100mm	Each	12488.00	6085.00	6205.00
4	150mm	Each	18264.00	10117.00	7297.00
5	200mm	Each	22734.00	12234.00	9090.00
6	250mm	Each	49383.00	26293.00	10306.00
7	300mm	Each	105402.00	46839.00	11042.00
8	400mm	Each	187063.00	77968.00	11242.00
9	500mm	Each	217694.00	113406.00	11268.00

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 etc., complete.



## 16.1 FULL BORE ELECTROMAGNETIC FLOW METER

Electromagnetic Flow Meter 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 different units (Kiloliters / Cubic meter) and shall be accurate within 0.5% of Measured value, shall operate within a range of 0.3 m/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 steel 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/ Polyurethrene/ 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 with IP68 Protection. 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, higher flow and empty pipe zero return. The signal converter housing should be die-cast aluminum 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 from FCRI, flow test lab / NABL accredited lab to be furnished.

Sl.No.	Description	Unit	Rate for 2020-21 in Rupees
1	10MM	1 No.	55914.00
2	25 MM	1 No.	44775.00
3	50 MM	1 No.	49925.00
4	80 MM	1 No.	79950.00
5	100 MM	1 No.	98127.00
6	125 MM	1 No.	102705.00
7	150MM	1 No.	114903.00
8	200MM	1 No.	142680.00
9	250MM	1 No.	177018.00
10	300 MM	1 No.	201706.00
11	350MM	1 No.	249793.00
12	400MM	1 No.	302785.00
13	450MM	1 No.	349423.00
14	500 MM	1 No.	399545.00
15	600MM	1 No.	458380.00
16	700 MM	1 No.	535153.00
17	800MM	1 No.	599113.00

<b>Sl.No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2020-21 in Rupees</b>
18	900 MM	1 No.	673938.00
19	1000 MM	1 No.	851775.00
20	1200 MM	1 No.	1223526.00
21	1400MM	1 No.	1465545.00
22	1600MM	1 No.	1667675.00
23	1800 MM	1 No.	2214000.00
24	2000 MM	1 No.	3179550.00
25	2200 MM	1 No.	3328175.00
26	2400MM	1 No.	3662325.00
27	2600 MM	1 No.	4086163.00
28	2800 MM	1 No.	4536650.00
29	3000 MM	1 No.	4882075.00

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**

<b>Sl.No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees</b>
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.	1570.00
	500 litres	1 No.	3560.00
	1000 litres	1 No.	7190.00
	2000 litres	1 No.	16000.00
	5000 litres	1 No.	39250.00
	10000 litres	1 No.	83400.00

- 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**

<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees</b>
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 50mmx 4mm alround 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.	9072.00

- 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 2021 -22 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.		
	<b>For OHT Capacities</b>		
a	1. 10000 litres with - 7.5m staging height	Each	26200.00
b	2. 20000 litres with - 7.5m staging height	Each	26200.00
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 <b>approved Type Design</b> and as directed by TWAD board officers.		
	<b>For OHT Capacities</b>		
a	30000 litres capacity at 12.0m staging height	Each	128500.00
b	40000 litres capacity at 12.0m staging height	Each	128500.00
c	50000 litres capacity at 12.0m staging height	Each	128500.00
d	60000 litres capacity at 12.0m staging height	Each	128500.00
e	100000 litres capacity at 12.0m staging height	Each	128500.00

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**

<b>Sl.No.</b>	<b>Description of Work</b>	<b>Unit</b>	<b>Rate for 2021 -22 in Rupees.</b>
	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	7657.00
ii.	Fully panelled Double leaf - Door	1.00m x2.10 m	6678.00
iii.	Fully panelled Double leaf - Door	1.00m x2.00 m	4893.00
iv.	Fully panelled Single leaf - Door	0.75 m x2.10 m	4089.00
v	Fully panelled Single leaf - Door	0.90 m x 2.00 m	4365.00
vi.	Fully panelled Single leaf - Door	0.90 m x 2.10 m	4835.00
vii	Fully panelled Single leaf - Door	1.00 m x2.00 m	4548.00
viii	Fully panelled Double leaf - Window (without Ventilator)	1.20 m x0.90 m	3628.00
ix	Fully panelled Double leaf - Window (without Ventilator)	0.60 m x 0.90 m	2648.00
x	Ventilator	0.45 m x0.60 m	1592.00

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

### **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 2021 -22 in Rupees.
		0.01mg/lt	0.005mg/lt	
1	1000			2351.00
2	2000			3920.00
3	3000	6	12	5978.00
4	5000	8	16	6641.00
5	10000	9	18	7304.00
6	15000	15	30	9962.00
7	25000	30	60	26245.00
8	50000	60	120	53119.00
9	100000	120	240	106238.00
10	200000	240	480	212475.00
11	300000	360	720	318114.00
12	400000	480	960	424952.00
13	500000	600	1,200	531191.00

- 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

Supply, Delivery, erection and commissioning of Batch type electro chlorinator using common salt as raw material, consisting of electrolyzers cell made of Titanium with coating mixed metal oxide such as Anabium, Cadmium, etc, capable of producing sodium hypochlorite solution within time span of 8 hours, having adjustable metering cum dosing pump capable of dozing the prepared sodium hypochlorite solution in water supply system with sensor having auto shut down when the storage if FRP tank gets empty. The storage vessel and electrolyzer tank (hypo procesing tank) must be made of FRP tank coated inside with hypothalic -BIS standard, having capacity to store required quantity of hypochlotrite solution, water and common salt for electrolysis process respectively. The eelectrochlorinator must have power source or control module for producing necessary DC current for electrlyser process from 440v, 3 phase / single phase AC supply and must have auto cut off after batch time of 8 hours. For all power connection, copper cables should be used.

Sl.No.	Capacity in litres per day	Rate for 2021 -22 in Rupees.
1	10,000-25,000	40190.00
2	25,001-50,000	53590.00
3	50,001-1,00,000	67860.00
4	1,00,001-1,50,000	91970.00
5	1,50,001-2,00,000	104800.00
6	2,00,001-2,50,000	126890.00
7	2,50,001-3,00,000	140492.00
8	3,00,001-3,50,000	157653.00
9	3,50,001-4,00,000	165410.00
10	4,00,001-4,50,000	175610.00
11	4,50,000-5,00,000	177310.00
12	5,00,001-5,50,000	203075.00
13	5,50,001-6,00,000	228840.00
14	6,00,001-6,50,000	258605.00
15	6,50,001-7,00,000	288370.00
16	7,00,001-7,50,000	310135.00
17	7,50,001-8,00,000	331900.00
18	8,00,001-8,50,000	357665.00
19	8,50,001-9,00,000	383430.00
20	9,00,001-9,50,000	409194.00
21	9,50,001-10,00,000	434958.00
22	10,00,001-15,00,000	536758.00
23	15,00,001-20,00,000	638558.00
24	20,00,001-25,00,000	738489.00

<b>Sl.No.</b>	<b>Capacity in litres per day</b>	<b>Rate for 2021 -22 in Rupees.</b>
25	25,00,001-30,00,000	838420.00
26	30,00,001-35,00,000	934725.00
27	35,00,001-40,00,000	1031030.00
28	40,00,001-45,00,000	1090108.00
29	45,00,001-50,00,000	1149186.00
30	50,00,001-55,00,000	1320754.00
31	55,00,001-60,00,000	1492321.00
32	60,00,001-65,00,000	1550050.00
33	65,00,001-70,00,000	1607779.00
34	70,00,001-75,00,000	1691594.00
35	75,00,001-80,00,000	1775409.00
36	80,00,001-85,00,000	1873414.00
37	85,00,001-90,00,000	1971418.00
38	90,00,001-95,00,000	2103413.00
39	95,00,001-100,00,000	2235407.00

- 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**

<b>SI No.</b>	<b>Description</b>	<b>unit</b>	<b>Rate for 2021 -22 in Rupees.</b>
	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	15450.00
b.	for 20mm to 32mm	MT	11714.00

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 2021 -22 in Rupees.
	Supply and Delivery of MJ Collars.		
1	100mm	Each	2681.00
2	150mm	Each	4264.00
3	200mm	Each	5565.00
4	250mm	Each	7747.00
5	300mm	Each	10057.00
6	350mm	Each	14358.00
7	400mm	Each	17102.00
8	450mm	Each	19782.00
9	500mm	Each	25254.00
10	600mm	Each	32226.00

- 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 -Deleted

### **III ( B ) RATES FOR PUMPSETS**

For individual specifications for various items regarding pumpsets & Electrical Equipments, the specifications already given in the manual for pumpsets should be followed



**1.0 CENTRIFUGAL MONOBLOC PUMPSET AS PER  
IS 9079/2002 WITHOUT PANEL BOARD THREE PHASE**

Supply and delivery of Electric Monoset centrifugal pump conforming to IS 9079:2002 as amended from time to time, with CI FG 200 Casing , hydraulically and dynamically balanced Bronze grade LTB-2 impeller, impeller ring and casing ring, stainless steel shaft capable of discharging required quantity of water against a total head noted below due to all causes. Pump shall of BEE 3 Star Rated and capable of discharging the specified quantity at the head noted at the minimum NPSHA 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+/- 10% , 50 Hz +/- 5%. Squirrel cage induction motor for continuous operation. The speed of the Pump and Motor shall be not less than 2700 to 2900 RPM respectively.

<b>Sl.No</b>	<b>Duty lpmxm</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	100x20	1 No	11740
2	150x20	1 No	17296
3	200x20	1 No	17972
4	250x20	1 No	19309
5	300x20	1 No	19309
6	350x20	1 No	19309
7	400x20	1 No	19309
8	450x20	1 No	19309
9	500x20	1 No	23858
10	700x20	1 No	24126
11	50x35	1 No	18667
12	100x35	1 No	21213
13	150x35	1 No	25656
14	200x35	1 No	28883
15	250x35	1 No	32455
16	300x35	1 No	32455
17	350x35	1 No	32455
18	400x35	1 No	30566
19	450x35	1 No	30566
20	500x35	1 No	30566
21	50x50	1 No	28881
22	100x50	1 No	32455
23	150x50	1 No	32455
24	200x50	1 No	34703
25	250x50	1 No	34703
26	300x50	1 No	34703

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

**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 %, 50 HZ +/- 5 %

<b>Sl. No.</b>	<b>Duty lpm x m</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	15x40	1 No	20261
2	15x50	1 No	20261
3	15x60	1 No	21067
4	15x70	1 No	24342
5	15x80	1 No	24342
6	15x90	1 No	24342
7	15x100	1 No	27769
8	15x125	1 No	31547
9	15X150	1 No	33961
10	20x40	1 No	21067
11	20x50	1 No	21067
12	20x60	1 No	21067
13	20x70	1 No	24342
14	20x80	1 No	24342
15	20x90	1 No	24792
16	20x100	1 No	29566
17	20X125	1 No	31547
18	20X150	1 No	33764

- Note: 1) The above rates are basic rates only.  
2) GST extra applicable as per G.O.  
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 IS9283 /1995 and as amended there after, suitable for operation in AC three phase 415 V+/- 10 %, 50 HZ +/- 5 %

<b>Sl. No.</b>	<b>Duty</b>	<b>lpm x m</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1		30x40	1 No	20629
2		30x50	1 No	20750
3		30x60	1 No	21721
4		30x70	1 No	22934
5		30x80	1 No	26210
6		30x90	1 No	28516
7		30x100	1 No	28516
8		30x125	1 No	31307
9		40x40	1 No	20507
10		40x50	1 No	21599
11		40x60	1 No	21599
12		40x70	1 No	28152
13		40x80	1 No	29365
14		40x90	1 No	31671
15		40x100	1 No	31671

- Note: 1) The above rates are basic rates only.  
 2) GST extra applicable as per G.O.  
 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 IS9283 /1995 as amended there after, suitable for operation in AC three phase 415 V+/- 10 %, 50 HZ +/- 5 %

<b>Sl.No.</b>	<b>Duty lpm x m</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	50x40	1 No	28899
2	50x50	1 No	31577
3	50x60	1 No	31577
4	50x75	1 No	35618
5	50x100	1 No	42344
6	50x125	1 No	46586
7	50x175	1 No	57424
8	50x200	1 No	65560
9	50x225	1 No	68530
10	50x250	1 No	73900
11	50x275	1 No	88244
12	75x40	1 No	30855
13	75x50	1 No	31845
14	75x60	1 No	33410
15	75x75	1 No	38098
16	75x100	1 No	46539
17	75x125	1 No	49282
18	75x150	1 No	57424
19	75x175	1 No	58883
20	75x200	1 No	64397
21	75x225	1 No	67783
22	75x250	1 No	80827
23	75x275	1 No	88244
24	100x30	1 No	28899
25	100x40	1 No	30855
26	100x50	1 No	33737
27	100x60	1 No	35618
28	100x75	1 No	41998
29	100x100	1 No	49271
30	100x125	1 No	57052
31	100x175	1 No	57052



<b>Sl.No.</b>	<b>Duty lpm x m</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
32	100x200	1 No	62269
33	100x225	1 No	80920
34	100x250	1 No	88244
35	125x25	1 No	29178
36	125x40	1 No	30855
37	125x50	1 No	33528
38	125x60	1 No	37096
39	125x75	1 No	38034
40	125x100	1 No	46204
41	125x125	1 No	52059
42	125x200	1 No	70829
43	125x225	1 No	75326
44	150x25	1 No	29178
45	150x40	1 No	30855
46	150x50	1 No	31577
47	150x60	1 No	37096
48	150x75	1 No	41185
49	150x100	1 No	46982
50	150x125	1 No	52058
51	175x40	1 No	30855
52	175x50	1 No	36767
53	175x60	1 No	37936
54	175x75	1 No	37936
55	175x100	1 No	45311
56	200x25	1 No	29178
57	200x40	1 No	30855
58	200x50	1 No	34643
59	200x60	1 No	41791
60	200x75	1 No	41998
61	200x100	1 No	51602
62	200x125	1 No	59444
63	250x40	1 No	30855
64	250x50	1 No	37430
65	250x60	1 No	37430
66	250x75	1 No	50280
67	250x100	1 No	59446
68	250x125	1 No	71550
69	300x40	1 No	32354
70	300x50	1 No	37741
71	300x60	1 No	50835
72	300x75	1 No	58353

<b>Sl.No.</b>	<b>Duty lpm x m</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
73	300x100	1 No	60067
74	350x40	1 No	37741
75	350x50	1 No	43871
76	350x60	1 No	50835
77	350x75	1 No	59444
78	350x100	1 No	66209
79	400x40	1 No	44578
80	400x50	1 No	55551
81	400x60	1 No	52358
82	400x75	1 No	69774
83	500x40	1 No	49230
84	500x50	1 No	52358
85	500x75	1 No	69774
86	600x40	1 No	50924
87	600x50	1 No	68627
88	600x75	1 No	79069

- 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 ( $\pm 5$ ), 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.

<b>Sl. No.</b>	<b>Duty lpm x m</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	50x25	1 No	25115
2	50x40	1 No	25151
3	50x50	1 No	29823
4	50x60	1 No	37300
5	50x75	1 No	49104
6	50x100	1 No	49684
7	50x125	1 No	80574
8	75x25	1 No	25150
9	75x40	1 No	28200
10	75x50	1 No	31951
11	75x60	1 No	37301
12	75x75	1 No	49104
13	75x100	1 No	49686
14	75x125	1 No	75418
15	75x150	1 No	99091
16	100x25	1 No	27184
17	100x40	1 No	31951
18	100x50	1 No	33586
19	100x60	1 No	49105
20	100x75	1 No	49686
21	100x100	1 No	49686
22	100x125	1 No	80697
23	125x25	1 No	27917
24	125x40	1 No	33525
25	125x50	1 No	39508
26	125x75	1 No	49105
27	125x100	1 No	49686

<b>Sl. No.</b>	<b>Duty lpm x m</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
28	125x125	1 No	80697
29	150x25	1 No	28563
30	150x40	1 No	33525
31	150x50	1 No	33586
32	150x60	1 No	49104
33	150x75	1 No	49104
34	150x100	1 No	49686
35	150x125	1 No	83199
36	175x25	1 No	28166
37	175x40	1 No	33525
38	175x50	1 No	39508
39	175x60	1 No	49105
40	175x75	1 No	49105
41	175x100	1 No	69848
42	200x25	1 No	28166
43	200x40	1 No	33525
44	200x50	1 No	33586
45	200x60	1 No	49105
46	200x75	1 No	55585
47	200x100	1 No	69848
48	200x125	1 No	98470
49	250x25	1 No	28563
50	250x40	1 No	33586
51	250x50	1 No	41553
52	250x60	1 No	49105
53	250x75	1 No	69690
54	250x100	1 No	73978
55	250x125	1 No	96370
56	300x25	1 No	28563
57	300x40	1 No	33586
58	300x50	1 No	39508
59	300x60	1 No	55585
60	300x75	1 No	69848
61	300x100	1 No	73978
62	350x25	1 No	30784
63	350x40	1 No	44237
64	350x50	1 No	49140
65	350x60	1 No	57154
66	350x75	1 No	69848
67	350x100	1 No	73978
68	400x25	1 No	33586
69	400x40	1 No	44412
70	400x50	1 No	49140
71	400x60	1 No	58771

<b>Sl. No.</b>	<b>Duty lpm x m</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
72	400x75	1 No	70539
73	500x25	1 No	33586
74	500x40	1 No	44412
75	500x50	1 No	49140
76	500x75	1 No	71296
77	600x25	1 No	33525
78	600x40	1 No	50076
79	600x50	1 No	59889
80	600x75	1 No	71296
81	700x40	1 No	55970
82	700x60	1 No	75388
83	700x80	1 No	75388
84	700x100	1 No	75388
85	800x40	1 No	55970
86	800x60	1 No	75388
87	800x80	1 No	75388
88	800x100	1 No	75388
89	900x40	1 No	75388
90	900x60	1 No	75388
91	900x80	1 No	75388
92	900x100	1 No	75388
93	1000x40	1 No	83789
94	1000x60	1 No	85372
95	1000x80	1 No	100985
96	1000x100	1 No	161908
97	1250x40	1 No	96518
98	1250x60	1 No	111730
99	1250x80	1 No	179788
100	1250x100	1 No	179788
101	1500x40	1 No	105835
102	1500x60	1 No	159254
103	1500x80	1 No	186125
104	1500x100	1 No	225407
105	2000x40	1 No	125074
106	2000x60	1 No	186125
107	2000x80	1 No	186125
108	2000x100	1 No	186125
109	2500x40	1 No	176385

- 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 CASTING CENTRIFUGAL PUMP (1500 RPM) confirming 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.

Sl.No.	Capacity in LPM	Rate for 2021-22 in Rupees										Rs. in Lakhs.		
		Head in Metres												
		25	30	35	40	45	50	55	60	70	80	90		
1	1500	3.54	3.38	4.11	4.17	4.20	5.06	5.36	5.37	5.72	5.72	6.37		
2	2500	3.54	3.54	4.21	4.34	5.18	5.18	5.44	5.76	6.43	6.66	6.66		
3	3000	3.54	3.54	4.43	4.49	5.44	5.44	5.18	5.76	6.87	6.87	6.93		
4	3500	3.54	3.54	4.43	4.49	5.44	6.22	6.71	7.06	7.34	7.34	7.34		
5	4000	4.10	4.10	4.49	4.49	5.51	6.29	7.00	7.17	7.34	7.34	7.34		
6	5000	4.48	4.48	4.60	4.74	6.41	6.67	7.30	7.56	7.79	7.83	7.85		
7	6000	4.48	4.48	6.21	6.35	6.73	7.20	7.63	8.47	8.87	9.03	9.33		
8	7000	5.72	6.08	6.29	6.53	7.05	7.34	7.88	8.65	8.91	9.96	10.16		
9	8000	5.88	6.08	6.35	7.00	7.34	7.72	7.88	8.26	12.89	13.21	13.86		
10	9000	5.88	6.29	6.51	7.34	7.56	7.72	7.88	8.00	13.51	14.80	15.94		
11	10000	5.88	6.29	6.59	7.37	7.74	8.05	8.05	13.96	17.85	18.61	18.72		
12	15000	7.24	7.45	7.27	8.95	9.39	9.89	11.64	15.44	18.58	18.58	18.72		
13	20000	7.95	8.10	8.11	15.73	16.16	17.73	20.24	20.24	20.67	20.79	21.36		
14	25000	18.31	18.60	19.12	19.39	19.88	19.91	20.71	20.71	21.36	21.81	21.74		
15	30000	19.81	20.55	21.53	21.85	22.05	22.61	22.61	25.82	29.15	30.21	31.05		

- 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, 415 V +/- 10 %, 50 HZ +/- 5%, TEFC (upto 20 HP), SPDP (above 20 HP). The motor offered should be of energy efficient motors.

Sl. No	KW	HP	Rate for 2021-22 in Rupees
1	9.3	12.5	97973
2	11	15	104011
3	15	20	122504
4	18.5	25	167339
5	22	30	183766
6	30	40	207969
7	37	50	260654
8	45	60	315285
9	55	75	321829
10	75	110	488745
11	90	120	514928
12	110	150	642494
13	125	170	826939
14	132	180	874940
15	150	200	882577
16	160	215	962216
17	180	240	962216
18	187	250	1001490
19	200	270	1075674
20	220	300	1413869
21	250	335	1609795
22	280	375	2221170
23	300	400	2563728

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 conforming 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%, TEFC (upto 20 HP), SPDP (above 20 HP). The motor offered should be of energy efficient motors.

Sl. No	KW	HP	Rate for 2021-22 in Rupees
1	9.3	12.5	95066
2	11	15	99896
3	15	20	140787
4	18.5	25	166266
5	22	30	214011
6	30	40	266946
7	37	50	333667
8	45	60	411041
9	55	75	470913
10	75	110	565235
11	90	120	641169
12	110	150	823783
13	125	170	980125
14	132	180	980125
15	150	200	1046230
16	160	215	1128320
17	180	240	1579073
18	187	250	1604330
19	200	270	1736485
20	220	300	1992415
21	250	335	2230514

- 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 type 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, No. 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 2021-22 in Rupees									
		Rs. in Lakhs									
		Head in Metres									
		15m	20m	30m	40m	50m	60m	70m	80m	90m	100m
1	1500	3.54	3.54	3.78	3.78	3.93	4.02	4.26	4.26	4.71	4.95
2	2000	7.09	7.50	8.39	9.31	10.38	11.08	11.54	11.78	12.01	12.85
3	3000	9.15	9.36	9.92	11.04	12.22	12.71	13.21	13.21	13.21	13.28
4	4000	10.01	10.35	12.88	13.09	13.28	13.28	13.69	14.58	14.98	14.98
5	5000	12.10	12.45	13.09	13.94	14.43	14.79	15.40	15.65	15.87	16.30
6	6000	12.45	12.45	13.26	13.94	14.79	14.79	15.40	15.65	15.88	16.30
7	7000	12.45	12.45	13.26	13.94	14.79	14.79	15.88	15.88	15.88	16.30
8	8000	13.53	13.53	13.94	14.59	14.98	14.98	15.88	15.88	15.88	16.30
9	10000	13.26	13.53	14.06	14.59	14.98	15.40	15.88	15.88	16.30	16.30
10	15000	14.54	14.87	14.98	15.40	16.30	16.30	16.70	17.59	17.98	18.40
11	20000	16.55	17.08	17.77	18.44	18.90	21.13	23.23	23.68	27.30	32.87
12	25000	17.01	17.55	18.21	18.78	19.34	21.53	23.68	24.24	27.85	33.87
13	30000	29.16	30.54	31.67	33.79	34.13	35.94	36.37	40.44	40.94	45.27

Note:

- 1) The above rates are basic rates inclusive of transportation, 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 to have maximum efficiency at high power factor. Separate thrust bearing assembly could also be supplied to take up the down load.

SI.No	KW	HP	Rate for 2021-22 in Rupees
<b>TEFC MOTORS</b>			
1	18.5	25	117778
2	22	30	129558
3	30	40	149891
4	37	50	196193
5	45	60	237041
<b>SPDP MOTORS</b>			
6	55	75	371126
7	75	100	489690
8	90	120	510722
9	110	150	658122
10	125	170	680133
11	132	180	762674
12	150	200	859187
13	160	215	1032305
14	180	240	1076327
15	187	250	1084031
16	200	270	1199587
17	220	300	1254614
18	250	335	1342658
19	280	375	1569089
20	300	400	1778829
21	380	520	1964824
22	400	540	2324943

Note: 1) The above rates are basic rates only 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, 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 L.V 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 2021-22 in Rupees		
		11KV / 433 V	22 KV / 433 V	22 KV / 11KV 433 V
1	63	198677	211094	<b>Deleted</b>
2	100	229058	241114	
3	150	406459	430468	
4	160	335269	366312	
5	200	372520	366312	
6	250	453877	521528	
7	315	533945	571198	
8	400	596000	658120	
9	500	687173	739413	
10	630	771563	819784	
11	750	916230	948380	
12	800	948380	988564	
13	1000	1060898	1109121	

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 and as amended thereafter with 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 2021-22 in Rupees
1	1	1 No.	5883
2	1.5	1 No	6128
3	2	1 No	7105

- Note: 1) The rate are basic rates with inclusive of two level guard worth Rs.568/- and auto start facility worth Rs. 424/-  
 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, IEC60947-1 and as amended thereafter with 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 2021-22 in Rupees
1	1	1 No.	13802
2	2	1 No	13802
3	3	1 No	14095
4	4	1 No.	14095
5	5	1 No	14492
6	6	1 No	14492

- Note: 1) The rate are basic rates with inclusive of two level guard worth Rs.568/- and auto start facility worth Rs. 424/-  
 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  
 5) DOL Starters are to be adopted upto 6HP

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

Supply and delivery of Star-Delta starter confirming to IS 13947, IEC60947-1 and as amended thereafter with 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, Miniature 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.	HP	Unit	Rate for 2021-22 in Rupees
1	6	1 No.	17355
2	7.5	1 No	18220
3	10	1 No	22070
4	12.5	1 No.	22991
5	15	1 No	23938
6	20	1 No	23938
7	25	1 No	23938

Note: 1) The rate are basic rates with inclusive of two level guard worth Rs.568/- and auto start facility worth Rs. 424/-

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) Air Break Fully Automatic Star Delta starters are suggested for above 6HP and upto 20HP and Auto Transformer starter for above 20HP are to be adopted.

5) GST extra applicable as per GO

**11.3 DOL STARTER WITH SINGLE PHASING PREVENTOR WITH ANALOG AMMETER AND VOLTMETER CONFORMING TO IS 13947, IEC 60947-1 WITH AUTO RESTART FACILITY FOR PUMP HOUSES WHERE PANEL BOARDS ARE AVAILABLE**

Supply and delivery of direct online starter confirming to IS13947, IEC60947-1 and as amended thereafter with 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 phasing 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. 5249 /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.

<b>Sl. No.</b>	<b>KW</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	30 to 37	1 No	191093
2	38 to 75	1 No	340696
3	76 to 135	1 No	475006
4	136 to 160	1 No	537252
5	161 to 250	1 No	802603
6	251 to 300	1 No	941282
7	301 to 500	1 No	1323790
8	501 to 750	1 No	1735148

- Note: 1)The above rates are basic rates only  
2) FCMA soft starters are to be adopted for 100 HP and above.  
3) 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 and 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.

<b>Sl. No.</b>	<b>KW</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	250	1 No	766922
2	300	1 No	807796
3	350	1 No	868356
4	400	1 No	908909
5	500	1 No	948686
6	600	1 No	1066889
7	700	1 No	1174017
8	800	1 No	1312186
9	900	1 No	1423589
10	1000	1 No	1557234

- Note: 1)The above rates are basic rates only  
 2) FCMA soft starters are to be adopted for 100 HP and above.  
 3) GST extra applicable as per GO

**11.6 FULLY AUTOMATIC AIR BREAK STAR DELTA STARTER WITH SINGLE PHASE PREVENTOR WITH AMMETER CONFIRMING TO IS 13947, 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 IS 13947, IEC60947-1 and as amended thereafter with 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 swith, Minature circuitr braeker, 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).

<b>Sl.No</b>	<b>KW Rating</b>	<b>HP</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	7.5	10	1 No	17447
2	11	15	1 No	17447
3	15	20	1 No	18813
4	18.5	25	1 No	18813
5	22	30	1 No	30705
6	30	40	1 No	35172
7	37	50	1 No	40111

- Note: 1) The above rates are basic rates inclusive of handling charges.  
 2) GST extra applicable as per GO  
 3) Air Break Fully Automatic Star Delta starters are suggested for above 6HP and upto 20HP and Auto Transformer starter for above 20HP are to be adopted.



**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, 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, in coming and out going cable entry provisions, transformer tank including first filling of oil etc.

<b>Sl.No</b>	<b>KW Rating</b>	<b>HP</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	5.5	7.5	1 No	30617
2	7.5	10	1 No	30617
3	9	12.5	1 No	35218
4	11	15	1 No	36686
5	15	20	1 No	73371
6	22	30	1 No	93781
7	30	40	1 No	105498
8	37	50	1 No	121694
9	45	60	1 No	135818
10	60	80	1 No	187852
11	75	100	1 No	205802

- Note: 1) The above rates are basic rates inclusive of handling charges.  
2) GST extra applicable as per GO  
3) Air Break Fully Automatic Star Delta starters are suggested for above 6HP and upto 20HP and Auto Transformer starter for above 20HP are to be adopted.

**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 CONFORMING TO IS 7098 (PART I)/1988 AND AS AMENDED  
THEREAFTER WITH ISI MARKING**

SI.NO.	Description	Unit	Rate for 2021-22 in Rupees		
			3 Core	3.5 Core	4 Core
1	4sq.mm	metre	83	—	168
2	6sq.mm	metre	101	—	178
3	10sq.mm	metre	114	—	195
4	16sq.mm	metre	119	—	254
5	25sq.mm	metre	150	311	—
6	35sq.mm	metre	184	365	—
7	50sq.mm	metre	243	477	—
8	70sq.mm	metre	321	611	—
9	95sq.mm	metre	420	789	—
10	120sq.mm	metre	506	966	—
11	150sq.mm	metre	616	1144	—
12	185sq.mm	metre	760	1402	—
13	240sq.mm	metre	959	1769	—
14	300sq.mm	metre	1164	2171	—
15	400sq.mm	metre	1491	2778	—

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 CONFORMING TO IS 694/1990 AND AS  
AMENDED THEREAFTER**

SI.No.	Description	Unit	Rate for 2021-22 in Rupees
1	1.5 sq.mm	meter	80
2	2.5 sq.mm	meter	125
3	4.0 sq.mm	meter	186
4	6.0 sq.mm	meter	251
5	10.0 sq.mm	meter	435
6	16.0 sq.mm	meter	676
7	25.0 sq.mm	meter	925
8	35.0 sq.mm	meter	1356
9	50.0 sq.mm	meter	1900
10	70.0 sq.mm	meter	2800
11	95.0 sq.mm	meter	3410

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 CONFORMING TO IS 1554 PART I AND AS AMENDED THEREAFTER WITH ISI MARKING

SI.NO.	Description	Unit	Rate for 2021-22 in Rupees		
			3 Core	3.5 Core	4 Core
1	4sq.mm	Joint	83	—	168
2	6sq.mm	Joint	100	—	176
3	10sq.mm	Joint	114	—	194
4	16sq.mm	Joint	119	—	254
5	25sq.mm	Joint	148	309	—
6	35sq.mm	Joint	183	364	—
7	50sq.mm	Joint	242	474	—
8	70sq.mm	Joint	320	609	—
9	95sq.mm	Joint	419	788	—
10	120sq.mm	Joint	504	963	—
11	150sq.mm	Joint	616	1139	—
12	185sq.mm	Joint	758	1397	—
13	240sq.mm	Joint	955	1764	—
14	300sq.mm	Joint	1161	2164	—
15	400sq.mm	Joint	1485	2769	—

### II. JOINTING OF XLPE INSULATED AND SHEATHED 3 CORE FLAT TYPE COPPER CABLE CONFORMING TO IS 694/1990 AND AS AMENDED THEREAFTER

SI.No.	Description	Unit	Rate for 2021-22 in Rupees
1	1.5 sq.mm	Joint	81
2	2.5 sq.mm	Joint	131
3	4.0 sq.mm	Joint	193
4	6.0 sq.mm	Joint	259
5	10.0 sq.mm	Joint	452
6	16.0 sq.mm	Joint	700
7	25.0 sq.mm	Joint	920
8	35.0 sq.mm	Joint	1346
9	50.0 sq.mm	Joint	1888
10	70.0 sq.mm	Joint	2784
11	95.0 sq.mm	Joint	3388

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

Sl.No.	Description	Unit	Rate for 2021-22 in Rupees	
			11KV	12KV
1	3 C 240 sq.mm	Joint	1449	1770
2	3 C 185 sq.mm	Joint	1207	1497
3	3 C 150 sq.mm	Joint	1024	1331
4	3 C 120 sq.mm	Joint	910	1196
5	3 C 95 sq.mm	Joint	772	1083
6	3 C 70 sq.mm	Joint	692	954

**12.3 CABLE LAYING**

Sl.No.	Description	Unit	Rate for 2021-22 in Rupees	
			For laying below GL including earth work	For laying in trenches inside the pump room or in air
1	up to 95 sq. mm		160	103
2	95 to 240 sq.mm		225	156
3	240 to 400 sq.mm		325	255

**12.4 CABLE CLAMPS**

Sl.No.	Description	Unit	Rate for 2021-22 in Rupees
1	up to 95 sq. mm	each	340
2	95 to 240 sq.mm	each	424
3	240 to 400 sq.mm	each	626

- 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 2021-22 in Rupees	
			11KV	12KV
1	3 C 240 sq.mm	metre	1315	1707
2	3 C 185 sq.mm	metre	1096	1457
3	3 C 150 sq.mm	metre	941	1299
4	3 C 120 sq.mm	metre	846	1178
5	3 C 95 sq.mm	metre	731	1033
6	3 C 70 sq.mm	metre	618	957

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 2021-22 in Rupees
1	Price for 5 HP Model/ Rotary type Vaccum pumpsets (Pumpset + GI Pipes + Fittings + Starters + Valves + 100L Tank) including Transportation, handling charges.	1 No	403245
2	Price for 10 HP Vaccum pumpset with all above Accessories	1 No	520826
3	150mm dia Pressure Gauge and Vaccum guage including all accessories as per specification (For Suction and Delivery to be mounted on wall on Teak Wood Board)	1 No	7214

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 2021-22 in Rupees	
		3POLE	4 POLE
1	32-100	10329	12788
2	125	14263	15739
3	160	17234	20658
4	200	29511	32737
5	250	29511	34431
6	320	37796	43764
7	400	39809	45742
8	630	44024	53049
9	800	59680	79519
10	1000	92811	119360
11	1250	104735	144603
12	1600	119298	180016

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, 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 CONFORMIING TO IS 2834.**

**Rs. 461/- 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.461/- per KVAR is inclusive of Banking charges, such as providing 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**

SI.No.	Description	Unit	Rate for 2021-22 in Rupees
1	Up to 50HP/37 KW (which includes LT meter panel board, 6 Nos. suitable fuse carriers	1 No.	27214
2	75HP/56 KW (which includes LT meter panel board, 6 Nos. suitable fuse carriers	1 No.	35516
3	75HP-150HP/56-112KW (which includes LTCT meter panel board, 6Nos. suitable fuse carriers and 3 nos. CT coil)	1 No.	44257
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.	71471

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**

SI.No.	Description	Unit	Rate for 2021-22 in Rupees
1	Designing and preparation of CEIG drawings, obtaining Approval and safety certificate including submission of Completion report and rectification report.	1 No.	74088
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.	376992
b	For 22 KV Sub station	1 No.	502656
3	Construction of transformer plinth	1 No.	25133
4	Chain link fencing with gate including the TNEB 2 poles Spreading of materials as per CEIG requirements	1 No.	62832
5	Transformer yard earthing using copper flat and TWIN earthing as per IS		
a	Upto 250 KVA Transformer sub station	1 No.	37699
b	Above 250 KVA Transformer sub station	1 No.	75398
6	Transformer sub station erection charges	1 No.	23961

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 2021-22 in Rupees	
		3POLE	4 POLE
1	630	130447	131495
2	800	162177	164366
3	1000	183795	226603
4	1250	195086	238971
5	1600	216493	278458
6	2000	255762	304947
7	2500	280355	334458
8	3200	368887	443649
9	4000	512393	614813

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 2021-22 in Rupees
1	Electrical gloves tested to 11 KV /22 KV with wooden box dusted with french	1 No.	624
2	Electrical quality 6mm thick rubber mat	1 No.	681
3	5 kg capacity ISI marked Dry chemical powder fire extinguisher	1 No.	2434
4	Fire Bucket-3 Nos Hooked to MS stand	1 No.	972
5	Laminated shock treatment chart	1 No.	649
6	Wooden First Aid Box	1 No.	819
7	Rechargeable Emergency lamp( 600mm fluorescent lamp)	1 No.	3256
	<b>H.T. SUPPLY</b>		
8	Teak Wood ladder –5M Ht.	1 No.	1667
9	Earth Discharge Rod (3 Nos. -RYB)	1 No.	1395

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**

<b>Sl.No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	Upto 25 HP installation	1 No.	13291
2	Above 25-60 HP	1 No.	20456
3	Above 60-150 HP	1 No.	31895
4	Above 150 HP	1 No.	51139

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.52/- per Kg should be adopted for estimation and this amount should be added with the above rates.

**20.0 TOOLS**

<b>Sl.No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
1	6" Chain wrench best India make or equivalent	1 No.	702
2	8"Chain Wrench Best India Make or equivalent	1 No.	949
3	Connector Screw Driver 901 Taparia Make or equivalent	1 No.	61
4	200mm Screw Driver 825 Taparia Make or equivalent	1 No.	101
5	300mm Screw Driver 829 Taparia Make or equivalent	1 No.	187
6	400mm Screw Driver 930 Taparia Make or equivalent	1 No.	272
7	200mm Cutting Plier Taparia Make or equivalent	1 No.	330
8	800gm Ball Pane Hammer with Handle Taparia Make	1 No.	417
9	Digital Tong Tester CE Make or equivalent	1 No.	3683
10	Digital Multi Meter CE Make or equivalent	1 No.	2475
11	15" Screw Spanner Taparia Make or equivalent	1 No.	857
12	12" Bearing Puller	1 No.	851
13	Lever Type Grease Gun	1 No.	696
14	12"Screw Spanner	1 No.	630
15	Crow Bar 5"	1 No.	615
16	1" Cold Chisel	1 No.	225
17	Hacksaw Frame with Blade	1 No.	139
18	Electrical Air Blower	1 No.	3192
19	Digital Tachometer	1 No.	2144
20	Hand Crimpling Tool 8"	1 No.	580
21	DE Spanner set 6 to 32 Jhalani Make or equivalent	1 No.	1110
22	Rings spanner set 6 to 32 Jhalani Make or equivalent	1 No.	2485
23	Pipe Wrench 24" Jhalani Make or equivalent	1 No.	1422
24	Pipe Wrench 14" Jhalani Make or equivalent	1 No.	702
25	12" Flat rough File Scissors Jhalani Make or equivalent	1 No.	350
26	12" Flat smooth File Scissors Jhalani Make or equivalent	1 No.	527
27	12"Round File Rough Scissors Jhalani Make or equivalent	1 No.	408
28	12" Round File Smooth Scissors Jhalani Make or equivalent	1 No.	486
29	12"Half Round File Rough Scissors Jhalani Make or equivalent	1 No.	712
30	12"Half Round File Smooth Scissors Jhalani Make or equivalent	1 No.	712

Note:

- 1)The above rates are basic rates inclusive of handling charges, F.O.R destination.
- 2) GSTextra applicable as per GO

## 21.0 H.O.T. CRANE AND ACCESSORIES

Sl.No.	Description	Unit	Rate for 2021-22 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.	346059
2	2T HOT crane with above specifications upto 8 M Span including girder	1 No.	359473
3	2T HOT crane with above specifications upto 10 M Span including girder	1 No.	390742
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.	374544
5	3T HOT crane with above specifications upto 8 M Span including girder	1 No.	405369
6	3T HOT crane with above specifications upto 10 M Span including girder	1 No.	420370
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.	441075
8	5T HOT crane with above specifications upto 8 M Span including girder	1 No.	473923
9	5T HOT crane with above specifications upto 10M Span including girder	1 No.	492685

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. 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 should 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 9600 rpm 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 3ph, 415 V(+or- 10%), 50Hz(+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 3core x 1.5 sq.mm copper conductor and for bimetallic switches 2core x 1.5 sqmm copper conductor shall be provided. Motor shall be supplied with 10m 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 2021-22 in Rupees
	<b>10 m upto 15 m head</b>		
1	Discharge Upto 20 M <sup>3</sup> /hour	1 No	501350
2	Discharge 20 to 100 M <sup>3</sup> /hour	1 No	501350
3	Discharge 100 to 200 M <sup>3</sup> /hour	1 No	529452
4	Discharge 200 to 300 M <sup>3</sup> /hour	1 No	909399
5	Discharge 300 to 400 M <sup>3</sup> /hour	1 No	1100496
6	Discharge 400 to 500 M <sup>3</sup> /hour	1 No	1318287

<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
7	Discharge 500 to 600 M <sup>3</sup> /hour	1 No	1637094
8	Discharge 600 to 700 M <sup>3</sup> /hour	1 No	1637094
9	Discharge 700 to 800 M <sup>3</sup> /hour	1 No	1620585
10	Discharge 800 to 900 M <sup>3</sup> /hour	1 No	1730806
11	Discharge 900 to 1000 M <sup>3</sup> /hour	1 No	2164935
12	Discharge 1000 to 1100 M <sup>3</sup> /hour	1 No	2129370
	<b>above 15m upto 20 m head</b>		
13	Discharge Upto 20 M <sup>3</sup> /hour	1 No	501350
14	Discharge 20 to 100 M <sup>3</sup> /hour	1 No	501350
15	Discharge 100 to 200 M <sup>3</sup> /hour	1 No	872219
16	Discharge 200 to 300 M <sup>3</sup> /hour	1 No	953238
17	Discharge 300 to 400 M <sup>3</sup> /hour	1 No	1224048
18	Discharge 400 to 500 M <sup>3</sup> /hour	1 No	1318287
19	Discharge 500 to 600 M <sup>3</sup> /hour	1 No	1637094
20	Discharge 600 to 700 M <sup>3</sup> /hour	1 No	1637094
21	Discharge 700 to 800 M <sup>3</sup> /hour	1 No	1620585
22	Discharge 800 to 900 M <sup>3</sup> /hour	1 No	1730806
23	Discharge 900 to 1000 M <sup>3</sup> /hour	1 No	2164935
24	Discharge 1000 to 1100 M <sup>3</sup> /hour	1 No	2129370
	<b>above 20 m upto 25 m head</b>		
25	Discharge Upto 20 M <sup>3</sup> /hour	1 No	672875
26	Discharge 20 to 100 M <sup>3</sup> /hour	1 No	669533
27	Discharge 100 to 200 M <sup>3</sup> /hour	1 No	929633
28	Discharge 200 to 300 M <sup>3</sup> /hour	1 No	1057148
29	Discharge 300 to 400 M <sup>3</sup> /hour	1 No	1323755
30	Discharge 400 to 500 M <sup>3</sup> /hour	1 No	1495571
31	Discharge 500 to 600 M <sup>3</sup> /hour	1 No	2164935
32	Discharge 600 to 700 M <sup>3</sup> /hour	1 No	2164935
33	Discharge 700 to 800 M <sup>3</sup> /hour	1 No	2164935
34	Discharge 800 to 900 M <sup>3</sup> /hour	1 No	2342095
35	Discharge 900 to 1000 M <sup>3</sup> /hour	1 No	2625054
36	Discharge 1000 to 1100 M <sup>3</sup> /hour	1 No	3043004

<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
	<b>above 25 m upto 30 m head</b>		
37	Discharge Upto 20 M <sup>3</sup> /hour	1 No	669823
38	Discharge 20 to 100 M <sup>3</sup> /hour	1 No	929633
39	Discharge 100 to 200 M <sup>3</sup> /hour	1 No	967852
40	Discharge 200 to 300 M <sup>3</sup> /hour	1 No	1435952
41	Discharge 300 to 400 M <sup>3</sup> /hour	1 No	1435952
42	Discharge 400 to 500 M <sup>3</sup> /hour	1 No	2062822
43	Discharge 500 to 600 M <sup>3</sup> /hour	1 No	2068658
44	Discharge 600 to 700 M <sup>3</sup> /hour	1 No	2068658
45	Discharge 700 to 800 M <sup>3</sup> /hour	1 No	2349458
46	Discharge 800 to 900 M <sup>3</sup> /hour	1 No	2349458
47	Discharge 900 to 1000 M <sup>3</sup> /hour	1 No	2578640
48	Discharge 1000 to 1100 M <sup>3</sup> /hour	1 No	3386887

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



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





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

<b>Sl.No.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
<b>1</b>	<b>Selector Switch for Panel Board /Cubical Panel Board/ Starter</b>		
a	Voltmeter Selector Switch - 6A	Each	284
b	Ammeter Selector Switch - 6A	Each	547
<b>2</b>	<b>Multi Functions Meters - Flush type for M V Panel Board</b>		
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	17874
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	21846
<b>3</b>	<b>Ammeter - Digital</b>		
a	96 mm X 96 mm Single Phase Ammeter Class 1-5A	Each	2650
b	96 mm X 96 mm Single Phase Ammeter Class 1-1A	Each	2881
c	96 mm X 96 mm Three Phase Ammeter Class 1-5A	Each	3227
d	96 mm X 96 mm Three Phase Ammeter Class 1-1A	Each	3573
<b>4</b>	<b>Pressure Gauge only</b>		
a	50 mm upto 60 Kg/Cm2 with s.s.case	Each	685
b	50 mm Glycerine filled upto 400 Kg/Cm2	Each	1537
c	63 mm upto 60 Kg/Cm2 with s.s.case	Each	709
d	63 mm Glycerine filled upto 400 Kg/Cm2	Each	1630
e	80 mm upto 60 Kg/Cm2 with s.s.case	Each	921
f	80 mm Glycerine filled upto 400 Kg/Cm2	Each	2717
g	100 mm upto 60 Kg/Cm2 with s.s.case	Each	1418
h	100 mm Glycerine filled upto 400 Kg/Cm2	Each	3307
i	150 mm upto 60 Kg/Cm2 with s.s.case	Each	1713
j	150 mm Glycerine filled upto 400 Kg/Cm2	Each	3898

Sl.No.	Description of Item	Unit	Rate for 2021-22 in Rupees
k	200 mm upto 60 Kg/Cm2 with s.s.case	Each	3780
l	200 mm Glycerine filled upto 400 Kg/Cm2	Each	8388
m	250 mm upto 60 Kg/Cm2 with s.s.case	Each	4726
n	250 mm Glycerine filled upto 400 Kg/Cm2	Each	9452
<b>5</b>	<b>Mechanical Interlocking System for For M V Panel Board</b>		
a	2 lock 1 key	Each	3154
b	3 lock 2 key	Each	5506
<b>6</b>	<b>Ammeter Analog</b>		
a	SR 65 5D/5A C.T.operated-AC	Each	570
b	SR 72 5D/5A C.T.operated-AC	Each	739
c	SR 96 5D/5A C.T.operated-AC	Each	791
<b>7</b>	<b>Voltmeter - Digital</b>		
a	Voltmeter- Single Phase Class 1-AC	Each	2650
b	Voltmeter- Three Phase Class 1-AC	Each	3572
<b>8</b>	<b>Voltmeter Analog</b>		
a	Voltmeter SR 65 600V-AC	Each	624
b	Voltmeter SR 72 500V-AC	Each	817
c	Voltmeter SR 96 600V-AC	Each	905
<b>9</b>	<b>Fabrication &amp; 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</b>		
a	Projection of 0.3 m	per m <sup>2</sup>	14337
b	Projection of 0.45m	per m <sup>2</sup>	16631
c	Projection of 0.6 m	per m <sup>2</sup>	21677

<b>Sl.No.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Rate for 2021-22 in Rupees</b>
<b>10</b>	<b>Electro magnetic contactors of suitable capacity in AC Three Phase rating, conforming to IS/IEC 60947-4-1.</b>		
a	9Amps	No.	827
b	12Amps	No.	961
c	18Amps	No.	1656
d	22Amps	No.	2740
e	25Amps	No.	3558
f	32Amps	No.	4343
g	40Amps	No.	4519
h	45Amps	No.	5588
i	50Amps	No.	6581
j	70Amps	No.	8848
k	80Amps	No.	11218
l	95Amps	No.	14145
m	110Amps	No.	17041
n	140Amps	No.	22490
o	185Amps	No.	27058
p	225Amps	No.	29787
q	250Amps	No.	33602
r	300Amps	No.	40515
s	400Amps	No.	51515
t	550Amps	No.	73875
u	650Amps	No.	110550

Sl.No.	Description of Item	Unit	Rate for 2021-22 in Rupees
<b>11</b>	<b>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.</b>		
a	Upto 5 A	No.	1311
b	5 A to 10 A	No.	1321
c	10 A to 20 A	No.	1486
d	20 A to 30 A	No.	2152
e	30 A to 50 A	No.	2963
f	50 A to 75 A	No.	4294
g	75 A to 110 A	No.	6348
h	110 A to 150 A	No.	7565
i	150 A to 200 A	No.	8599
j	200 A to 300 A	No.	10357
<b>12</b>	<b>Preventer – Single Phasing</b>		
	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 auxillary device and have provisions for mounting in panel boards. Operate without need of any auxiliary supply.	No.	1152
<b>13</b>	<b>Preventer – Dry Run</b>		
	Electric Motor protection device against dry running. The device should protect the motor against Dry running. The device should be suitable for any auxillary device and have provisions for mounting in panel boards. Operate without need of any auxiliary supply	No.	1613

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



### **III (D) RATES FOR BUILDING MATERIALS**





## **BUILDING MATERIALS**

1. Cement - Rs. 5,960/ – per metric tonne  
(Rupees Five Thousand Nine Hundred and Sixty 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 Stock yard/ Dealer's Godown 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 51,750/- per metric tonne  
(Rupees Fifty One Thousand Seven Hundred and Fifty only)

The above rate for steel 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 Stock yard/ Dealer's Godown 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)

## BUILDING MATERIALS

Sl. No.	Description	Unit	Rates for 2021-22
<b>1</b>	<b>Bricks-II Class Table Moulded (Chamber burnt)</b>		
a.	9" x 4 1/2" x 3"	1000 Nos.	7695.00
b.	9" x 4 3/8" x 2 3/4"	1000 Nos.	7400.00
<b>2</b>	<b>Bricks-II Class (Ground Moulded Chamber burnt)</b>		
a.	9"x 4 1/2" x3"	1000 Nos.	6630.00
b.	9"x 4 3/8" x 2 3/4"	1000 Nos.	6435.00
<b>3</b>	<b>Bricks-III Class (Country Bricks, Kiln burnt)</b>		
a	22 x 11 x 5 cm (8 3/4" x 4 1/4" x 2")	1000 Nos.	4195.00
b.	22 x 11 x 5.7 cm (8 3/4" x 4 1/4" x 2 1/4")	1000 Nos.	4380.00
c.	22 x 11 x 7cm (8 3/4 " x 4 1/4 " x 2 3/4")	1000 Nos.	5570.00
<b>4</b>	<b>Fly Ash bricks</b>		
a.	230 x 110 x 70mm	1000 Nos.	6435.00
b.	230 x 110 x 75mm	1000 Nos.	6630.00
<b>5</b>	<b>Bricks Country (specially moulded for well steining)</b>		
a.	8 3/4 "x 4 1/4 " x 2"	1000 Nos.	2465.00
b.	Perforated Bricks 19 x 9 x 9cm	1000 Nos.	3760.00
c.	Terrace Bricks 15 x 7.5 x 2.5cm	1000 Nos.	965.00
6	Special Bricks 8" x 4" x 2" for Heritage works	1000 Nos.	13040.00
<b>7</b>	Terrace Bricks 6" x 3" x 1" for Heritage works	1000 Nos.	9780.00
<b>8</b>	Wire cut Bricks for Heritage works		
a	Size 9" x 4" x 3"	1000 Nos.	13040.00
b	Size 9" x 4" x 2"	1000 Nos.	10870.00
c.	Size 9" x 6.5" x 2"	1000 Nos.	16300.00
<b>9</b>	<b>Flat Tiles</b>		
a.	15cm x 15cm x 12mm	1000 Nos.	7890.00
b.	15cm x 15cm x 20mm	1000 Nos.	9370.00
<b>10</b>	<b>Brick Jelly</b>		
a.	40mm size	cu.m.	688.00
b.	20mm size	cu.m.	767.00
<b>11</b>	<b>Pressed Tiles</b>		
a.	20cm x 20cm x 2cm	1000 Nos.	11356.00
b.	23cm x 23cm x 2cm	1000 Nos.	16106.00

Sl. No.	Description	Unit	Rates for 2021-22
<b>12</b>	<b>Pan Tiles</b>		
a.	23cm x 8cm x 1.7cm	1000 Nos.	437.00
b.	16.5cm x 8cm x 1.7cm	1000 Nos.	360.00
<b>13</b>	<b>Best Mangalore Tiles</b>		
a.	1 <sup>st</sup> Class 'A'	1000 Nos.	10490.00
b.	Class 'AA'	1000 Nos.	10700.00
c.	Best Mangalore Ridge Tiles	1000 Nos.	30700.00
d.	Best Mangalore Ceiling Tiles	1000 Nos.	6450.00
e.	Best Mangalore Glass Roofing Tiles	Each	301.00
f.	Best Mangalore Ventilating Tiles (Single)	Each	45.00
g.	Best Mangalore Ventilating Tiles (Double)	Each	57.00
<b>14</b>	<b>Mosaic Flooring tiles GREY</b>		
a.	25cm x 25cm x 2cm	1000 Nos.	11790.00
b.	20cm x 20cm x 2cm	1000 Nos.	7530.00
<b>15</b>	<b>Mosaic (other colour)</b>		
a.	25cm x 25cm x 2cm	1000 Nos.	16270.00
b.	20cm x 20cm x 2cm	1000 Nos.	9600.00
c.	Mosaic (Green)Tile 20cm x 20cm x 2cm	1000 Nos.	11790.00
d.	Mosaic (Green) Tile 25cm x 25cm x 2cm	1000 Nos.	18490.00
e.	Mosaic Chequered Tile of Grey colour size 25 cm x 25 cm x 2 cm	1000 Nos.	14800.00
<b>16</b>	Attangudi Tiles for Heritage Works		
	Size 8" x 8" x 3/4"	Each	26.70
	Size 10" x 10" x 3/4"	Each	32.40
	<b>Stone and Road materials</b>		
<b>17</b>	Rough stone for Masonry works (Hard Granite)	cu.m.	445.00
<b>18</b>	Rough stone for revetment works	cu.m.	385.00
<b>19</b>	Jeddy size for revetment (Hard granite)	cu.m.	424.00
<b>20</b>	Cut stone pillar of size 0.15 x 0.15 x 2.1M	Each	164.00
<b>21</b>	From boulders without blasting for revetment	cu.m.	113.00
<b>22</b>	From boulders without blasting for masonry	cu.m.	146.00
<b>23</b>	Course Rubble stone for masonry works	cu.m.	355.00
<b>24</b>	Course Rubble stone for Arch works	cu.m.	385.00
<b>25</b>	Ashlar Arch Stone Fully Dressed to size all faces	cu.m.	4845.00
<b>26</b>	Flooring Stone SS size (Not less than 10cm thick)	sq.m.	353.00
<b>27</b>	Bond stones	cu.m.	642.00

Sl. No.	Description	Unit	Rates for 2021-22
<b>28</b>	<b>Chisel dressed stone</b>		
a.	70cm x 30cm x 29cm	Each	175.00
b.	37cm x 30cm x 29cm	Each	158.00
<b>29</b>	<b>Hammer dressed stone</b>		
a.	37cm x 30cm x 29cm	Each	122.00
<b>30</b>	Cut stone fully dressed to size on all faces	cu.m.	6380.00
<b>31</b>	Cut stone roughly dressed	cu.m.	4390.00
<b>32</b>	Stone slab for culvert (3 faces, one line dressed)		
a.	Above 1.2m	cu.m.	4620.00
b.	Up to 1.2m	cu.m.	4200.00
<b>33</b>	Stone slab for culvert (3 faces, two line dressed)	cu.m.	5140.00
<b>34</b>	For lintel coping (3 faces, two line dressed)	cu.m.	5140.00
<b>35</b>	Kilometre stone 1.65 x 0.45 x 0.15m	Each	439.00
<b>36</b>	<b>Hecta metre stone</b>		
a.	0.90 x 0.10 x 0.10m	Each	122.00
b.	0.75 x 0.23 x 0.10m	Each	224.00
c.	0.90 x 0.15 x 0.15m	Each	220.00
<b>37</b>	<b>Demarcation stone (Two line dressed for top 30cm)</b>		
a.	0.75 x 0.15 x 0.15m	Each	91.00
b.	0.90 x 0.23 x 0.23m	Each	117.00
c.	0.75 x 0.23 x 0.23m	Each	109.00
d.	0.90 x 0.15 x 0.15m	Each	99.00
e.	Demarcation Stone with letters cut 0.75 x 0.15 x 0.15m	Each	122.00
f.	Edge stone 0.45 x 0.15 x 0.15m	Each	55.50
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	140.00
ii)	0.10 x 0.10 x 0.25m	Each	101.00
<b>38. a.</b>	Guard Stone (Two line dressed for 45cm) 23cm dia 1.0m long	Each	162.00
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	173.00
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	162.00
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	113.00
e.	Guard stone 90cm long 23cm dia	Each	83.40

Sl. No.	Description	Unit	Rates for 2021-22
<b>39</b>	<b>Hard broken Granite stone jelly (I.S.S.) machine crushed / Hand broken.</b>		
i.	90mm size	cu.m.	440.00
ii.	80mm size	cu.m.	493.00
iii.	63mm size	cu.m.	569.00
iv.	50mm size	cu.m.	661.00
v.	40mm size	cu.m.	1029.00
vi.	25mm size	cu.m.	884.00
vii.	20mm size	cu.m.	1432.00
viii.	12mm size	cu.m.	1329.00
ix.	10mm size	cu.m.	977.00
x.	6mm size	cu.m.	661.00
xi.	3mm size	cu.m.	595.00
<b>40</b>	<b>Quartz metal</b>		
i.	50mm	cu.m.	96.80
ii.	40mm	cu.m.	97.80
<b>41</b>	<b>Soft broken stone</b>		
i.	63mm	cu.m.	Deleted
ii.	40mm	cu.m.	Deleted
<b>42</b>	Laterite 40mm to 75mm size	cu.m.	96.80
<b>43</b>	Kankar 40mm to 75mm size	cu.m.	96.80
<b>44.a</b>	Soling stones 15cm cube (un blasted)	cu.m.	113.00
b.	Soling stones 15cm cube (blasted)	cu.m.	184.00
<b>45.a</b>	<b>Gravel</b>	cu.m.	216.30
b.	Well Gravel	cu.m.	161.70
c.	Screened Kankar Gravel	cu.m.	118.40
<b>46.a</b>	Quarry rubbish	cu.m.	95.70
b.	Stone dust	cu.m.	122.50
c.	Pond Ash (wet /dry)	cu.m.	94.70
d.	Crushed Stone Sand (M-Sand)	cu.m.	1280.00
e.	Plastering sand (P- Sand)	cu.m.	1285.00
<b>47</b>	<b>Sand for Mortar</b>	cu.m.	447.00
<b>48</b>	<b>Sand for Filling</b>	cu.m.	447.00
<b>49</b>	Clay for puddle and masonry	cu.m.	37.00
<b>50. i)</b>	Cuddapah slab 50mm thick	sq.m	421.00
ii)	Cuddapah slab 38mm/40mm thick	sq.m	404.00
iii)	Cuddapah slab 20mm/30mm thick	sq.m	373.00

Sl. No.	Description	Unit	Rates for 2021-22
	<b>LIME</b>		
51	Shell Lime (Slacked and screened)	cu.m.	1322.00
52	Freshly Slacked and Screened Burnt Lime Stone	cu.m.	974.00
53	Stone Lime or Lime Metal	cu.m.	84.00
54	Unslaked Pollachi Lime for Heritage Works	cu.m.	10345.00
55	Teakwood scantlings (over 3m for joists and rafters) Malabar	cu.m.	116600.00
56	Teakwood scantlings (for tiebeams and principal rafters) - Malabar	cu.m.	114700.00
57	Teakwood scantlings (over 2m and below 3m in length) - Malabar	cu.m.	111600.00
58	Teakwood scantlings(below 2m in length ) – Malabar	cu.m.	99400.00
59	<b>Teakwood planks</b>		
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
60	Seasoned Teakwood for Scantling and Planks for Heritage Works	cu.m.	185200.00
61	<b>Teak Wood Reepers</b>		
i)	50mm x 25mm	RM	76.00
ii)	50mm x 12mm	RM	61.00
62	<b>Country wood Scantlings</b>		
i)	Up to 4m in length	cu.m.	34300.00
ii)	Over 4m in length	cu.m.	36200.00
63	Country wood scantlings (for tiebeams and principal rafters for trusses)	cu.m.	36200.00
64	Jack wood Scantlings (up to 4m)	cu.m.	37900.00
65	Silver Oak Scantling	cu.m.	15500.00

Sl. No.	Description	Unit	Rates for 2021-22
<b>66</b>	<b>Country wood planks</b>		
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
<b>67.a.</b>	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
<b>68</b>	<b>Country wood reepers</b>		
a.	50mm x 25mm	RM	34.60
b.	50mm x 12mm	RM	24.90
<b>69</b>	Mango Plank	cu.m.	16700.00
<b>70.a.</b>	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
<b>71</b>	<b>Casurina Poles</b>		
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
<b>72</b>	<b>Eucalyptus Poles</b>		
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
<b>73</b>	Eucalyptus Bullies 4cm to 5 cm dia & cross ties	RM	12.00
<b>74</b>	Casurina Bullies 4cm to 5cm dia & cross ties	RM	13.50
<b>75</b>	<b>Bamboo large</b>		
i)	10cm diameter and above	RM	12.00
ii)	7.5cm to 10cm diameter	RM	10.60
	<b>METAL AND IRON ITEMS</b>		
<b>76</b>	Mild steel plates or sheets BG 10	Kg.	47.30
<b>77</b>	Mild Steel Angles 25mm x 25mm x 3mm	Kg.	47.30
<b>78.a)</b>	Binding wire (Black 18G)	Kg.	50.30
b)	Binding wire (Galvanised – 18G)	Kg.	50.30
<b>79</b>	G.I. sheets 30cm wide and 1.6mm thick	sq.m.	349.00

<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22</b>
<b>80</b>	<b>Weld mesh</b>		
i)	7.5 x 2.5cm, 10 gauge	sq.m.	339.00
ii)	7.5cm x 5cm, 10 gauge	sq.m.	303.00
iii)	10cm x 10cm, 10 gauge	sq.m.	164.00
<b>81</b>	Chicken Mesh	sq.m.	36.30
<b>82</b>	Fly Proof Mesh	sq.m.	104.00
<b>83</b>	Supplying mild steel grills for windows, ventilators, etc., including priming coat	Kg.	62.60

**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 Basic rate adopted is exclusive of all taxes 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**



## 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.	Name of Material	Unit	Rate 2021-22
<b>1</b>	Water proofing compound	Kg	42.30
<b>2</b>	Mild Steel Flats of all sizes	Kg	46.50
<b>3</b>	Mild Steel Square Rods of all sizes	Kg	46.50
<b>4</b>	First Quality Design Ceramic tiles of All colours		
i	305 mm x 305 mm x 6 mm	Each	47.20
ii	200 mm x 200 mm x 6 mm	Each	20.70
iii	200 mm x 100 mm x 6 mm	Each	11.20
<b>5</b>	First Quality Plain ceramic tiles of all colours		
i	305 mm x 305 mm x 6 mm	Each	33.80
ii	200 mm x 200 mm x 6 mm	Each	15.10
iii	200 mm x 100 mm x 6 mm	Each	7.70
<b>6</b>	Joint free Rectified Glazed Ceramic Flooring Tiles 305 x 305 x 8 mm	Each	55.60
<b>7</b>	Solar Reflective Ceramic Tiles of Size		
i.	305mm x 305mm x 7mm thick	sq.m.	487.00
ii.	305mm x 240mm x 6mm thick	sq.m.	402.00
<b>8</b>	Dadoing Ceramic Tiles of Size		
i.	300mm x 450mm x 8mm	Each	60.00
ii.	300mm x 600mm x 10mm	Each	89.20
<b>9</b>	First quality White glazed tiles		
i	150 mm x 150 mm x 6 mm	Each	8.00
ii	100 mm x 200 mm x 6 mm	Each	7.00
<b>10</b>	First quality colour glazed tiles		
i	150 mm x 150 mm x 6 mm	Each	9.30
ii	100 mm x 200 mm x 6 mm	Each	8.00
<b>11</b>	First quality colour glazed tiles with printed design		
i	150 mm x 150 mm x 6 mm	Each	11.00
ii	100 mm x 200 mm x 6 mm	Each	9.90
<b>12</b>	Stain free Nano polish Vitrified Tiles 600 x 600 x 8mm	sq.m.	633.00
<b>13</b>	Double charged Vitrified Tiles 600 x 600 x 8mm	sq.m.	945.00

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>14</b>	Double charged Vitrified Tiles 800 x 800 x 10mm	sq.m.	1205.00
<b>15</b>	Pre -Polished concrete Antiskid Step Tiles of 20mm Thick	sq.m.	628.00
<b>16</b>	Rubber Moulded Hydraulic Pressed Paver Block		
i	83mm thick	sq.m.	547.00
ii	63mm thick	sq.m.	455.00
<b>17</b>	TAMIN Paver Block of size - Supply at site		
i	60mm thick	sq.ft.	51.00
ii	80mm thick	sq.ft.	61.00
<b>18</b>	Tactile paver Type of New Tek BT Yellow colour ceramic tiles of size 305x305x15mm for vision Impairment person	sq.m.	2020.00
<b>19</b>	Providing and filling the tile joint with epoxy grout with following specifaion: Surface preparation including cleaning the joint to be free from dust and loose particles. Proviidng 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.	434.00
<b>20</b>	SRC Cement (Sulphate Resisitant Cement)	50 kgs/ bag	308.00
<b>21</b>	Slag Cement	50 kgs/ bag	277.00
<b>22</b>	White Cement	Kg	22.40
<b>23</b>	Colour Cement (White cement mixed with colouring pigments)	Kg	27.00
<b>24</b>	Multi-colour marble chips of all Grades / Sizes	Bag	90.00
<b>25</b>	White Marble slab (Adanga) 18 mm to 20 mm thick		
i	4'0" x 2'0" and above	sq.m.	1390.00
ii	2'0" x 2'0" or 2'0" x 1'0" or 1'0" x1'0"	sq.m.	694.00
<b>26</b>	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.	852.00
b	Ruby Red, Raw Silk	sq.m.	763.00
c	Sinthetic Grey, Paradise and Similar varieties.	sq.m.	721.00

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>27</b>	Granite slabs (Super fine polished with machine cut edges) of sizes 4'x2' and above 18mm to 20mm thick.		
a	Jet Black	sq.m.	1720.00
b	Ruby Red, Raw Silk	sq.m.	1610.00
c	Sinthetic Grey, Paradise and Similar varieties.	sq.m.	1448.00
d	Fine polished Steel Grey Granite Slab 1200mm x 600mm. 16mm to 18mm thick	sq.m.	1498.00
e	Fine polished Blue Pearl Granite Slab 1200mm x 600mm, 16mm to 18mm thick	sq.m.	7497.00
<b>28</b>	Flamed Steel Grey Granite Slab 1200mm x 600mm, 16mm to 18mm thick	sq.m.	1814.00
<b>29</b>	Flamed Ruby Red Granite Slab 1200mm x 600mm, 16mm to 18mm thick	sq.m.	1927.00
<b>30</b>	Nosing for Granite slab		
a	Single Nosing	RM	193.80
b	Double Nosing	RM	366.60
	<b>New item</b>		
<b>31</b>	Grooving the Granite Slab	RM	300.00
<b>32</b>	Polished shahabad stone slabs of 20 mm thick with machine cut edges of size 2' 0" x 2'0" and above.	sq.m.	373.00
<b>33</b>	Polished shahabad stone slabs 20 mm thick with machine cut edges of size below 2' 0" x 2'0".	sq.m.	315.00
<b>34</b>	Polished Rajasthan Kota stone slabs of 20 mm thick with machine cut edges of size 2' 0" x 2'0" and above.	sq.m.	545.00
<b>35</b>	Polished Rajasthan Kota stone slabs of 20 mm thick with machine cut edges of size below 2'0" x 2'0".	sq.m.	480.00
<b>36</b>	Dolphur stone slabs - semi polished with machine cut edges of all sizes		
a	40 mm thick	sq.m.	416.00
b	20 mm thick	sq.m.	378.00
<b>37</b>	PVC Trims (Beading)	RM	90.90
<b>38</b>	Teracota Jally of size 20x20x0.75mm	Each	38.60
<b>39</b>	Aluminium strips of size 40 mm wide x 1.5 mm thick	RM	33.90
<b>40</b>	Brass strips of size 40 mm wide x 1.5 mm thick	RM	68.50

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
41	Glass strips of size 40 mm wide and 4 mm thick	RM	15.50
42	Marblex Tiles 3 mm thick	sq.m.	670.00
43	Red Oxide - Superior quality for floor finish	Kg	143.80
44	Decorative pressed tiles of 12 mm thick of all sizes and shapes	sq.m.	1065.00
45	Exterior Emulsion Paint - Water based primer (Liquid)	Litre	149.80
46	Alkali Resistant Distemper Primer	Litre	134.30
47	Sandtex matt	Litre	156.50
48	Vinaratex or equivalent Textured coat	sq.m.	201.90
49	Best Lac Polish / French Polish	Litre	261.50
50	Varnish	Litre	268.60
51	Cotton Waste	Kg	10.30
52	Cement based Hydraulically pressed Anti skid tiles (pattern design) - 20 mm thick	sq.m.	505.00
53	Marble Powder	Kg	4.50
54	Polishing Stone		
i	Rough	Each	66.40
ii	Medium	Each	88.70
iii	Fine / Nice	Each	101.70
55	Oxalic Acid	Kg	38.40
56	Turpentine	Litre	23.50
57	Mansion polish	400 gram	147.70
58	Poly Sulphide	Kg	175.30
59	Primer for expansion joints	Kg	150.70
60	Filler material	sq.m.	143.80
61	Bond Breaker	RM	3.70
	<b>New item</b>		
62	Bentonite powder for construction quality	kg	6.00
63	PVC Water Bar 150mm wide with single bulb	RM	285.60
64	Plain G.I. sheet 0.8mm thick (22 Gauge)	sq.m.	361.00
65	Phil Plug	Each	5.00
66	G.I. Screws		
i	30mm x 6mm	Each	1.27
ii	19mm x 6mm	Each	0.81

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>67</b>	G.I. Limpet / Cup Washers	Each	1.88
<b>68</b>	Bitumen washers 15mm dia	Each	1.12
<b>69</b>	Asbestos Cement pipe - 100mm dia	3 RM	142.70
<b>70</b>	A.C. shoe - 100mm dia	Each	45.25
<b>71</b>	A.C. Bend - 100mm dia	Each	51.80
<b>72</b>	A.C. Cylindrical Cowl - 100mm dia	Each	77.70
<b>73</b>	C.I. Brackets for A.C. pipe 100mm dia	Each	19.90
<b>74</b>	C.I. Grating - 100mm dia	Each	31.80
<b>75</b>	Asbestos cement fully corrugated sheet - 6mm thick	sq.m.	187.80
<b>76</b>	Asbestos cement plain sheet		
i	6mm thick	sq.m.	168.50
ii	4mm thick	sq.m.	116.70
<b>77</b>	Supplying and fixing shade net (Green net) for under construction of high rise buildings	sq.m.	66.60
<b>78</b>	Asbestos cement adjustable ridges	Pair	194.50
<b>79</b>	G.I. "J" or "L" Bolts with nuts 6mm Dia	Each	3.88
<b>80</b>	Steel - special extruded sections for steel windows and ventilators conforming to I.S.S. 7452 / 1990 including Fabrication charges	Kg	62.10
<b>81</b>	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	356.50
b	With powder coated primer	RM	380.00
<b>82</b>	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	301.00
b	With powder coating of any colours.	Kg	322.00
<b>83</b>	Aluminium Extruded Box Section for Staircase Hand Rails including charges for Anodising for 15 micron thickness - Natural colour matt finish	Kg	362.00
<b>84</b>	Rubber beading for aluminium glazed doors	RM	37.90
<b>85</b>	Rubber beading for aluminium glazed windows.	RM	28.80

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>86</b>	PVC / Woollen felt for aluminium doors 6mm thick	RM	7.60
<b>87</b>	Pivot for Aluminium Door	Set	148.80
<b>88</b>	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	934.00
<b>89</b>	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	2075.00
<b>90</b>	Lock for Aluminium doors	Each	263.50
<b>91</b>	Lock for Aluminium sliding windows	Each	65.90
<b>92</b>	Aluminium Grill of standard pattern (diamond shape) - 10mm thick including 'F' (or) 'H' Section.	sq.m.	1925.00
<b>93</b>	Aluminium Grill of standard pattern (diamond shape) - 6mm thick including 'F' (or) 'H' Section.	sq.m.	1555.00
<b>94</b>	Bolts and Nuts 10mm dia for false ceiling	Each	5.60
<b>95</b>	Rawl Plugs for false ceiling	Each	9.45
<b>96</b>	PVC Roller for sliding windows	Each	13.95
<b>97</b>	Synthetic Resin - Fevicol or equivalent (Phenol Formaldehyde based Resin)	Kg	197.80
	<b>New items</b>		
<b>98</b>	Steel door/ Window fittings - 200mm length hold fast	each	150.00
<b>99</b>	300mm hinges (heavy duty)	each	105.00
<b>100</b>	250 mm legth cover bolt	each	115.00
<b>101</b>	250mmx16mm aldrop	each	210.00
<b>102</b>	200mm MS handles (heacy duty)	each	75.00
<b>103</b>	Window stay	each	140.00



<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>104</b>	Stopper and handle	each	130.00
<b>105</b>	Butt Hinges with nylon washers of various sizes. Length and width (with required screws).		
a	125mm x 30mm	Each	83.00
b	100mm x 30mm	Each	66.60
c	75mm x 30mm	Each	45.70
d	50mm x 30mm	Each	36.90
<b>106</b>	Brass Hinges		
a	125mm x 30mm	Each	212.00
b	100mm x 30mm	Each	181.80
c	75mm x 30mm	Each	151.10
d	50mm x 30mm	Each	126.20
<b>107</b>	Tower Bolts of various lengths and diameter (with required screws)		
a	400mm long and 12mm dia	Each	157.10
b	300mm long and 12mm dia	Each	120.90
c	250mm long and 12mm dia	Each	90.60
d	200mm long and 12mm dia	Each	76.20
e	150mm long and 12mm dia	Each	60.00
f	100mm long and 10mm dia	Each	52.80
g	75mm long and 10mm dia	Each	36.80
<b>107</b>	Brass Tower Bolts		
	400mm x 12mm	Each	1010.00
	300mm x 12mm	Each	757.00
	200mm x 12mm	Each	535.00
	150mm x 12mm	Each	404.00
	100mm x 10mm	Each	323.00
	75mm x 10mm	Each	202.00
<b>108</b>	Aldrops of following lengths and diameter with required screws, bolts and nuts.		
a	300mm long and 16mm dia	Each	194.40
b	250mm long and 16mm dia	Each	167.60
c	200mm long and 16mm dia	Each	113.50
d	200mm long and 12mm dia	Each	94.10
<b>109</b>	Brass Aldrops		
a	300mm x 16mm	Each	959.00

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
b	250mm x 16mm	Each	828.00
c	200mm x 16mm	Each	707.00
d	200mm x 12mm	Each	505.00
<b>110</b>	Handles "D" type of various sizes with required screws		
a	200mm long	Each	59.50
b	150mm long	Each	53.40
c	100mm long	Each	32.70
<b>111</b>	Ornamental handles of various sizes with required screws		
a	200mm long	Each	153.60
b	150mm long	Each	102.20
c	100mm long	Each	56.40
<b>112</b>	Brass Ornamental Handles		
a	200mm	Each	393.00
b	150mm	Each	252.00
c	100mm	Each	181.00
<b>113</b>	Aluminium door stopper with rubber bush with required screws	Each	45.90
<b>114</b>	Rubber bush - 40 mm dia and 60 mm long with required screws	Each	22.90
<b>115</b>	Mortice Lock-(Godrej or equivalent) with required screws with 3 Keys		
a	With night latch	Each	535.00
b	Without night latch	Each	397.00
c	Wire nails	Kg	63.40
<b>116</b>	Teakwood beading		
a	15mm x 12mm	RM	15.30
b	35mm x 12mm	RM	38.70
<b>117</b>	Teakwood Beading (ordinary)		
a	30mm x 12mm	RM	32.20
b	25mm x 12mm	RM	25.80
<b>118</b>	Teakwood beading - Ornamental / design		
a	40mm x 12mm	RM	90.60
b	40mm x 15mm	RM	103.80
c	25mm x 12mm	RM	71.00
d	15mm x 12mm	RM	48.70

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>119</b>	Medium Density Fibre (MDF) Board - Exterior Grade, Both sides pre-laminated including external lipping with kiln dried soft wood 35mm thick	sq.m.	2160.00
<b>120</b>	Medium Density Fibre (MDF) Board - exterior Grade - Both sides pre-laminated, 12mm thick	sq.m.	1040.00
<b>121</b>	MDF Board exterior Grade - Plain including external lipping with kiln dried soft wood		
i	35mm thick	sq.m.	1760.00
ii	30mm thick	sq.m.	1625.00
<b>122</b>	Medium density fibre (MDF) Board 12 mm thick Exterior grade - with melamine finish.		
a	One side melamine finish	sq.m.	1100.00
b	Both sides melamine finish	sq.m.	1239.00
<b>123</b>	Medium density fibre (MDF) board - Exterior grade - Plain - With teak wood external lipping around		
a	35mm thick	sq.m.	1896.00
b	30mm thick	sq.m.	1682.00
<b>124</b>	Solid core Flush shutters with Teak ply on both side with teak wood lipping around 35 mm thick	sq.m.	2233.00
<b>125</b>	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.	1963.00
<b>126</b>	Solid core Flush shutters with commercial ply on both side with teak wood lipping around 35 mm thick	sq.m.	1682.00
<b>127</b>	Providing cup board Shutter with frame 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.	4998.00

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>128</b>	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 rebate for housing the shutter.		
a	Solid panel PVC door with frame	sq.m.	3167.00
b	Solid panel PVC door without frame	sq.m.	2668.00
<b>129</b>	Supplying and fixing of PVC sliding door with roller	sq.m.	3393.00
<b>130.a</b>	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.	3957.00
b	Excluding door frames	sq.m.	3039.00
<b>131.a</b>	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.	2034.00
b	Excluding door frames	sq.m.	1718.00
<b>132</b>	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	277.00
<b>133</b>	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	909.00

Sl. No.	Name of Material	Unit	Rate 2021-22
134	Stainless Steel (Salem Stainless Steel) Door Frame (Box Section using Stainless Steel Plate of 1.6mm thick) of size 100mm x 60mm 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	1229.00
135	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.,		
<b>A</b>	<b>ROLLING SHUTTERS (WITH ISI MONOGRAM)</b>		
a	Manually operated (up to 8 m <sup>2</sup> area)	sq.m.	2150.00
b	Gear operated type (from 8 m <sup>2</sup> to 12 m <sup>2</sup> area)	sq.m.	2396.00
c	Electrically operated type (exceeding 12m <sup>2</sup> area)	sq.m.	2600.00
<b>B</b>	<b>ROLLING GRILLS (WITH ISI MONOGRAM)</b>		
a	Manually operated (up to 8 m <sup>2</sup> area)	sq.m.	2192.00
b	Gear operated (from 8 m <sup>2</sup> to 12 m <sup>2</sup> area)	sq.m.	2468.00
c	Electrically operated (exceeding 12 m <sup>2</sup> area)	sq.m.	2743.00
136	Barbed Wire - 10 Gauge - Two ply and four pronged (Galvanised)	1 Kg or 6 RM	61.50
137	Chain link - 2" x 2" using 10 Gauge Galvanised Iron Wire (of all sizes)	sq.m.	158.70
138	Pin Headed / Fluted / Figured Glass 3mm thick	sq.m.	224.40
139	Plain Glass - 4mm thick	sq.m.	303.90
140	Plain Sheet Glass - 5.5mm thick	sq.m.	359.00
141	Metal screws (for Aluminium Doors, windows etc.)		
i	75mm x 8mm	Each	2.19
ii	38mm x 6mm	Each	1.53
iii	19mm x 8mm	Each	1.07
iv	19mm x 6mm	Each	0.81
142	Cement paint (First quality)	Kg	49.40
143	Oil Bound Distemper	Kg	73.10
144	Acrylic Distemper	Kg	84.40
145	Primer for Plastic Emulsion paint	Litre	146.10
146	Plastic Emulsion paint (First quality)	Litre	292.70
147	Wood Primer	Litre	146.10

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>148</b>	Synthetic Enamel paint for Wood work	Litre	236.60
<b>149</b>	Red Oxide primer for Iron work	Litre	135.60
<b>150</b>	Synthetic Enamel paint for Iron work	Litre	225.40
<b>151</b>	Melanine polish	sq.m.	642.00
<b>152</b>	Exterior Emulsion Paint	Litre	300.80
<b>153</b>	Painting the wall with texture finish paint including labour charges	sq.m.	408.00
<b>154</b>	White wall putty powder	kg	27.20
<b>155</b>	Sand paper ( Water proof abrasive sheet)	each	10.10
<b>156</b>	8" putty blade	Dozen	121.10
<b>157</b>	6" putty blade	Dozen	90.90
<b>158</b>	Brass chromium plated screw down Tap 15 / 12mm Dia (Heavy Type)	Each	204.00
<b>159</b>	Brass chromium plated pillar Tap (Heavy type)- 15/12mm Dia	Each	267.00
<b>160</b>	PVC screw down tap Heavy type 20mm dia	each	89.00
<b>161</b>	PVC screw down tap Heavy type 15mm dia	each	69.00
<b>162</b>	Chromium plated stop cock 15mm Dia	Each	149.80
<b>163</b>	Brass chromium plated shower Rose - 100mm Dia	Each	192.70
<b>164</b>	CP wall mixture tap 3 in 1 system with hand showers	Each	4105.00
<b>165</b>	CP two way bib cock with health faucet	Each	2040.00
<b>166</b>	CP Shower Arm with Overhead shower rose	Each	1170.00
<b>167</b>	Wooden plug, clamp and screws	Set	12.10
<b>168</b>	Shellac	100 gram	18.30
<b>169</b>	PVC Adhesive (Solution)	100 gram	34.30
<b>170</b>	UPVC Adhesive	100 gram	80.80
<b>171</b>	CPVC Adhesive	100 gram	111.00
<b>172</b>	Vajjram	Kg	77.70
<b>173</b>	Thread Ball	Each	3.57
<b>174</b>	CP Heavy duty Bottle trap 32mm	Each	1095.00
<b>175</b>	CP Angle cock tap	Each	769.00
<b>176</b>	Oriya Type Indian Water closet 580mm x 440mm with "P" or "S" Trap		

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
i	White	Set	1190.00
ii	Colour	Set	1519.00
<b>177</b>	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	3060.00
ii	Colour	Set	3450.00
<b>178</b>	European water closet with "P" or "S" Trap with Double falpped seat and seat cover with Brass Hinges and 12.5 litre capacity Porcelain low level flushing tank with all internal fittings		
i	White	Set	4310.00
ii	Colour	Set	5190.00
<b>179</b>	PVC low level flushing tank with all internal fittings (wall moubnting type)		
a	White - 10 litre capacity	set	948.00
b	White - 7.5 litre capacity	set	724.00
c	Colour - 10 litre capacity	set	1074.00
d	Colour - 7.5 litre capacity	set	853.00
e	PVC water tank	litre	9.60
<b>180</b>	SS Elbow Action tap of size 15mm	Each	1530.00
<b>181</b>	SS Heavy Duty long body tap 15mm	Each	1530.00
<b>182</b>	SS Swan Neck Tap	Each	1020.00
<b>183</b>	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 C.P. pillar tap etc.		
i	White without pedastal	Set	1656.00
ii	White with pedastal	Set	1993.00
iii	Colour without pedastal	Set	2217.00
iv	Colour with pedastal	Set	2453.00
<b>184</b>	White Porcelain 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	2126.00
<b>185</b>	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	762.00

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>186</b>	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	1010.00
<b>187</b>	Stainless Steel Sink		
a	600mm x 600mm x 200mm	Each	9090.00
b	600mm x 450mm x 200mm	Each	7070.00
<b>188</b>	Lipped Mouth Porcelain 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	931.00
ii	Colour	Set	1065.00
<b>189</b>	Supplying and fixing of SS Sink of size 1200x550x180mm	Each	18360.00
<b>190</b>	Supplying and fixing of Granite Sink of size 600x600x250mm	Each	4100.00
<b>191</b>	Supplying and fixing Ornamental type White glazed Porcelain corner L type Wash hand Basin of size 350mm	Each	3518.00
<b>192</b>	Supplying and fixing of Oval shape wash hand basin of size 560x450mm	Each	2871.00
<b>193</b>	Supplying and fixing of white glazed porcelain oval shape special type Urinal of size 382x398x601mm	Each	9970.00
<b>194</b>	Porcelain soap dish of size 150mm x 150mm x 50mm		
i	White	Each	194.30
ii	Colour	Each	266.20
<b>195</b>	Brass chromium plated soap tray of size 150mm x 100mm	Each	163.50
<b>196</b>	Brass chromium plated towel rail 60cm long and 20mm dia with Brackets	Set	266.40
<b>197</b>	SS Towel rack 600mm long with lower hanger	Each	1530.00
<b>198</b>	Anodised Aluminium Towel Rail 60cm long and 20mm dia with Brackets.	Set	134.40
<b>199</b>	PVC / Fibre Glass framed 5.5mm thick mirror, shelf type with Hard Board Backing		
i	600mm x 450mm	Each	471.20
ii	500mm x 400mm	Each	379.40



<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>200</b>	Special type Mirror of size 1000x780mm	Each	2550.00
<b>201</b>	Stone ware gully trap of size 150mm x 100mm with cast Iron Double Gratings	Each	168.70
<b>202</b>	Cast Iron Nahini / Floor Trap with stainless Steel Grating		
i	100mm x 75mm	Each	276.90
ii	75mm x 50mm	Each	216.90
<b>203</b>	PVC Nahini / Floor Trap with PVC Grating		
i	100mm x 75mm	Each	169.60
ii	75mm x 50mm	Each	148.60
<b>204</b>	Spun Yarn	Kg	13.00
<b>205</b>	Hemp Yarn	Kg	11.70
<b>206</b>	Gunny Tape / Kithan	sq.m.	11.70
<b>207</b>	Tar	Kg	40.70
<b>208</b>	Bitumen Felt 15 mm thick pad	sq.m.	232.00
<b>209</b>	Supplying, fabricating, erecting and fixing Hilux (or) Equivalent Board false ceiling upto a ceiling height of 4.5m from floor level.		
a	Using Hilux Board plain sheets (10mm thick)	sq.m.	963.00
b	Using perforated sheets (10mm thick)	sq.m.	985.00
<b>210</b>	Supplying and laying Glass wool for insulation including necessary packing materials.		
a	Using 50mm thick Glass wool	sq.m.	388.80
b	Using 25mm thick Glass wool	sq.m.	207.00

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>211</b>	Supply and installation of Anutone (or) Euivalent Brand of Acoustical False Ceiling of subtex nubby, square edge, glass fibrecore fully encapsulated ceiling tile of size 595 x 595 x 15mmhaving volume density 120 Kgs / m3, weight 1.8 / 2.4 / 3 kg /m2 which is suspended by using 0.3mm thick skelet trellis T15metal grid system. Skelet trellis T15 metal grid system of 600 x600mm module includes skelet WA15 W30 wall angle with unequal flanges of 15 / 19mm, length 3000mm, fixed along the perimeter of walls with the help of nylon sleeves and suitable fasteners at 300mm centers. Then suspend the skelet MT15 W36 MainT with flange width 15mm, height 32mm and length 3600mm, from the soffit slab with help of soffit cleat and wire rod with leveling spring clip at 1200mm centres. Skelet CT15 W12 CrossT with flange width 15mm, height 26mm and length 1200mm is interlocked into the pre-cut slots in the Main T15 at 600mm centers in the perpendicular direction to the Main T15. Finally, the skelet CT15W06 CrossT with flange width 15mm, height 26mm and length 600mm are interlocked into the precut slots in the CT15W12 CrossT in direction parallel to the Main T15 to result in 600 x 600mm module. The subtex nubby square edge of size 595 x 595 x 15mm shall be placed into the grid size of 600x 600mm. Ensure arrow marks behind the tiles are oriented in one direction to achieve uniform	sq.m.	1717.00

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>212</b>	Supply and installation of Anutone (or) Equivalent Brand of Acoustical False Ceiling of Sisoli Serene / Slate Spirits / Slate Polka Mineral Fibre/ GRG Core Ceiling Tiles of size 595 x 595 x 15mm having volume density 270 kgs / m <sup>3</sup> , weight 4kg / m <sup>2</sup> which is suspended by using 0.3mm thick skelet trellis T15 metalgrid system. The skelet trellis T15 metal grid system of 600 x 600mm module includes skelet WA15 W30 wall angle with unequal flanges of 15 / 19mm, length 3000mm, fixed along the perimeter of walls with the help of nylon sleeves and suitable fasteners at 300mm centers. Then suspend the skelet MT15 W36 Main T with flange width 15mm, height 32mm and length 3600mm, from the soffit slab with help of soffit cleat and wire rod with leveling spring clip at 1200mm centres. Skelet CT15 W12 Cross T with flange width 15mm, height 26mm and length 1200mm is interlocked into the pre-cut slots in the Main T15 at 600mm centers in the perpendicular direction to the Main T15. Finally skelet CT15 W06 Cross T with flange width 15mm, height 26mm and length 600mm are interlocked into the pre-cut slots in the CT15 W12 Cross T in direction parallel to the Main T15 to result in 600 x 600mm module. Sisoli Serene / Slate Spirits / Slate Polka of size 595 x 595 x 15mm shall be placed into the grid size of 600 x 600mm. The systems to achieve noise reduction coefficient not less than 0.5 NRC, so as to have a neat appearance as	sq.m.	959.00
<b>213</b>	Supply of laying of Anutone (or) Equivalent Brand of Acoustical Insulation of Sound Synth Polywool, 50mm thick made from recycled poly fibre and fully recyclable, surface density 1000 g / m <sup>2</sup> , weight 1.0 kg / m <sup>2</sup> in form of rolls of 600mm wide and 15m in length, adhered to surface with stick S7 adhesive or held in position with chicken wire mesh etc., complying to standard specification.	sq.m.	424.00

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>214</b>	<p>Providing Polymer coating (water proof coating) for sunken portion of toilet with following specification and the surface shall be cleaned to remove all dust, foreign, matters loose material or any other deposits of contamination by rubbing with wire brush.</p> <p>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 thoroughly until no bubbles remain in the mix . Any lumps found shall be removed.</p> <p>Apply first coat of polymer modified cementitious slurry by brush on wet cleaned surface. After drying, second coat shall be applied on the first coat as directed by the departmental officers. The rate inclusive of cost of materials and labour etc., complete</p>	sq.m	326.00
<b>215</b>	Providing Cornice work for Gyp Board false ceiling	RM	188.60
<b>216</b>	8mm thick Calcium Silicate Board designed and perforated for false ceiling	sq.m	1530.00
<b>217</b>	Termite proof/ water proof plywood 19mm thick	sq.m	1326.00
<b>218</b>	Laminated sheet 0.8mm thick (inside)	sq.m	244.00
<b>219</b>	Laminated sheet 1mm thick (outside)	sq.m	408.00
<b>220</b>	Double Charged Vitrified Tiles of size 600 x 600 x 8 mm	sq.m.	Deleted
<b>221</b>	Pre-polished concrete anti-skid step tiles of 20mm thick	sq.m.	Deleted
<b>222</b>	Colour designed glazed tiles 300 x 200 x 6 mm	Each	Deleted
<b>223</b>	Squatting Urinal	Set	450.00
<b>224</b>	CI Brackets for fixing the sink	set	106.90
<b>225</b>	Swan Neck Tap	Each	250.00
<b>226</b>	Brass Screws (30 x 6 mm)	Each	2.39
<b>227</b>	Brass Screws (75 x 10 mm)	Each	4.84
<b>228</b>	Special clamp, teak wood plugs and screws	Set	21.40
<b>229</b>	PVC Clamp, teak wood plugs and screws	Set	8.43
<b>230</b>	Teak Wood plug	Each	1.07
<b>231</b>	Teak wood plug (50 x 50 x 100 mm)	Each	5.35
<b>232</b>	Manhole cover 60 x 60 cm (heavy duty) with frame	Each	1846.00

<b>Sl. No.</b>	<b>Name of Material</b>	<b>Unit</b>	<b>Rate 2021-22</b>
<b>233</b>	Welding Charges		
a	50 mm	Each	2.09
b	40 mm	Each	1.63
<b>234</b>	Add for painting/ tarring for Hex Nipple	Each	2.80
<b>235</b>	Labour charges for fixing cuddapah slab to cup board	sq.m.	45.55
<b>236</b>	Hire charges for polishing machinery	Day	226.40
<b>237</b>	Electricity charges	Unit	11.80
<b>238</b>	PVC Mould CI steps for sump	Each	228.00



## **III (G) RATES FOR ELECTRICAL ITEMS**





<b>ELECTRICAL ITEMS OF WORKS</b>			
<b>ELECTRICAL LAMPS, FITTINGS AND CONNECTED ACCESSORIES</b>			
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.		
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
	<b>PART-A</b>		
1	<b>INCANDESCENT BULBS 230V/ 250V GRADE BC/ES WITH ISI</b>		
a.	15 Watts	Each	9.40
b.	25 Watts	Each	9.40
c.	40 Watts	Each	9.40
d.	60 Watts	Each	9.40
e.	100 Watts	Each	9.40
f.	200 Watts	Each	18.90
2	<b>INCANDESCENT BULB 230V/250V GRADE BC/ ES</b>		
a.	Colour 15 Watts	Each	11.60
b.	Blended lamp 160 Watts	Each	230.30
3	<b>PL LAMP (PHILIPS/ OSRAM/ Equivalent)</b>		
a.	9 Watts	Each	71.70
b.	11 Watts	Each	76.30
c.	18 Watts	Each	120.30
d.	36 Watts	Each	133.90
4	<b>FLUORESCENT TUBULAR LAMPS WITH ISI MARK</b>		
a.	Cool Day light 2 Ft. 20 Watts	Each	35.90
b.	Cool Day light 4 Ft. 40 Watts	Each	35.90
c.	Cool Day light 4 Ft. 36 Watts	Each	35.10
5	4' 18W crystal Glass LED Tube Light fitting (Havells/ Equivalent)	Each	388.00
6	<b>MERCURY VAPOUR DISCHARGE LAMP 230V GRADE 3 PIN BC</b>		
a.	80 Watts	Each	165.40
b.	125 Watts	Each	173.70
c.	250 Watts	Each	424.00
d.	400 Watts	Each	597.00
7	<b>BOX TYPE SINGLE FLUORESCENT FITTING WITH COPPER CHOKE AND CONDENSOR COMPLETE WITH ISI MARK</b>		

Item No.	Description	Unit	Rates for the year 2021-22
a.	4 Ft. 40 Watts with ballast (Lower end)	Each	306.00
b.	4 Ft. 40 Watts Box type with (Highwer end) Ballast (Philips/ Crompton / Wipro/ Equivalent)	Each	450.00
8	<b>BOX TYPE TWIN FLUORESCENT FITTING WITH COPPER CHOKE AND CONDENSOR[HPF] COMPLETE WITH ISI MARK</b>		
a.	4 Ft. 40 Watts with Ballast (Lower end)	Each	574.00
b.	4 Ft. 40 Watts Box type With Ballast (Higher end) (Philips/ Crompton/ Equivalent )	Each	751.00
9	<b>INDUSTRIAL TYPE FLUORESCENT FITTING STOVE ENAMELLED WITH COPPER CHOKE AND CONDENSOR (HPF) 4 Ft. 40W</b>		
a.	Single type suitable for 1 No. tube	Each	847.00
b.	Twin type suitable for 2 Nos. tube	Each	1040.00
10	<b>DECORATIVE TWIN FLUORESCENT TYPE FITTING WITH COPPER CHOKE AND CONDENSOR COMPLETE SUITABLE FOR 2 NUMBERS FLUORESCENT TUBES</b>		
a.	4 Ft. 40W Twin Mirror optic Recessed mounting fitting (Lower end)	Each	1460.00
b.	4 Ft. 40W Twin Mirror optic Suspension type fitting. (Philips/ Crompton /Wipro/ Equivalent)	Each	2632.00
c.	4 Ft. 40W Twin Mirror Optic Recessed mounting type fitting (Higher end) (Philips/ Crompton/ Wipro/ Equivalent)	Each	1930.00
11	<b>SINGLE TYPE STREET LIGHT FLUORESCENT FITTING SUITABLE FOR ONE NO. FLUORESCENT TUBE WITH COPPER CHOKE AND CONDENSOR COMPLETE</b>		
a.	4 Ft. 40 Watts type	Each	642.00
12	<b>TWIN TYPE STREET LIGHTS FLUORESCENT FITTING SUITABLE FOR 2 Nos. FLUORESCENT TUBES WITH COPPER CHOKE AND CONDENSOR COMPLETE</b>		
a.	4 Ft. 40 Watts type	Each	864.00
13	<b>POST TOP LANTERN FITTING OF (INTEGRAL TYPE) WITH COPPER CHOKE AND CONDENSOR &amp; NECESSARY ACCESSORIES (PHILIPS/ CROMPTON GREAVES/WIPRO/ EQUIVALENT)(SPHERICAL / RIBBED / CONICAL ACRYLIC COVER)</b>		
a.	Suitable for 125 Watts M.V lamp	Each	3110.00

Item No.	Description	Unit	Rates for the year 2021-22
b.	Suitable for 70 Watts S.V. Lamp	Each	3278.00
c.	Post top lantern fitting with S.C. holder suitable for 160 W blended lamp/ incandescent lamp	Each	1790.00
14	<b>CFL STREET LIGHT FITTINGS (COMPACT FLOURESCENT LAMP)</b>	<b>Higher End Each</b>	<b>Lower End Each</b>
a	T5 Street Light (IP65) EB / 4 x 14W T5	3705.00	2964.00
b	T5 Street Light (IP65) EB / 4 x 24W T5	4095.00	3275.00
c	1 x 9W CFL Street Light	853.00	681.00
d	1 x 11W CFL Street Light	853.00	681.00
e	1 x 13W CFL Street Light	858.00	681.00
f	1 x 18W CFL Street Light	858.00	684.00
g	2 x 9W CFL Street Light	817.00	653.00
h	2 x 11W CFL Street Light	998.00	799.00
i	2 x 13W CFL Street Light	998.00	799.00
j	2 x 18W CFL Street Light	998.00	799.00
k	1 x 36 CFL Street Light	1020.00	816.00
l	45-1 x 45W 4U Retro CFL B22 Street Light	952.00	763.00
m	CFL - 1 x 85W CFL E27 Street Light	1545.00	1240.00
n	CFL 1 x 85W CFL B22 Street Light	1545.00	1240.00
o	36WFP-LHF(MS) Street Light	1610.00	1287.00
p	36WFP-LHF(AL) Street Light	1790.00	1428.00
q	T5 1 x 24W FTL T5 Street Light	1670.00	1335.00
r	T5 2 x 14W FTL T5 Street Light	1845.00	1480.00
s	T5 2 x 24W FTL T5 Street Light	1935.00	1549.00
t	FTL 1 x 36 / 40W FTL Street Light	1340.00	1072.00
u	FTL 2 x 36 / 40W FTL Street Light	1910.00	1528.00
15	4 Feet LED Fitting	Higher End Each	Lower End Each
a	18W 4 Feet LED fitting with LED	754.00	642.00
b	20W 4 Feet LED fitting with LED	765.00	749.00
	<b>New Items</b>		
c	<b>1 X 18 w / 22 w 4 Feet LED Fitting without LED Tube</b>	<b>Each</b>	<b>299.00</b>
d	<b>2 x 22 W 4 Feet LED Fitting without LED Tube</b>	<b>Each</b>	<b>348.00</b>

Item No.	Description	Unit	Rates for the year 2021-22
e	<b>20 W LED Tube Light for T 8 Fitting (single side)</b>	<b>Each</b>	<b>612.00</b>
f	<b>20 W LED Tube Light for T 8 Fitting (Double side)</b>	<b>Each</b>	<b>379.00</b>
g	<b>18 W LED Tube Light for T 8 Fitting (single side)</b>	<b>Each</b>	<b>603.00</b>
h	<b>18 W LED Tube Light for T 8 Fitting (Double side)</b>	<b>Each</b>	<b>371.00</b>
i	<b>7 W / 9 W LED Bulb</b>	<b>Each</b>	<b>134.00</b>
j	<b>15 W LED Bulb</b>	<b>Each</b>	<b>268.00</b>
16	<b>LED INDOOR FITTINGS (LIGHT EMITTING DIODE)</b>	<b>Higher End Each</b>	<b>Lower End Each</b>
a	24W LED 4000K 2 x 2 Square Type Recessed Fitting with LED	3508.00	2487.00
b	18W LED 3000K Square Type Recessed Fitting with LED	1371.00	904.00
c	18W LED 3000K Round Type Recessed Fitting with LED	1246.00	983.00
17	<b>LED OUTDOOR FITTINGS (LIGHT EMITTING DIODE)</b>		Higher End
a	30W LED Street Light Fitting with LED	Each	2502.00
b	48W LED Street Light Fitting with LED	Each	4943.00
c	80W LED Focus Light Fitting with LED	Each	11775.00
d	120W LED Street Light Fitting with LED	Each	13920.00
e	150W LED Street Light Fitting with LED	Each	17350.00
18	<b>LED OUTDOOR FITTINGS (LIGHT EMITTING DIODE)</b>		Lower End
a	25W LED Street Light Fitting with LED	Each	1182.00
b	30W LED Street Light Fitting with LED	Each	1838.00
c	60W LED Street Light Fitting with LED	Each	3633.00
d	120W LED Street Light Fitting with LED	Each	11780.00
e	150W LED Street Light Fitting with LED	Each	13920.00
	<b>New Items</b>		
19	LED FLOOD LIGHT		Higher End
a	LED Flood Light 100 W with Integrated Driver	Each	9375.00
b	LED Flood Light 120 W with Integrated Driver	Each	10265.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
c	LED Flood Light 150 W with Integrated Driver	Each	12940.00
<b>20</b>	<b>TIMER SWITCHES</b>		
a	24 Hours Analog Timer Switch with Shortest Switching Time 30 Minutes	Each	2282.00
b	24 Hours Programmable Timer Switch with Shortest Switching Time 15 Minutes	Each	2424.00
c	Digital Weekly Programmable Timer Switch with Shortest Switching Time 1 Minute	Each	2272.00
d	Astronomical Weekly Programmable Timer Switch	Each	2615.00
e	Staircase Light Timer Switch Adjustable Range 5 to 20 Minutes	Each	1201.00
21	63A 3 phase 4 pole Contactor (L&T/ Equivalent)	Each	5328.00
<b>22</b>	<b>STARTERS FOR FLUORESCENT TUBES</b>		
a.	Starters of capacity 20 Watts	Each	9.40
b.	Starters of capacity 40 Watts / 36 Watts	Each	9.40
<b>23</b>	<b>POLYSTER FILLED COPPER CHOKE 250V/ 50 HZ GRADE SUITABLE FOR (PHILIPS/CROMPTON/ WIPRO/EQUIVALENT)</b>		
a.	20 Watts fluorescent Tube	Each	193.00
b.	40 Watts fluorescent Tube	Each	193.00
c.	36/40W Electronic ballast for flu. Tube (Higher end) (Philips/Crompton/ Equivalent)	Each	320.00
d.	36/40W Electronic ballast for flu. Tube (lower end) (Indo Asian/ Equivalent)	Each	261.00
<b>24</b>	<b>CONDENSOR FOR S.V/ M.V LAMP</b>		
a.	8 Mfd for 80 Watts Bulb	Each	103.40
b.	10 Mfd for 125 watts Bulb	Each	123.80
c.	15 Mfd for 250 Watts Bulb	Each	164.90
d.	20 Mfd for 400 watts Bulb	Each	228.10
<b>25</b>	Battern type Bakelite holder for lamp	Each	16.50
<b>26</b>	Water tight bulk head fitting suitable for 100/60 watts lamp with guard heavy type (PHILIPS/ BAJAJ/ CROMPTON GREAVES/ EQUIVALENT)	Each	274.90
<b>27</b>	Ceiling Rose	Each	13.70
<b>28</b>	Ceiling fixtures 250/300mm complete with Gallery etc. Clear glass opac/ crystal suitable for 40/60 Watts Bulb	Each	162.40

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
<b>29</b>	Ceiling luminaire with mirror optics suitable for 2 Nos. 9 Watts/11 Watts (Philips/Crompton/Bajaj/ Equivalent)	Each	1029.00
	<b>(FOR ITEMS 7 TO 14 ,27 &amp; 28 , THE RATES ARE EXCLUSIVE OF COST OF TUBES AND LAMPS)</b>		
<b>30</b>	Fan clamp (dia 12mm) with 6mm MS side plates & 45 cm cross arm	Each	109.80
<b>31</b>	<b>CALL BELLS</b>		
a.	Call bell/ Buzzar 6mm suitable for AC/DC	Each	41.30
b.	Push bell	Each	16.50
c.	Gong bell 9" size suitable for 250 V	Each	413.00
d.	Gong bell 12" size suitable for 250V	Each	597.00
<b>32</b>	<b>WATER HEATER WITH ISI MARK</b>		
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 (Higher end)	Each	7716.00
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 (Lower end)	Each	5713.00
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 (Higher end)	Each	8861.00
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 (Lower end)	Each	6618.00
<b>II</b>	<b>PART 'B'</b>		
<b>1</b>	<b>FANS – CONFORMING TO ISS</b>		
a.	AC Ceiling fan complete 1200mm (48") sweep with 300mm Down rod.(without regulator)	Each	1265.00
b.	AC Ceiling fan complete 1400mm (56") sweep with 300mm Down rod. (Without regulator)	Each	1357.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
c.	Stepped electronic 300W/450W square type fan regulator	Each	215.40
d.	Dimmer type electronic 300W/450W square type fan regulator	Each	172.20
e.	AC Ceiling fan complete 1200mm (48") sweep with 300mm Down rod.(without regulator) (Higher end)	Each	1435.00
f.	AC Ceiling fan complete 1400mm (56") sweep with 300mm Down rod (Without regulator) (Lower end)	Each	1548.00
<b>2</b>	<b>EXHAUST FANS</b>		
a.	AC Exhaust Fan 225 mm (9") sweep (Light duty)	Each	1172.00
b.	AC Exhaust Fan 300 mm (12") sweep (Light duty)	Each	1340.00
c.	AC Exhaust Fan 375 mm (15") sweep (Light duty)	Each	1382.00
d.	AC Exhaust Fan 450 mm (18") sweep (Light duty)	Each	1945.00
	New Item		
e	AC Exhaust Fan 300 mm (12") sweep (Heavy duty)	Each	2000.00
f.	AC Exhaust Fan 375 mm (15") sweep (Heavy duty)	Each	2554.00
g	AC Exhaust Fan 450 mm (18") sweep (Heavy duty)	Each	3176.00
<b>3</b>	<b>LOUVER SHUTTERS ARRANGEMENTS</b>		
a.	MS/Fibre Louvers shutters arrangements for 300mm AC Exhaust Fan	Each	220.70
b.	MS/Fibre Louvers shutters arrangements for 375mm AC Exhaust Fan	Each	233.90
c.	MS/Fibre Louvers shutters arrangements for 450mm AC Exhaust Fan	Each	261.70
<b>4</b>	<b>CEILING FAN</b>	Higher End Each	Lower End Each
a	48" Ceiling Fan 5 Star Rates (Without regulator)	1,617.00	1438.00
b	48" Ceiling Fan High Speed (Without regulator)	Each	1,608.00
	New Item		
c	56" Ceiling Fan High Speed (Without regulator)	Each	2,313.00
d	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	2908.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
	New Items		
5	WALL MOUNTING FAN		
a	300 mm Sweep	Each	2400.00
b	400 mm Sweep	Each	2520.00
c	450 mm Sweep	Each	4125.00
<b>6</b>	<b>DIMMER AND REGULATOR</b>	Higher End Each	Lower End Each
a	Fan Step Regulator 100W - 1 Module	338.00	243.00
b	Fan Step Regulator 100W - 2 Module	385.00	277.00
<b>III.</b>	<b>PART "C"</b>		
1	<b>SWITCHES</b>		
a.	5 Amps (Flush type)	Dozen	192.60
b.	5 Amps (Flush type staircase)	Dozen	239.00
2	<b>DOUBLE POLE SWITCHES</b>		
a.	16 Amps DP Switch with metal clad (front handle)	Each	413.00
b.	32 Amps DP Switch with metal clad (front handle)	Each	847.00
c.	16 Amps DP Switch with metal clad (side handle)	Each	341.00
d.	32Amps DP Switch with metal clad (side handle)	Each	768.00
3	<b>TRIPLE POLE SWITCHES (SIDE HANDLE)</b>		
a.	100 Amps TPN Switch with HRC fuses sheet steel double break	Each	5812.00
b.	125 Amps TPN Switch with HRC fuses sheet steel double break	Each	6373.00
c.	200 Amps TPN Switch with HRC fuses sheet steel double break	Each	8238.00
d.	315 Amps TPN Switch with HRC fuses sheet steel double break	Each	11685.00
e.	400 Amps TPN Switch with HRC fuses sheet steel double break	Each	15040.00
f.	16 Amps TPN Metal clad switch with rewirable fuse units	Each	881.00
g	32 Amps TPN Metal clad switch with rewirable fuse units	Each	1302.00



Item No.	Description	Unit	Rates for the year 2021-22
h	63 Amps TPN Metal clad switch with rewirable fuse units	Each	2838.00
I	100 Amps TPN Metal clad switch with rewirable fuse units	Each	5588.00
j	200 Amps TPN Metal clad switch with rewirable fuse units	Each	8484.00
4	<b>SWITCH DISCONNECTOR FUSE UNITS IN SHEET STEEL ENCLOSURE (SDF)</b>		
a	63 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	3590.00
b	100 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	6038.00
c	125 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break.	Each	7129.00
d	200 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	8955.00
e	250 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	11165.00
f.	315 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	13390.00
g	400 A TPN switch disconnecter fuse units in sheet steel enclosure with HRC fuses Double break	Each	15360.00
5	<b>SWITCH DISCONNECTOR FUSE UNITS IN OPEN EXECUTION (INTERIOR FOR CUBICAL)</b>		
a	63A TPN Switch disconnecter fuse units interior only with HRC fuses Double break	Each	2372.00
b	100 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	4314.00
c	125 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	5885.00
d	200 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	7594.00
e	250 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	9894.00
f.	315 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	12445.00
g	400 A TPN switch disconnecter fuse units interior only with HRC fuses Double break.	Each	14678.00
6	<b>FUSE UNITS (ANCHOR /EQUIVALENT)</b>		
a.	16 Amps Porcelain fuse unit (500 V)	Each	47.60
b.	32 Amps Porcelain fuse unit (500 V)	Each	84.40
c.	63 Amps Porcelain fuse unit (500 V)	Each	188.40

Item No.	Description	Unit	Rates for the year 2021-22
d.	100 Amps Porcelain fuse unit (500 V)	Each	340.30
e.	200 Amps Porcelain fuse unit (500 V)	Each	550.00
7	<b>SINGLE PHASE DBS</b>		
a.	4 Way DB 16 Amps /Way with fuse & Neutral Each (250V)	Each	458
b.	6 Way DB 16 Amps /Way with fuse & Neutral Each (250V)	Each	625
c.	8 Way DB 16 Amps /Way with fuse & Neutral Each (250V)	Each	773
8	<b>THREE PHASE DBS</b>		
a.	4 Way TPDB 16A/Way with fuse & Neutral link	Each	1809.00
b.	6 Way TPDB 16A/Way with fuse & Neutral link	Each	2478.00
c.	8 Way TPDB 16A/Way with fuse & Neutral link	Each	2998.00
d.	4 Way TPDB 32A/Way with fuse & Neutral link	Each	2289.00
e.	6 Way TPDB 32A/Way with fuse & Neutral link	Each	3063.00
f.	8 Way TPDB 32A/Way with fuse & Neutral link	Each	3874.00
g.	4 Way TPDB 63A/Way with fuse & Neutral link	Each	5358.00
h.	6 Way TPDB 63A/Way with fuse & Neutral link	Each	6892.00
9	<b>CHANGE OVER SWITCHES</b>		
a.	16 Amps three phase 500 V 4 pole Change over switch	Each	1246.00
b.	32 Amps three phase 500 V 4 pole Change over switch	Each	1476.00
c.	63 Amps three phase 500 V 4 pole Change over switch	Each	3225.00
d.	100 Amps three phase 500 V 4 pole Change over switch	Each	5127.00
	New Item		
e	125 A 4 pole Change Over Switch	Each	8850.00
f	200 Amps three phase 500 V 4 pole Change over switch	Each	9647.00
g	250A 3 phase 4 pole change over switch	Each	20410.00
h	400A 3 phase 4 pole change over switch	Each	31190.00
10	<b>MODULAR SWITCHES</b>	Higher End	Lower End
A	<b>Switches 6A - 230V</b>	Each	Each
a	6A Switch 1W - 1 Module	77.40	57.00
b	6A Switch 2W - 1 Module	94.60	67.20
c	6A Switch 1W - 1 Module with Indicator	104.00	74.20
d	6A Switch 1W - 1 Module with 'Light' Marking	83.50	59.50
e	6A Switch 1W - 1 Module with 'Fan' Marking	83.50	59.50
B	<b>Switches 16A - 230V</b>		

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
a	16A Switch 1W - 1 Module	116.80	83.50
b	16A Switch 2W - 1 Module	144.20	104.00
c	16A Switch 1W with Indicator - 1 Module	137.30	98.90
<b>C</b>	<b>Switches 20A - 230V</b>		
a	20A 1W Switch - 1 Module	151.80	109.10
b	20A DP 1W Switch - 2 Module	253.40	181.00
c	20A DP 1W Switch with Indicator - 2 Module	267.00	192.60
<b>D</b>	<b>Switches 25A - 230V</b>		
a	25A SP 1W Switch with Indicator - 1 Module	165.20	119.20
<b>E</b>	<b>Switches 32A - 230V</b>		
a	32A DP Switch with Indicator - 2 Module	322.00	233.50
<b>B</b>	<b>PUSH BUTTONS</b>		
a	6A Push Button SP - 1 Module	104.70	75.80
b	6A Push Button SP with Indicator - 1 Module	136.10	98.00
c	6A Bell Push - 1 Module	104.00	74.20
d	6A Bell push with Indicator - 1 Module	128.70	92.10
e	6A Bell Push - 2 Module	136.00	98.00
f	6A Bell Push with Indicator - 2 Module	160.00	115.10
<b>12</b>	<b>MOTOR STARTER</b>		
a	25A Motor Starter - 2 Module	298.80	215.10
<b>13</b>	<b>FLUSH MOUNTING BOXES (GI)</b>		
a	Flush Box - 1/2 Module	38.00	27.50
b	Flush Box - 3 Module	44.60	32.40
c	Flush Box - 4 Module	54.40	38.90
d	Flush Box - 6 Module	85.30	61.70
e	Flush Box - 8 Module	104.70	75.50
f	Flush Box - 8 Module (2 row x 4)	105.50	76.30
g	Flush Box - 12/16 (2 row x 6) Module Metal Box	141.40	101.60
h	Flush Box - 18 Module Metal Box	160.80	115.40
<b>14</b>	<b>SURFACE MOUNTING BOXES (PLASTIC)</b>		
a	Surface Box - 1/2 Module	42.60	30.30
b	Surface Box - 3 Module	45.00	32.70
c	Surface Box - 4 Module	58.31	41.70
d	Surface Box - 6 Module	75.40	54.90
e	Surface Box - 8 Module	91.90	66.40
f	Surface Box - 8 (2 row x 4) Module	106.60	77.00
g	Metal Surface Box - 12/16 (2 row x 6) Module	161.60	116.10
h	Metal Surface Box - 18 Module	206.00	147.70

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
15	<b>COMBINED PLATES (PLASTIC)</b>		
a	1 Module Cover Plate	63.10	45.80
b	2 Module Cover Plate	66.40	47.40
c	3 Module Cover Plate	80.30	57.20
d	4 Module Cover Plate	89.30	63.90
e	6 Module Cover Plate	125.50	90.10
f	8 Module Cover Plate	159.90	114.80
g	8 Module Cover Plate (H)	160.70	136.00
h	12 Module Cover Plate	200.20	144.50
i	18 Module Cover Plate	252.90	181.30
16	<b>COMBINED PLATES (ALUMINIUM)</b>		
a	1 Module Cover Plate	133.80	96.30
b	2 Module Cover Plate	140.70	98.30
c	3 Module Cover Plate	152.60	110.00
d	4 Module Cover Plate	172.30	123.60
e	6 Module Cover Plate	292.80	211.60
f	8 Module Cover Plate	323.40	233.90
g	8 Module Cover Plate (H)	411.30	296.00
h	12 Module Cover Plate	534.40	385.30
i	18 Module Cover Plate	704.50	507.00
17	SOCKET 230 V	Higher End Each	Lower End Each
a	16 A 3 Pin Switched Socket - 3 Module	383.80	277.20
b	6 A 5 Pin Universal Socket - 2 Module	119.20	86.60
c	6 / 16 A Socket - 3 Module	216.10	155.90
d	6 / 16 A Socket - 2 Module	183.50	131.50
<b>IV</b>	<b>PART 'D'</b>		
1	<b>PLUG AND SOCKETS</b>		
a	5 Amps 3 pin and 2 pin combined flush type wall socket only.	Each	23.90
b	5 Amps /15 amps.3 pin flush type wall socket only.	Each	54.00
c	5 Amps 3 pin Top	Each	33.90
d	15 Amps 3 pin Top	Each	48.00
e	15 Amps Flush type switch	Each	56.00
f	10 Amps M.C plug with 3 pin Top	Each	179.00

Item No.	Description	Unit	Rates for the year 2021-22
g	20 Amps M.C plug with 3 pin Top	Each	204.00
e	25A Flush type Wall Socket with 25A DP MCB for AC Plug	Each	803.00
3	<b>SINGLE PHASE WATT HOUR METERS</b>		
a.	AC single phase 230V/250V/50 HZ 5 Amps Watt Hour Meter	Each	954.00
b.	AC single phase 230V/250V/50 HZ 10 Amps Watt Hour Meter	Each	954.00
c.	AC single phase 230V/250V/50 HZ 20 Amps Watt Hour Meter	Each	954.00
4	<b>THREE PHASE WATT HOUR METERS</b>		
a.	AC 3 phase 400V 50 HZ unbalanced load 4 wire 10 Amps Watt Hour Meter	Each	1968.00
b.	AC 3 phase 400V 50 HZ unbalanced load 4 wire 25 Amps Watt Hour Meter	Each	1968.00
c.	AC 3 phase 400 V 50 HZ unbalanced load 4 wire 50 Amps Watt Hour Meter	Each	2492.00
<b>V</b>	<b>PART 'E'</b>		
<b>I</b>	<b>SERVICE CONNECTION ACCESSORIES LT. 1100V PVC ALUMINIUM ARMoured UNDER GROUND CABLE WITH ISI MARK</b>		
a.	2 Core 6 sq.mm PVC armoured UG cable	Metre	90.70
b.	2 Core 10 sq.mm PVC armoured UG cable	Metre	110.40
c.	2 Core 16 sq.mm PVC armoured UG cable	Metre	119.90
d.	2 Core 25 sq.mm PVC armoured UG cable	Metre	136.10
e	3 <sup>1</sup> / <sub>2</sub> core 25 sq.mm. PVC Armoured UG Cable	Metre	205.20
f	3 <sup>1</sup> / <sub>2</sub> core 35 sq.mm. PVC Armoured UG Cable	Metre	241.60
g	3 <sup>1</sup> / <sub>2</sub> core 50 sq.mm. PVC Armoured UG Cable	Metre	314.70
h	3 <sup>1</sup> / <sub>2</sub> core 70 sq.mm. PVC Armoured UG Cable	Metre	403.70
i	3 <sup>1</sup> / <sub>2</sub> core 95 sq.mm. PVC Armoured UG Cable	Metre	522.50
j	3 <sup>1</sup> / <sub>2</sub> core 120 sq.mm. PVC Armoured UG Cable	Metre	638.30
k	3 <sup>1</sup> / <sub>2</sub> core 150 sq.mm. PVC Armoured UG Cable	Metre	756.00
l	3 <sup>1</sup> / <sub>2</sub> core 185 sq.mm. PVC Armoured UG Cable	Metre	922.90
m	3 <sup>1</sup> / <sub>2</sub> core 240 sq.mm. PVC Armoured UG Cable	Metre	1170.00
n	3 <sup>1</sup> / <sub>2</sub> core 300 sq.mm. PVC Armoured UG Cable	Metre	1436.00
o	3 <sup>1</sup> / <sub>2</sub> core 400 sq.mm. PVC Armoured UG Cable	Metre	1831.00
p	4 core 6 sq.mm. PVC Armoured UG Cable	Metre	117.50
q	4 core 10 sq.mm. PVC Armoured UG Cable	Metre	128.80
r	4 core 16 sq.mm. PVC Armoured UG Cable	Metre	169.70

Item No.	Description	Unit	Rates for the year 2021-22
2	<b>PVC INSULATED SINGLE CORE MULTI STRAND FIRE RETARDANT FLEXIBLE COPPER CABLE WITH ISI MARK CONFORMING TO IS</b>		
a.	14/0.3 ( 1 sq.mm )	Metre	9.80
b.	22/0.3 ( 1.5 sq.mm )	Metre	15.50
c.	36/0.3 ( 2.5 sq.mm )	Metre	24.10
d.	56/0.3 ( 4 sq.mm )	Metre	38.30
e.	84/0.3 ( 6 sq.mm )	Metre	56.70
f.	140/0.3 ( 10 sq.mm )	Metre	85.30
g.	101/0.45 ( 16 sq.mm )	Metre	139.50
h.	168/0.45 ( 25 sq.mm )	Metre	306.40
3	<b>CONDUCTOR</b>		
a.	Hard drawn copper conductor(Gauge No.8 & 6)	KG	575.00
b.	14 SWG TC wire	KG	589.00
c.	GI No.8 wire and No. 6 wire	KG	94.90
4	<b>CABLE GLANDS</b>		
a.	Cable gland suitable for 2 core 4 sq.mm UG cable	Each	18.15
b.	Cable gland suitable for 2 core 6 sq.mm UG cable	Each	22.70
c.	Cable gland suitable for 2 core 10 sq.mm UG cable	Each	27.15
d.	Cable gland suitable for 2 core 16 sq.mm UG cable	Each	40.20
e.	Cable gland suitable for 2 core 25 sq.mm UG cable	Each	48.00
f.	Cable gland suitable for 3½ core 25 sq.mm UG cable	Each	48.00
g.	Cable gland suitable for 3½ core 35 sq.mm UG cable	Each	61.10
h.	Cable gland suitable for 3½ core 50 sq.mm UG cable	Each	61.10
I	Cable gland suitable for 3½ core 70 sq.mm UG cable	Each	75.35
j	Cable gland suitable for 3½ core 95 sq.mm UG cable	Each	92.00
k	Cable gland suitable for 3½ core 120 sq.mm UG cable	Each	117.15
l	Cable gland suitable for 3½ core 150 sq.mm UGcable	Each	154.20
m	Cable gland suitable for 3½ core 185 sq.mm UGCable	Each	182.40
n	Cable gland suitable for 3½ core 240 sq.mm UG cable	Each	182.40
o	Cable gland suitable for 3½ core 300 sq.mm UGcable	Each	217.80
p	Cable gland suitable for 3 ½ core 400 sq.mm UGcable	Each	309.90
q	Cable gland suitable for 3 ½ core 500 sq.mm UG cable	Each	361.30
r	Cable gland suitable for 4 core 6 sq.mm UG cable	Each	22.70
s	Cable gland suitable for 4 core 10 sq.mm UG cable	Each	27.15
t	Cable gland suitable for 4 core 25 sq.mm UG cable	Each	48.00

Item No.	Description	Unit	Rates for the year 2021-22
5	<b>FUSE WIRE(COPPER)</b>		
a.	5 Amps fuse wire	Kg	575.00
b.	10 Amps fuse wire	Kg	575.00
c.	20 Amps fuse wire	Kg	575.00
6	<b>NEUTRAL LINK 15 AMPS</b>		
a.	4 way Neutral Link	Each	28.50
b.	6 way Neutral Link	Each	42.20
c.	8 way Neutral Link	Each	52.60
d.	12 way Neutral Link	Each	76.50
<b>VI</b>	<b>PART ' F '</b>		
1	<b>M.S. BOX WITH PAINTING (16 SWG)</b>		
a.	M.S Box of Size (100 x 100 x 75mm)	Each	45.60
b.	M.S Box of Size (150 x 100 x 75mm)	Each	63.10
c.	M.S Box of Size (200 x 150 x 75mm)	Each	102.70
d.	M.S Box complete with Lock & Key arrangements with painting of size (300 x 200 x 100 mm)	Each	310.50
2	Synthertic Moulded Coumpound box for street light	Each	845.00
<b>VII</b>	<b>PART ' G '</b>		
1	<b>MS ANGLES</b>		
a.	1½ " x 1½" x ¼" (37.5 x 37.5 x 6.24 mm) (1M= 3.25 Kg)	KG	51.40
b.	1½"x 1½" x ½" (37.5 x 37.5 x 12.5mm)	KG	51.40
c.	2" x 2" x ½" (50 x 50 x 12.5 mm)	KG	51.40
2	<b>ALUMINIUM FLAT</b>		
a.	Aluminium Flat (1"x ¼") (25x 6.25 mm)	KG	163.50
b.	Aluminium Flat ( 1"x1/8")	KG	163.50
3	<b>COPPER FLAT</b>		
a.	Copper Flat (25 x 3 mm)	KG	526.00
b.	Copper Flat (25 x 6 mm)	KG	526.00
c.	Copper Flat (33 x 6 mm)	KG	526.00
d.	Copper Flat (50 x 6 mm)	KG	526.00
4	<b>POWER CAPACITOR</b>		
a.	Power capacitor for power factor improvement with oil filled with discharge resistance 3 phase 415/440V 50 HZ conforming to ISS with ISI marking	KVAR	315.00
	New Item		
5	Plate Earthing	Each	11090.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
<b>VIII</b>	<b>PART ' H '</b>		
<b>1</b>	<b>CONDUIT MATERIALS 16 Gauge</b>		
a.	Conduit pipe 16 mm (5/8") Heavy Gauge	Metre	31.20
b.	Conduit pipe 19 mm (3/4") Heavy Gauge	Metre	32.30
c.	Conduit pipe 25 mm (1") Heavy Gauge	Metre	39.70
d.	Conduit pipe 32 mm (1¼") Heavy Gauge	Metre	52.20
e.	Conduit pipe 38 mm (1½") Heavy Gauge	Metre	61.50
<b>2</b>	<b>CONDUIT TEE BENDS</b>		
a.	Conduit Tee bends 16 mm (5/8")	Dozen	87.70
b.	Conduit Tee bends 19 mm (3/4")	Dozen	88.60
c.	Conduit Tee bends 25 mm (1")	Dozen	106.40
d.	Conduit Tee bends 32 mm (1¼")	Dozen	110.10
e.	Conduit Tee bends 38 mm (1½")	Dozen	137.30
f.	Conduit Tee bends 50 mm (2")	Dozen	171.50
<b>3</b>	<b>CONDUIT BENDS 16 Gauge</b>		
a.	Conduit solid bends 16 mm (5/8")	Dozen	83.00
b.	Conduit solid bends 19 mm (3/4")	Dozen	92.40
c.	Conduit solid bends 25 mm (1")	Dozen	109.20
d.	Conduit solid bends 32 mm (1¼")	Dozen	129.00
e.	Conduit solid bends 38 mm (1½")	Dozen	183.00
f.	Conduit solid bends 50 mm (2")	Dozen	224.00
<b>4</b>	<b>CONDUIT INSPECTION BEND 16 Gauge</b>		
a.	Conduit Inspection bends 16 mm (5/8")	Dozen	83.00
b.	Conduit Inspection bends 19 mm (3/4")	Dozen	85.90
c.	Conduit Inspection bends 25 mm (1")	Dozen	110.10
d.	Conduit Inspection bends 32 mm (1 ¼")	Dozen	132.70
e.	Conduit Inspection bends 38mm (1½")	Dozen	171.80
f.	Conduit Inspection bends 50mm (2")	Dozen	195.20
g.	Conduit Inspection bends 65mm (2½")	Dozen	251.30
<b>5</b>	<b>HDPE Pipe</b>		
a.	HDPE pipe 50mm/ 38mm	RM	102.00
b.	HDPE pipe 90mm/ 76mm	RM	210.00
c.	HDPE pipe 120mm/ 103.50mm	RM	262.00
<b>6</b>	<b>Cable Tray</b>		
a.	GI Hot dip/ Powder coated 16 SWG Cable tray with 150mm width and 50mm height	RM	325.00
b.	GI Hot dip/ Powder coated 16 SWG Cable tray with 300mm width and 50mm height	RM	396.00



<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
<b>IX</b>	<b>PART ' I '</b>		
1	<b>PVC (RIGID) PIPES (1.8 MM THICK)WITH ISI MARK</b>		
a.	PVC rigid pipes 16mm (5/8")	Metre	13.10
b.	PVC rigid pipes 20mm (3/4")	Metre	19.10
c.	PVC rigid pipes 25mm (1")	Metre	28.40
d.	PVC rigid pipes 32mm (1¼")	Metre	43.00
e.	PVC rigid pipes 40mm (1½")	Metre	61.40
f.	PVC rigid pipes 50mm (2")	Metre	92.00
2	<b>PVC RIGID BENDS</b>		
a.	PVC rigid bends 16mm (5/8")	Each	3.00
b.	PVC rigid bends 20mm (3/4")	Each	3.00
c.	PVC rigid bends 25mm (1")	Each	4.10
d.	PVC rigid bends 32mm (1¼")	Each	7.30
e.	PVC rigid bends 40mm (1½")	Each	18.40
f.	PVC rigid bends 50mm (2")	Each	22.50
3	<b>PVC COUPLES</b>		
a.	PVC Couples 16mm (5/8")	Dozen	13.20
b.	PVC Couples 19mm (3/4")	Dozen	13.20
c.	PVC Couples 25mm (1")	Dozen	25.70
d.	PVC Couples 32mm (1¼")	Dozen	58.90
e.	PVC Couples 38mm (1½")	Dozen	126.20
f.	PVC Couples 50mm (2")	Dozen	131.80
4	<b>PVC TEES</b>		
a.	PVC Tees 16mm (5/8")	Dozen	13.20
b.	PVC Tees 19mm (3/4")	Dozen	15.30
c.	PVC Tees 25mm (1")	Dozen	19.60
d.	PVC Tees 32mm (1¼")	Dozen	87.90
e.	PVC Tees 38mm (1½")	Dozen	282.20
f.	PVC Tees 50mm (2")	Dozen	309.00
5	<b>PVC Saddles</b>		
a.	PVC Saddles 16 mm (5/8")	Dozen	3.00
b.	PVC Saddles 19mm (3/4")	Dozen	3.45
c.	PVC Saddles 25mm (1")	Dozen	4.00
d.	PVC Saddles 32mm (1¼")	Dozen	5.00
e.	PVC Saddles 38mm (1½")	Dozen	6.15
f.	PVC Saddles 50mm (2")	Dozen	12.30

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
6	<b>PVC JUNCTION BOXES</b>		
a.	Junction boxes 1,2,3 & 4 way 16 mm (5/8")	Dozen	41.20
b.	Junction boxes 1,2,3 & 4 way 19 mm (3/4")	Dozen	41.20
c.	Junction boxes 1,2,3 & 4 way 25 mm (1")	Dozen	48.50
d.	Junction boxes 1,2,3 & 4 way 32 mm (1¼")	Dozen	107.70
e.	Junction boxes 1,2,3 & 4 way 38 mm (1½")	Dozen	128.00
7	<b>PVC Hylem sheets</b>		
a.	Hylem sheet 3 mm thick	Sq.m	630.00
8	<b>Insulation Tape PVC</b>		
a.	PVC Insulation Tape (19mm)	Roll/10 mts	15.30
b.	Empire Tape (12 mm)	Roll/10 mts	20.60
c.	Empire Tape (19 mm)	Roll/10 mts	24.70
	New Items		
9	<b>CABLE MANAGEMENT SYSTEM</b>		
a.	Cable Management Box with Cover		
i.	50 mm x 80 mm	Mtr	945.00
ii	150 mm x 105 mm	Mtr	1200.00
b	Divider	Each	205.00
c.	Cover Joint	Each	115.00
d.	End Cap	Each	190.00
e.	Joint for Top Part	Each	215.00
f.	Joint for Bottom Part	Each	260.00
<b>X</b>	<b>PART ' J '</b>		
1	<b>TEAK WOOD MATERIALS</b>		
	<b>T.W. BOX CONCEALED TYPE</b>		
a.	T.W. Box concealed type 12"x8"x3"	Each	69.90
b.	T.W.Box concealed type 8"x6"x3"	Each	37.10
c.	T.W. Box concealed type 6"x4"x3"	Each	16.50
d.	T.W. Box concealed type 4"x4"x3"	Each	13.80
e.	T.W. plugs 1½" x 1" x2"	1000 Nos.	287.00
f.	T.W. Round blocks	100 Nos.	558.00

Item No.	Description	Unit	Rates for the year 2021-22
<b>XI</b>	<b>PART ' K '</b>		
1	<b>CRIMPING LUGS SUITABLE FOR THE FOLLOWING SIZES</b>		
	<b>Size</b>	Aluminium (Each)	Copper (Each)
a.	4 Sq.mm	1.34	4.47
b.	6 Sq.mm	1.50	4.47
c.	10 Sq.mm	1.93	5.60
d.	16 Sq.mm	1.93	6.75
e.	25 Sq.mm	2.94	11.30
f.	35 Sq.mm	3.89	12.45
g.	50 Sq.mm	5.80	14.70
h.	70 Sq.mm	7.70	23.90
i.	95 Sq.mm	8.80	29.60
j.	120 Sq.mm	11.80	41.00
k.	150 Sq.mm	15.70	52.40
l.	185 Sq.mm	20.50	79.80
m.	225 Sq.mm	30.50	113.90
n.	240 Sq.mm	33.40	113.90
o.	300 Sq.mm	46.30	153.70
p.	400 Sq.mm	69.10	233.60
2	<b>CABLE ROUTE INDICATOR</b>		
a.	Cable route indicator for L.T/ cable	Each Box	76.10
b.	Cable route indicator for H.T/ cable	Each Box	76.10
<b>XII</b>	<b>PART ' L '</b>		
1	<b>BRASS SCREWS</b>		
a.	Brass Screws (20mm) ¾" No.6	Gross	59.60
b.	Brass Screws (25mm) 1" No.6	Gross	64.30
c.	Brass Screws (40mm) 1½" No.6	Gross	68.80
d.	Brass Screws (20mm) ¾" No.8	Gross	59.60
e.	Brass Screws (25mm) 1" No.8	Gross	64.30
f.	Brass Screws (50mm) 2" No.10	Gross	133.00
g.	Brass screws (75mm) 3" No.10	Gross	196.80
2	Coach screws 2"x¼" (50 x 6.25mm)	Dozen	11.80
3	<b>CONDUIT SADDLES</b>		
a.	Conduit Saddles 16mm (5/8")	Gross	36.60

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
b	Conduit Saddles 19mm (3/4")	Gross	39.00
c.	Conduit Saddles 25mm (1")	Gross	45.80
d.	Conduit Saddles 32mm (1¼")	Gross	59.60
e.	Conduit Saddles 38mm (1½")	Gross	73.20
f.	Conduit Saddles 50mm (2")	Gross	82.70
g.	Conduit Saddles 65mm (2½")	Gross	94.20
4	<b>SODIUM VAPOUR FITTINGS &amp; LAMP</b>		
	<b>(For External Electrification &amp; Campus lighting)</b>		
	<b>(Lowe end)</b>		
a.	250 Watts Sodium Vapour fittings	Each	3025.00
b	250 Watts Sodium Vapour lamp	Each	668.00
c.	150 Watts Sodium Vapour fittings	Each	2983.00
d.	150 Watts Sodium Vapour lamp	Each	572.00
e.	70 Watts Sodium Vapour fittings	Each	2405.00
f.	70 Watts Sodium Vapour lamp	Each	380.00
5	<b>SODIUM VAPOUR LAMP FITTING SINGLE PIECE DIE CAST ALUMINIUM HOUSING &amp; LAMP FOR HEAVY TRAFFIC ROADS (Higher end)</b>		
a.	400 Watts sodium vapour fittings	Each	9045.00
b	400 Watts sodium vapour lamp	Each	938.00
c.	250 Watts sodium vapour fittings	Each	6170.00
d.	250 Watts sodium vapour lamp	Each	758.00
e.	150 Watts sodium vapour fittings	Each	5790.00
f.	150 Watts sodium vapour lamp	Each	623.00
g.	70 Watts sodium vapour fittings	Each	2475.00
h.	70 Watts sodium vapour lamps	Each	429.00
6	<b>MINIATURE CIRCUIT BREAKERS 240 V/415 V 50HZ AC SUPPLY SUITABLE FOR BOTH LIGHTING AND MOTOR CIRCUITS.</b>	Higher End (Each)	Lower End (Each)
a.	Single pole 6A to 32A,10 KA	173.00	127.00
b	Single pole 40A , 10 KA	357.00	265.00
c.	Single pole & Neutral 6A to 32A, 10 KA	511.00	385.00
d.	Single pole & Neutral 40A, 10 KA	829.00	535.00
e.	Double pole 6A to 32A, 10 KA	511.00	424.00

Item No.	Description	Unit	Rates for the year 2021-22
f.	Double pole 40A, 10 KA	829.00	581.00
g.	Triple pole 6A to 32A, 10 KA	822.00	641.00
h.	Triple pole 63A , 10 KA	1250.00	1020.00
I	Triple pole & Neutral 6A to 32A, 10 KA	1082.00	835.00
j.	Triple pole & Neutral 63A, 10 KA	1617.00	1287.00
k.	Four pole 6A to 32A, 10 KA	1082.00	894.00
l.	Four pole 63A, 10 KA	1617.00	1370.00
7	New Items		
	MCB		
a.	100 A Triple Pole MCB	Each	6920.00
b.	125 A Triple Pole MCB	Each	7680.00
c.	100 A Four Pole MCB	Each	8830.00
d.	125 A Four Pole MCB	Each	9990.00
8	<b>PLUG AND SOCKETS IN SHEET STEEL ENCLOSURE WITHOUT MCBS</b>	Higher End (Each)	Lower End (Each)
a.	10A single Pole	846.00	500.00
b.	20A Single Pole	903.00	507.00
c.	20A Double Pole	978.00	-
d.	20A Triple Pole	1659.00	962.00
e.	32A Triple Pole	1979.00	1302.00
f.	63A Triple Pole	8065.00	-
9	Sheet Steel Enclosure for MCB's	Higher End (Each)	Lower End (Each)
a	2 Pole	374.00	260.00
b	4 pole	549.00	319.00
10	<b>RCCB/ ELCB</b>		
a.	10 Amps 30 MA DP	Each	2387.00
b	25 Amps 30 MA DP	Each	1968.00
c.	40 Amps 30 MA DP	Each	2178.00
11	<b>RCCB/ELCB (FOUR POLE)</b>		
a.	25 Amps 30 MA	Each	2710.00
b	40 Amps 30 MA	Each	2743.00
c.	63 Amps 30 MA	Each	3173.00

Item No.	Description	Unit	Rates for the year 2021-22	
12	<b>HRC FUSES</b>			
a.	16 Amps	Each	61.10	29.80
b	32 Amps	Each	63.40	50.00
c.	63 Amps	Each	130.80	63.00
d.	125 Amps	Each	305.00	139.70
e.	160 Amps	Each	380.00	188.40
f.	200 Amps	Each	392.00	188.40
g.	250 Amps	Each	546.00	278.40
13	<b>MCB ISOLATORS</b>			
			Higher End (Each)	Lower End (Each)
a	32A -DP		268.20	-
b	32A - TP		448.00	-
c	32A -FP		513.00	-
d	40A -DP		370.00	256.00
e	40A - TP		642.00	471.00
f	40A -FP		826.00	575.00
g	63A -DP		496.00	326.00
h	63A - TP		848.00	514.00
i	63A -FP		903.00	600.00
j	100A -DP		-	421.00
k	100A - TP		932.00	669.00
l	100A -FP		952.00	732.00
14	<b>MCCB</b>			
	New Items			
a	63 A / 100 A 3 Pole MCCB	Each		6195.00
	Rotary Handle	Each		885.00
	Spreader Terminal	Each		235.00
b	160 A 3 Pole MCCB	Each		11760.00
	Rotary Handle	Each		1500.00
	Spreader Terminal	Each		1130.00
c	125A 3 pole MCCB	Each		8660.00
d	250A 3 pole MCCB	Each		17850.00
	Spreader Terminal for 250A / 125 A	Each		1138.00
	Rotary handle for 400A/ 630A	Each		1405.00
e	400A 3 pole MCCB	Each		23550.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
	400A Spreader Terminal	Each	1959.00
f	630A 3 pole MCCB	Each	28840.00
	630A Spreader Terminal	Each	3300.00
	Rotary handle for 400 A / 630 A	Each	2294.00
	New Items		
g	63 A / 100 A 4 Pole MCCB	Each	8600.00
	Rotary Handle	Each	885.00
	Spreader Terminal	Each	400.00
h	125A 4 pole MCCB	Each	9265.00
	Rotary Handle	Each	885.00
	Spreader Terminal	Each	400.00
i	160 A 3 Pole MCCB	Each	13980.00
	Rotary Handle	Each	1500.00
	Spreader Terminal	Each	1490.00
j	250A 4 pole MCCB	Each	21810.00
	250A Spreader Terminal	Each	1380.00
k	400A 4 pole MCCB	Each	29415.00
b	400A Spreader Terminal	Each	2814.00
	New Items		
15	AIR CIRCUIT BREAKER		
a	630 A, 4 Pole 50 kA, Micro processor based, EDO Breaker	Each	201300.00
b	800 A, 4 Pole 50 kA, Micro processor based, EDO Breaker	Each	201300.00
c	1000 A, 4 Pole 50 kA, Micro processor based, EDO Breaker	Each	207700.00
d	1250 A, 4 Pole 50 kA, Micro processor based, EDO Breaker	Each	226700.00
e	1600 A, 4 Pole 50 kA, Micro processor based, EDO Breaker	Each	248900.00
<b>XIII</b>	<b>PART "M"</b>		
1	<b>11 KV INDOOR VACCUM CIRCUIT BREAKER</b>		
a	11 KV, 25 KA, 630 A, HT Indoor Single Panel Vaccum Circuit Breaker complete as per specification	Each	445000.00
b	11 KV, 25 KA, 630 A, HT Indoor Three Panel Vaccum Circuit Breaker complete as per specification	Each	1134000.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
c	11 KV, 25 KA, 630 A, HT Indoor Four Panel Vaccum Circuit Breaker complete as per specification	Each	1609000.00
d	11 KV, 25 KA, 630 A, HT Indoor Five Panel Vaccum Circuit Breaker complete as per specification	Each	1929000.00
<b>2</b>	<b>11 KV OUTDOOR VACCUM CIRCUIT BREAKER</b>		
a	11 KV, 25 KA, 630 A, HT Outdoor Single Panel Vaccum Circuit Breaker complete as per specification	Each	465000.00
b	11 KV, 25 KA, 630 A, HT Outdoor Three Panel Vaccum Circuit Breaker complete as per specification	Each	1162000.00
c	11 KV, 25 KA, 630 A, HT Outdoor Four Panel Vaccum Circuit Breaker complete as per specification	Each	1628000.00
d	11 KV, 25 KA, 630 A, HT Outdoor Five Panel Vaccum Circuit Breaker complete as per specification	Each	1949000.00
<b>3</b>	<b>11 KV INDOOR RING MAIN GEAR (RMG)</b>		
a	11 KV, 25 KA, 630 A, HT Indoor Three Panel Ring Main Gear complete as per specification	Each	647000.00
<b>4</b>	<b>11 KV OUTDOOR RING MAIN GEAR (RMG)</b>		
a	11 KV, 25 KA, 630 A, HT Outdoor Three Panel Ring Main Gear complete as per specification	Each	678000.00
<b>5</b>	<b>HT CABLES</b>		
	<b>New Items</b>		
a	185 sq.mm. 3 core HT XLPE 11KV (E)	Mtr	1685.00
b	185 sq.mm. 3 core HT XLPE 11KV (UE)	Mtr	2190.00
c	240 sq.mm. 3 core HT XLPE 11KV (UE)	Mtr	2575.00
d	240 sq.mm. 3 core HT XLPE 11KV (E) SISMV11E3 x 2402797	Mtr	1965.00
e	300 sq.mm. 3 core HT XLPE 11KV (E) SISMV11E3 x 3002797	Mtr	2285.00
f	300 sq.mm. 3 core HT XLPE 11KV (UE) SISMV11U3 x 3002424	Mtr	2680.00
<b>6</b>	<b>CABLES, ACCESSORIES AND KITS</b>		
a	120-185 sq.mm. 3 core HT Cable Indoor Terminations XLPE 11KV (E) - EPKT 3111	Each	11000.00
b	240-300 sq.mm. 3 core HT Cable Indoor Terminations XLPE 11KV (E) - EPKT 3121	Each	11750.00



<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
c	120-185 sq.mm. 3 core HT Cable Outdoor Terminations XLPE 11KV (E) - EPKT 3362	Each	15200.00
d	240-300 sq.mm. 3 core HT Cable Outdoor Terminations XLPE 11KV (E) - EPKT 3372	Each	17100.00
e	240-400 sq.mm. 3 core HT Cable Indoor Terminations 11 KV (UE) - Belted PILC Cables - EPKT 4685	Each	15500.00
f	240-400 sq.mm. 3 core HT Cable Outdoor Terminations 11 KV (UE) - Belted PILC Cables - EPKT 4961	Each	20500.00
g	150-185 sq.mm. 3 core HT Cable Outdoor Terminations 22KV(E) Screened XLPE Cables - EPKT 5363	Each	21800.00
h	240-400 sq.mm. 3 core HT Cable Outdoor Terminations 22KV(E) Screened XLPE Cables-EPKT 5373	Each	29000.00
i	185-240 sq.mm 3 core HT Cables Straight Through Joints 22KV (E) Screened XLPE Cables-EPKJ 5118	Each	57000.00
j	300-400 sq.mm. 3 core HT Cable Straight Thorough Joints 22KV (E) Screened XLPE Cables - EPKJ 5119	Each	63700.00
	<b>PART "N"</b>		
1	<b>SUPPLY &amp; INSTALLATION OF AIR-CONDITIONER WITH COPPER COIL</b>	3 Star Rated	5 Star Rated
a	1.5 TR Split Type AC Unit	32600.00	43400.00
b	2.0 TR Split Type AC Unit	43400.00	55400.00
c	Supply and installation of 4 KVA capacity Automatic Voltage Stabilizer with time delay relay	Each	4365.00
d	Supply and installation of 5 KVA capacity Automatic Voltage Stabilizer with time delay relay	Each	4855.00
e	Supply and laying of 5/8" and 3/8" copper pipe (Extra beyond 3 metres supplied with AC unit)	Each	924.00
f	Supply and fixing of MS stand for fixing outdoor unit	Each	1070.00
2	<b>SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND HANDING OVER OF AIR-COOLED SELF CONTAINED DUCTABLE AC UNITS</b>		

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
a	3.0 TR Ceiling Suspended Ductable Unit	Each	96400.00
b	5.0 TR Ceiling Suspended Ductable Unit	Each	166400.00
c	8.5 TR Ceiling Suspended Ductable Unit	Each	226800.00
d	11 TR Ceiling Suspended Ductable Unit	Each	292600.00
e	17 TR Ceiling Suspended Ductable Unit	Each	424200.00
f	5.5 TR Floor Mounted Ductable Unit	Each	351700.00
g	8.5 TR Floor Mounted Ductable Unit	Each	363300.00
h	11 TR Floor Mounted Ductable Unit	Each	399000.00
i	17 TR Floor Mounted Ductable Unit	Each	570000.00
j	25 TR Floor Mounted Ductable Unit	Each	685000.00
<b>3</b>	<b>ACCESSORIES FOR PACKAGE AC</b>		
a	Supply and filling of R-22 Refrigerant Gas	KG	562.00
b	Supply and fixing of Copper Refrigerant Piping of 7/8" dia	RM	1020.00
c	Supply and fixing of Flexible Canvas Connection	Each	2720.00
d	Supply and fixing of 50mm thick Anti Vibrating Rubber Pads	Sqm.	534.00
e	Supply, Fabrication and erection of fabricated ducting made up of GI Sheets of 24 Gauge thickness	RM	834.00
f	Supply, Fabrication and erection of fabricated ducting made up of GI sheets of 22 Gauge thickness	Sqm.	1117.00
g	Supply, Fabrication and erection of fabricated ducting made up of GI sheets of 20 Gauge thickness	Sqm.	1389.00
h	Supply and fixing of extruded aluminum powder coated, Supply and return Air Grilles / Diffusers with Volume Control Damper	Sqm.	7775.00
i	Supply and fixing of water drain pipe line (1" PVC Pipe)	RM	63.00
j	Supply, fabrication and fixing of MS Channel for Mounting the Airconditioning Indoor Unit	Each	7194.00
k	Supply, fabrication and fixing of Ms Channel for Mounting the Airconditioning Outdoor Unit	RM	6123.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
l	Supply and providing of pipeline nitrle rubber insulation for Refrigerant and drain pipe lines.	RM	54.30
m	Supply and fixing of Duct Mouth Dampers	Set	2330.00
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.	827.00
o	Supply and providing thermal insulation of 9mm thick vidoflex with Aluminum Foil	Sqm.	806.00
p	Supply and providing Civil Concrete Block for Mounting the Airconditioning Unit	Each	693.00
q	Supply and laying of 30 sq.mm. incoming cable	RM	375.00
r	Supply and providing of 10 sq.mm. copper flexible single cable	RM	86.90
s	Supply and providing of 1.5 sq.mm. copper flexible cable	RM	19.40
t	Supply and providing of 0.5 sq.mm. 4 core flexible signal cable	RM	16.20
	New Items		
4	VARIABLE REFRIGERANT FLOW (VRF) AIR - CONDITIONING SYSTEM		
a	Invertor Scroll Compressor Modular VRF ODU		
i	34.0 HP	Each	755000.00
ii	32.0 HP	Each	718500.00
iii	30.0 HP	Each	673000.00
iv	28.0 HP	Each	630000.00
v	26.0 HP	Each	583100.00
vi	24.0 HP	Each	534200.00
vii	22.0 HP	Each	504700.00
viii	20.0 HP	Each	462000.00
ix	18.0 HP	Each	397800.00
x	16.0 HP	Each	354400.00
xi	14.0 HP	Each	342800.00
xii	12.0 HP	Each	311600.00
xiii	10.0 HP	Each	235000.00
xiv	8.0 HP	Each	226400.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
b	High ESP Duct (200 Pa / 220 Pa) with wired controller, No Drain Pump		
i	6.3 TR	Each	81000.00
ii	8.0 TR	Each	83700.00
iii	12.8 TR	Each	143100.00
iv	16.0 TR	Each	149800.00
c	Wall - Mounted Panel with Cordless Remote Controller		
i	0.63 TR	Each	17700.00
ii	0.80 TR	Each	18800.00
iii	1.03 TR	Each	21800.00
iv	1.28 TR	Each	22500.00
v	1.60 TR	Each	23600.00
vi	2.02 TR	Each	24100.00
5	SUPPLY AND FILLING REFRIGERANT GAS		
a	R 410 A	kg	600.00
b	R 407 C	kg	600.00
	REFRIGERANT PIPE		
a	36.90 mm	RM	1915.00
b	28.60 mm	RM	1750.00
c	22.20 mm	RM	1470.00
d	19.10 mm	RM	1120.00
e	15.90 mm	RM	1050.00
f	12.70 mm	RM	950.00
g	9.50 mm	RM	755.00
h	6.40 mm	RM	660.00
7	DRAIN PIPE		
a	25 mm	RM	165.00
b	32 mm	RM	198.00
c	40 mm	RM	242.00
d	50 mm	RM	286.00
8	Supply and fixing of Refnet Joint	Each	9020.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
9	<b>GENERATORS WITH STANDARD PANEL</b>		
a	5 KVA	Each	202100.00
b	7.5 KVA	Each	210900.00
c	10 KVA	Each	238500.00
d	15 KVA	Each	256300.00
e	20 KVA	Each	269500.00
f	30 KVA	Each	328000.00
g	35 KVA	Each	350200.00
h	40 KVA	Each	408700.00
i	45 KVA	Each	477300.00
j	62.5 KVA	Each	549000.00
k	82.5 KVA	Each	647500.00
l	100 KVA	Each	720000.00
m	125 KVA	Each	827600.00
n	160 KVA	Each	1124000.00
o	200 KVA	Each	1373000.00
p	250 KVA	Each	1546000.00
	New Item		
q	500 KVA	Each	3918000.00
10	<b>GENERATORS WITH AUTO MAIN FAILURE (AMF) PANEL</b>		
a	62.5 KVA	Each	659600.00
b	82.5 KVA	Each	757900.00
c	100 KVA	Each	941300.00
d	125 KVA	Each	1048000.00
e	160 KVA	Each	1345000.00
f	200 KVA	Each	1594000.00
g	250 KVA	Each	1767000.00
6	Exhaust Pipe with Silencer	RM	2177.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
11	<b>PASSENGER LIFTS (G+3)</b>		Higher End
	<b>SS 304 Grade with 1m/sec. speed with ARD</b>		
A	<b>8 Persons Passenger Lift Car Size (1300 x 1100)</b>		
a	Gearless Lift with Machine Room	Each	1500000.00
b	Gearless Lift without Machine Room	Each	1570000.00
B	<b>10 Persons Passenger Lift Car Size (1300 x 1350)</b>		
a	Gearless Lift with Machine Room	Each	1567000.00
b	Gearless Lift without Machine Room	Each	1643000.00
C	<b>13 Persons Passenger Lift Car Size (2000 x 1100)</b>		
a	Gearless Lift with Machine Room	Each	1745000.00
b	Gearless Lift without Machine Room	Each	1825000.00
D	<b>20 Persons Passenger Lift Car Size (2000 x 1500)</b>		
a	Gearless Lift with Machine Room	Each	2169000.00
b	Gearless Lift without Machine Room	Each	2305000.00
	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		
12	<b>BED-CUM-PASSENGER LIFTS (G+3)SS 304 Grade with 1m/sec. speed with ARD</b>		
A	<b>15 Persons Passenger Lift Car Size (1000 x 2400)</b>		Higher End
a	Gearless Lift with Machine Room	Each	1904000.00
b	Gearless Lift without Machine Room	Each	2025000.00
B	<b>20 Persons Passenger Lift Car Size (1300 x 2400)</b>		
a	Gearless Lift with Machine Room	Each	2275000.00
b	Gearless Lift without Machine Room	Each	2369000.00

Item No.	Description	Unit	Rates for the year 2021-22
C	<b>26 Persons Passenger Lift Car Size (1600 x 2400)</b>		
a	Gearless Lift with Machine Room	Each	2586000.00
b	Gearless Lift without Machine Room	Each	2787000.00
	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		
	New Items		
13	I PHASE UPS (Single Phase In & single phase Out)	<b>System with Battery Each</b>	
	CAPACITY	1 Hour Backup	2 Hours Backup
a	1 KVA	29500.00	39500.00
b	2 KVA	65000.00	85500.00
c	3 KVA	78500.00	135000.00
d	5 KVA	145000.00	200000.00
e	7.5 KVA	175000.00	228000.00
14	3 PHASE UPS (Three Phase In & Single Phase Out)	1 Hour Backup	2 Hours Backup
a	7.5 KVA	185000.00	237500.00
b	10 KVA	270000.00	360000.00
c	15 KVA	370000.00	446000.00
<b>XV</b>	<b>PART "O"</b>		
1	<b>GI STEEL TUBULAR POLE FOR STREET LIGHT</b>		
a	4 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	6350.00
	76.10mm OD x 3.65mm Thick x 4000mm Length		
b	4 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	7230.00
	76.10mm OD x 3.65mm Thick x 4000mm Length		
c	6 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	7590.00
	76.10mm OD x 3.65mm Thick x 6000mm Length		

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
d	6 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	8470.00
	76.10mm OD x 3.65mm Thick x 6000mm Length		
e	7 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	9730.00
	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		
f	7 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	10700.00
	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		
g	7.50 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	10870.00
	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		
h	7.50 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	12010.00
	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		
i	8 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	11190.00
	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		
j	8 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	12320.00
	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		



<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
k	8.50 Metre Length Single Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	11930.00
	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		
l	8.50 Metre Length Double Bracket Pole with Base Plate (250 x 250 x 6mm)	Each	13390.00
	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		
m	9 Metre Length Single Bracket Pole with Base Plate (300 x 300 x 6mm)	Each	11930.00
	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		
n	9 Metre Length Double Bracket Pole with Base Plate (300 x 300 x 6mm)	Each	13390.00
	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		
o	10 Metre Length Single Bracket Pole with Base Plate (300 x 300 x 6mm)	Each	15800.00
	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		
p	10 Metre Length Double Bracket Pole with Base Plate (300 x 300 x 6mm)	Each	16230.00
	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		
q	12 Metre Length Single Bracket Pole with Base Plate (300 x 300 x 6mm)	Each	18620.00
	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		

Item No.	Description	Unit	Rates for the year 2021-22
r	10 Metre Length Double Bracket Pole with Base Plate (300 x 300 x 6mm)	Each	20640.00
	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		
2	Octogonal post		
a	Supply erection of 8mm free standing single arm bracket 8 sided octogonally 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 octogonally 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 octogonally 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
	New Items		
3	Minimast (12 metre) with 6 Nos. 150W LED Fitting	Each	349800.00
4	Highmast (162 metre) with 8 Nos. 150W LED Fitting	Each	528100.00
5	<b>LIGHTNING ROD</b>		
a	Supply of Early Streamer Emission Air Terminal (ESEAT). Model: L	Each	73850.00

Item No.	Description	Unit	Rates for the year 2021-22
	<p>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 (<math>\Delta T_s</math>) obtained during the lab test for the offered model is 60 <math>\mu s</math>. 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 ).</p>		
	<p>ESEAT Model : L - Radius of protection : 86 Metres Level of protection considered for the Project-II level</p>		
b	<p>Supply of Early Streamer Emission Air Terminal (ESEAT). Model: S</p>	Each	65580.00
	<p>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 (<math>\Delta T_s</math>) obtained during the lab test for the offered model is 60 <math>\mu s</math>.</p>		
	<p>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 )</p>		

Item No.	Description	Unit	Rates for the year 2021-22
	ESEAT Model : S - Radius of protection : 46 Metres Level of protection considered for the Project-II level		
c	<b>MOUNTING STRUCTURE</b>		
	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	19680.00
d	<b>DOWN CONDUCTOR</b>		
	Supply and run of 25mm x 6mm GI Flat Down Conductor with necessary clamps / supports on wall / floor / ground for earth connection	Mtr	114.00
e	<b>TEST LINK</b>		
	Supply of Test Link Box for each Down conductor in order to disconnect the earth termination system to enable measurement of resistance	Each	4843.00
f	<b>EARTH ELECTRODE</b>		
	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	8938.00
g	<b>SURGE PROTECTION</b>		
	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	18780.00
	Model: PSV4-12.5/400TT (3 phase power network)		
<b>XVI</b>	<b>PART "P"</b>		
	<b>Conference type Public Address System, Projector and Motorized Screen</b>		Higher End
1	Chairman Unit	Each	15095.00
2	Delegate Unit	Each	13380.00
3	Conference Controller	Set	33475.00
4	PA Mixer Amplifier 120W	Set	20155.00
5	PA Mixer Amplifier 240W	Set	25860.00
6	PA Booster Amplifier 480W	Set	44660.00
7	Wall Speaker 15W	Each	8679.00
8	Wall Speaker 30W	Each	12615.00

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
9	Ceiling Speaker 15W	Each	2196.00
10	Ceiling Speaker 20W	Each	3394.00
11	Cordless Mic UHF	Each	20200.00
12	8 Pin Conference Mic socket with Modular Box and Front Plate	Each	330.90
13	2 Core 1.5 sq.mm Shielded Copper Speaker Wire	RM	40.90
14	8 Core 1.5 sq.mm PVC Copper Conference Cable	RM	157.00
15	3200 Ansi Lumens Projector, XGA (1024 x 768) Resolution, Contrast Ratio : 4000:1	Each	39180.00
16	3600 Ansi Lumens Projector, XGA (1024 x 768) Resolution, Contrast Ratio : 20000:1	Each	55740.00
17	3300 Ansi Lumens Short Throw Projector, WXGA (1280 x 800) Resolution, Contrast Ratio : 3000 : 1	Each	98200.00
18	6' x 4' Motorized Screen	Each	12089.00
19	8' x 6' Motorized Screen	Each	16220.00
20	10' x 8' Motorized Screen	Each	19480.00
21	3 Feet Ceiling Mount Kit	Each	4294.00
22	20 Metre HDMI Cable	Set	4252.00
23	3 Core 1.5 sq.mm PVC Power cable for Projector	RM	57.80
24	Unarmoured 0.5mm Telephone cable		
	2 Pair	RM	9.10
	4 Pair	RM	16.30
	10 Pair	RM	38.60
	20 Pair	RM	71.40
	50 Pair	RM	161.00
25	Armoured 0.5mm Jellyfilled Telephone Cable		
	10 Pair	RM	149.80
	20 Pair	RM	220.20
	50 Pair	RM	428.20
	100 Pair	RM	742.50
	200 Pair	RM	1382.00
26	Unarmoured Co-axial Cable for TV		
	RG-06	RM	23.40
	RG-11	RM	53.00
27	Armoured Co-Axial cable for TV		
	RG-06	RM	89.60
	RG-11	RM	127.40
28	Unarmoured LAN & CCTV Cable		
	CAT-6	RM	29.40

Item No.	Description	Unit	Rates for the year 2021-22
29	Armoured LAN & CCTV Cable		
	CAT-6	RM	105.00
30	Unarmoured Speaker Cable		
	2 Core - 1.00 sq.mm	RM	28.40
	2 Core - 1.5 sq.mm	RM	40.80
31	Armoured Speaker Cable		
	2 Core - 1.5 sq.mm	RM	84.60
	2 Core - 2.5 sq.mm	RM	105.00
32	OFC Cable		
	6 Core indoor	RM	54.00
	6 core outdoor	RM	59.00
	12 core indoor	RM	69.20
33	PoE Switches for CCTV IP camera		<b>Higher End</b>
	4 Port	Each	6158.00
	8 port	Each	8514.00
	24 Port	Each	19270.00
34	Network Video Recorder for CCTV		
	4 Channel - 1 SATA	Each	5569.00
	8 Chennel - 1 SATA (1 No. Hard disk)	Each	6426.00
	16 Chennel - 2 SATA (2 Nos. Hard disk)	Each	11776.00
	32 Chennel - 2 SATA (2 Nos. Hard disk)	Each	21410.00
35	LAN NETWORK SWITCHES		
I	Un Managed 10/ 100/1000		
	8 Port	Each	1981.00
	16 Port	Each	5194.00
	24 Port	Each	6373.00
II	Semi managed 10/100/1000		
	24 Port	Each	11988.00
III	Fully Managed 10/100/1000 Layer 2 with 1G Uplink		
	8 Port	Each	17129.00
	24 Port	Each	35339.00
	24 Port with Fibre port	Each	63185.00
	48 Port	Each	42820.00
IV	Fully Managed 10/100/1000 Layer 2 with 10G Uplink		
	24 Port	Each	38550.00
	28 Port	Each	49530.00
V	Fully Managed 10/100/1000 Layer 3 with 10G Uplink		
	24 Port	Each	112460.00
	24 Port with Fibre port	Each	128470.00
	48 Port	Each	208760.00
36	Media Convertor for optical fibre cable		
	Single mode	Each	5355.00
	Multi mode	Each	4819.00
37	I/O Socket		
	RJ-45	Each	161.10

Item No.	Description	Unit	Rates for the year 2021-22
	RJ-11	Each	64.20
	CAT 6 PVC Module Box	Each	64.20
	Face plate single socket RJ-45	Each	96.80
	Face plate dual socket RJ-45	Each	107.00
	Face plate quad socket RJ-45	Each	118.10
38	Hard Disk for NVR		<b>Higher End</b>
	2 TB	Each	5890.00
	4 TB	Each	12478.00
	6 TB	Each	16922.00
	8 TB	Each	24633.00
39	Rack with Accessories		<b>Higher End</b>
	2U Rack	Each	1927.00
	4U Rack	Each	2676.00
	6U Rack	Each	3211.00
	9U Rack	Each	4282.00
	12U Rack	Each	6423.00
	36U Rack	Each	21412.00
	42U Rack	Each	37470.00
	Fan extra for the above rack	Each	535.00
40	Patch Cord		<b>Higher End</b>
	1 Metre Length	Each	139.30
	2 Metre Length	Each	186.80
	3 Metre Length	Each	225.20
	24 Port Patch Panel - Unloaded	Each	2141.00
	24 Port Patch Panel - Fully loaded	Each	4016.00
	PART "Q"		
	HIRE CHARGES FOR TEMPORARY ARRANGEMENTS		
1	Metal Halide lamp		
a	1 day	Each	278.00
b	2 days	Each	350.00
c	3 days	Each	405.00
d	4 days	Each	456.00
e	5 days	Each	511.00
f	6 days	Each	556.00
g	7 days	Each	612.00
2	Generator	Starting & End day (Each)	Intermediate days (Each)
a	62.5 KVA	1,780.00	1424.00
b	125 KVA	3,673.00	2938.00
c	250 KVA	7,348.00	5878.00
d	320 KVA	8,795.00	7037.00
e	500 KVA	13,360.00	10685.00
3	Cable		
a	2 of 7/20 sq.mm	RM	2.12
b	4 of 7/20 sq.mm	RM	4.24
c	4 of 19/16 sq.mm	RM	11.65
d	4 of 7/16 sq.mm	RM	6.35

Item No.	Description	Unit	Rates for the year 2021-22
e	4 of 120 sq.mm	RM	56.15
f	3.5x 180 sq.mm LTUG	RM	22.25
g	4 of 185 sq.mm	RM	78.40
h	3 core flexible wire	RM	3.18
i	4 core flexible wire	RM	3.18
j	4 core 6 sq.mm copper cables	RM	6.35
k	4 x 10 sq.mm flexible cable	RM	6.35
l	2 of 3/ 20 sq.mm	RM	2.12
m	3 1/2 x 50 sq.mm LTUG	RM	11.65
n	Co- Axial cable	RM	1.06
4	<b>Serial set</b>		
a	2 days	RM	18.00
b	3 days	RM	26.50
5	Fly Catcher 2 days	Each	178.00
6	Air cooler with stand 2 days	Each	301.00
7	Air Circulator 2 days	Each	66.70
8	Pedestal fan	Each	44.50
9	LED Nose Light	Each	19.00
10	Earth pipe	Each	33.90
11	100A Change over switch	Each	167.40
12	250A Change over switch	Each	178.00
13	400A Change over switch	Each	222.00
14	250A Change over switch with Panel Board	Each	834.00
15	100A Panel Board with 100A TPN Switch & 5 No.s 30A TPN switch with bus bar	Each	863.00
16	250A Panel Board with 250A TPN Switch & 7 No.s 63A DPMCB switch	Each	1113.00
17	100A Panel Board incoming 100A TPN Switch with various range of TP/ DP/ SP MCB with suitable angle iron frame work	Each	823.00
18	200A Panel Board	Each	890.00
19	400A Panel Board	Each	1669.00
20	4'40 W Patty tube light with fitting	Each	26.40
21	15A/ 5A Plug board	Each	26.40
22	Blank post	Each	2060.00
23	6mtr GI post for metal Hallide fitting	Each	100.70
24	1.5 TR Split AC	Each	5567.00
25	2 TR Split AC	Each	7460.00
26	5 TR Split AC	Each	26275.00
27	7.5 TR Ductable AC	Each	38410.00
28	5 TR Slim pack	Each	26055.00
29	Air Curtain	Each	556.00
30	High power Audio sysytem	Each	50100.00



<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for the year 2021-22</b>
31	PA ssystem	Each	7794.00
32	Amplifier, Mic, XLR	Each	5567.00
33	2x15 HF 3 way speaker	Each	1780.00
34	1x15 HF Speaker	Each	1113.00
35	4x12 Loud speaker	Each	667.00
36	Car calling system Arrangement	Each	3340.00
37	Cordless Mic	Each	556.00
38	Wired Mic	Each	556.00
39	32 Channel mixer Amplifier	Each	667.00
40	Laptop to play CD Songs	Each	2226.00
41	5KVA with 1 Hour back up	Each	8350.00
42	Power Amplifier	Each	222.60
43	Sony Video Camera	Each	5567.00
44	42" Plasma Screen	Each	2783.00
45	Mixer Board, Computer, UPS, etc.,	Each	8900.00
46	200W LED Flood light fitting	Each	222.60
47	5TR Slim Package AC	Each	28170.00
Note:	The Basic Rate adopted under this Head, "Rates of Electrical Items of Works" 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 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 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 inco mer MCB/Isolator	No. of ways inco mer ELCB/ RCD	No.of outgoing ways	Higher End	Lower End
4 Ways 3 Phase DB	4	4	12	5404.00	4440.00
8 Ways 3 Phase DB	4	4	24	6850.00	5467.00
12 Ways 3 Phase DB	4	4	36	9134.00	6724.00

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

Description	No. of ways inco mer MCB/Isolator	No. of ways inco mer ELCB/ RCD	No.of outgoing ways	Hgher End
4 Ways 3 Phase DB	4	4	12	6525.00
8 Ways 3 Phase DB	4	4	24	8307.00
12 Ways 3 Phase DB	4	4	36	11045.00
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	10015.00

#### 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	Hgher End
4 Ways 3 Phase DB	4	4	12	10095.00
8 Ways 3 Phase DB	4	4	24	12185.00
12 Ways 3 Phase DB	4	4	36	16340.00

#### 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 outgoings 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 incomer MCB/Isolator	No. of ways incomer ELCB/RCD	No.of outgoing ways	Higher End	Lower End
				Rate in Rs.	Rate in Rs.
4 Ways 3 Phase DB	4	4	12	2262.00	1790.00
6 Ways 3 Phase DB	4	4	18	2785.00	2262.00
8 Ways 3 Phase DB	4	4	24	3340.00	2775.00
12 Ways 3 Phase DB	4	4	36	4933.00	3770.00

##### 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	Hgher End
4 Ways 3 Phase DB	4	4	12	2628.00
6 Ways 3 Phase DB	4	4	18	3225.00
8 Ways 3 Phase DB	4	4	24	3854.00
12 Ways 3 Phase DB	4	4	36	5875.00

### 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	Hgher End
4 Ways 3 Phase DB	4	4	12	6379.00
6 Ways 3 Phase DB	4	4	18	7678.00
8 Ways 3 Phase DB	4	4	24	8400.00
12 Ways 3 Phase DB	4	4	36	11597.00

### 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

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)		Higher End	Lower End
4 Way, MCCB + 12 Modules	Each	9045.00	16755.00
6 Way, MCCB + 18 Modules	Each	10450.00	18250.00
8 Way, MCCB + 24 Modules	Each	11390.00	19480.00
12 Way, MCCB + 36 Modules	Each	15170.00	20650.00
16 Way, MCCB + 48 Modules	Each	17920.00	23250.00

### 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 out going ways	Higher End
					Rate in Rupees
4 Ways 3 Phase DB	4	4	12	12	5310.00
6 Ways 3 Phase DB	4	4	12	18	6000.00
8 Ways 3 Phase DB	4	4	12	24	6693.00
12 Ways 3 Phase DB	4	4	12	36	8525.00

**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 incomer MCB/Isolator	No. of ways incomer ELCB/ RCD	No.of outgoing ways	Higher End	Lower End
4 Ways single Phase DB	2	2	2	889.00	581.00
8 Ways single Phase DB	2	2	6	1112.00	794.00
12 Ways single Phase DB	2	2	10	1339.00	1024.00

**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	Higher End	Lower End
4 Ways single Phase DB	2	2	2	1049.00	-
8 Ways single Phase DB	2	2	6	1237.00	-
12 Ways single Phase DB	2	2	10	1500.00	-

**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	Hgher End	
4 Ways single Phase DB	2	2	2	2680.00	
8 Ways single Phase DB	2	2	6	3140.00	
12 Ways single Phase DB	2	2	10	3619.00	

## **III (H) RATES FOR CONVEYANCE**



## CONVEYANCE

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

Size	Unloading from Railway wagons or loading into Railway	Loading into carts or lorries/ Tonne	Unloading from carts or lorries & stacking/ Tonne	Transport charges up to 8km or part thereof/ Tonne	Total/ Tonne
	2	3	4	5	6
1	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.
Up to 125 mm	325.00	213.53	213.53	178.69	930.75
Over 125 mm up to 200 mm	445.25	285.53	285.53	190.86	1207.16
Over 200 mm up to 350 mm	546.37	377.72	377.72	194.32	1496.13
Over 350 mm up to 500 mm	683.45	447.34	447.34	218.60	1796.73
Over 500 mm up to 700 mm	825.13	517.10	517.10	241.08	2100.41
Above 700mm	928.55	615.99	615.99	260.23	2420.75

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	13.81	15.56
Above 25 KM to 50 KM	10.04	11.80
Above 50 KM to 80 KM	8.79	10.48
Above 80 KM to 125 KM	6.59	8.72
Above 125 KM to 200 KM	6.59	6.59
Above 200 KM	4.33	4.33

**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. 36.85 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/	Unloading from carts or lorries & stacking/	Transport charges up to 8km or part thereof/	Total/
		Tonne	Tonne	Tonne	Tonne
1	2	3	4	5	6
	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.
Up to 350 mm	1227.59	849.87	849.87	444.19	3371.53
Over 350 mm up to 500 mm	1542.38	1007.30	1007.30	492.76	4049.73
Over 500 mm up to 700 mm	1861.62	1155.60	1155.60	544.80	4717.62
Above 700mm	2090.98	1394.01	1394.01	589.86	5468.85

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	31.19	34.65
Above 25 KM to 50 KM	22.34	26.86
Above 50 KM to 80 KM	19.27	24.17
Above 80 KM to 125 KM	15.19	19.33
Above 125 KM to 200 KM	15.19	15.19
Above 200 KM	10.74	10.74

### 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 36.85 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/	Loading into carts or lorries/	Unloading from carts or lorries & stacking/	Transport charges up to 8km or part thereof/	Total/
	Tonne	Tonne	Tonne	Tonne	Tonne
1	2	3	4	5	6
	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.
150 mm to 200 mm	251.79	193.32	193.32	204.68	843.10
Over 200 mm up to 350 mm	312.42	247.33	247.33	215.10	1022.18
Over 350 mm up to 500 mm	391.17	305.73	305.73	223.82	1226.44
Over 500 mm up to 700 mm	487.83	359.74	359.74	253.25	1460.57
Above 700mm	530.62	400.16	400.16	274.16	1605.10

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	11.86	15.88
Above 25 KM to 50 KM	7.97	12.05
Above 50 KM to 80 KM	6.65	10.92
Above 80 KM to 125 KM	6.65	8.72
Above 125 KM to 200 KM	6.65	6.65
Above 200 KM	4.40	4.40

**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/	Transport charges up to 8km or part thereof/	Total/
			Tonne	Tonne	Tonne
1	2	3	4	5	6
	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.
Up to 125 mm	166.35	148.30	148.30	312.25	775.21
Over 125 mm up to 200 mm	226.99	157.36	157.36	327.88	869.59
Over 200 mm up to 250 mm	258.56	193.32	193.32	373.01	1018.20
For 300 mm	278.76	202.31	202.31	383.43	1066.80
For 350 mm	278.76	224.82	224.82	388.64	1117.04
For 400 mm	289.98	249.55	249.55	414.69	1203.77
For 450 mm	321.42	278.76	278.76	438.98	1317.91
For 500 mm	341.76	307.96	307.96	452.78	1410.47
For 600 mm	375.42	352.97	352.97	485.80	1567.17
For 700 mm	391.17	361.98	361.98	487.56	1602.68

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	23.84	27.87
Above 25 KM to 50 KM	14.06	16.13
Above 50 KM to 80 KM	13.12	15.32
Above 80 KM to 125 KM	10.86	13.12
Above 125 KM to 200 KM	8.72	10.86
Above 200 KM	6.65	8.72

#### 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. 36.80/- 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/	Loading into carts or lorries/	Unloading from carts or lorries & stacking/	Transport charges up to 8km or part thereof/	Total/
	Tonne	Tonne	Tonne	Tonne	Tonne
1	2	3	4	5	6
	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.
50mm to 110mm OD	215.77	188.86	188.86	520.57	1114.06
125mm to 200mm OD	278.76	191.02	191.02	523.96	1184.76
Over 200mm to 315mm OD	283.29	251.79	251.79	563.88	1350.74
Over 315mm OD	287.75	258.48	258.48	612.47	1417.17

For every 1 KM or part thereof	Rate per Tonne in Rupees
Beyond 8 KM to 25 KM	44.94
Above 25 KM to 50 KM	30.00
Above 50 KM to 80 KM	26.30
Above 80 KM to 125 KM	19.64
Above 125 KM to 200 KM	15.25
Above 200 KM	10.86

**NOTE:**

- 1) For departmentally loading of PVC pipes and Specials (excluding transport charges) Up to 110 mm dia Rs. 3.50 each length (6 m)
- 2) For departmentally unloading of PVC pipes and Specials Up to 110 mm dia Rs. 3.50 each length (6 m)
- 3) a. For departmentally loading for remaining sizes of pipes Rs. 196.20 per 1 MT  
 b. For departmentally unloading for remaining sizes of pipes Rs. 196.20 per 1 MT
- 4) An extra rate of Rs. 38.81 / 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/	Loading into carts or lorries/	Unloading from carts or lorries & stacking/	Transport charges up to 8km or part thereof/	
	Tonne	Tonne	Tonne	Tonne	
					Total/
					Tonne
1	2	3	4	5	6
	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.
100 to 200 mm	312.43	204.54	204.54	284.51	1006.02
Over 200 to 350 mm	395.70	263.01	263.01	307.05	1228.77
Over 350 mm to 500 mm	496.82	316.95	316.95	333.09	1463.81

For every 1 KM or part thereof	Rate per Tonne in Rupees
Beyond 8 KM to 25 KM	19.84
Above 25 KM to 50 KM	12.05
Above 50 KM to 80 KM	13.18
Above 80 KM to 125 KM	8.72
Above 125 KM to 200 KM	6.65
Above 200 KM	4.40

**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. 38.90/ 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/	Loading into carts or lorries/	Unloading from carts or lorries & stacking/	Transport charges up to 8km or part thereof/	
	Tonne	Tonne	Tonne	Tonne	
					Total/
					Tonne
1	2	3	4	5	6
	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.	Rs. Ps.
Pig lead / Yarn	107.81	92.13	92.13	104.06	396.14

For every 1 KM or part thereof	Rate per Tonne in Rupees
Beyond 8 KM to 25 KM	11.87
Above 25 KM to 50 KM	10.04
Above 50 KM to 80 KM	8.79
Above 80 KM to 125 KM	6.65
Above 125 KM to 200 KM	6.65
Above 200 KM	4.40

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

Sl.No	Distance in Kilometre	Rate for 2021-22 in Rupees					
		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	<b>Co- efficient</b>	<b>1.00</b>	<b>1.10</b>	<b>1.60</b>	<b>1.35</b>	<b>1.80</b>	<b>2.25</b>
2	<b>Add for every extra 1 Km and part thereof.....</b>						
a	0 to 10 kms	13.92	15.28	22.26	18.78	25.04	31.28
b	10 to 20 kms	11.92	13.10	19.04	16.08	21.44	26.80
c	20 to 40 kms	10.26	11.28	16.40	13.80	18.44	23.04
d	40 to 80 kms	8.84	9.74	15.38	11.92	15.88	19.90
e	Above 80 kms	8.06	8.88	12.90	10.90	14.50	18.14

#### 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)]
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 column (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 materials 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

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

Sl.No	Distance in Kilometre	Rate for 2021-22 in Rupees					
		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
<b>1</b>	<b>Co efficient</b>	<b>1.00</b>	<b>1.10</b>	<b>1.60</b>	<b>1.35</b>	<b>1.80</b>	<b>2.25</b>
<b>2</b>	<b>Add for every extra 1Km and part there of</b>						
a	0 to 10 kms	6.96	7.64	11.13	9.39	12.52	15.64
b	10 to 20 kms	5.96	6.55	9.52	8.04	10.72	13.40
c	20 to 40 kms	5.13	5.64	8.20	6.90	9.22	11.52
d	40 to 80 kms	4.42	4.87	7.69	5.96	7.94	9.95
e	Above 80kms	4.03	4.44	6.45	5.45	7.25	9.07
3	Loading Charges	130.25	62.15	42.55	61.15	61.15	61.15
4	Unloading Charges	130.25	62.15	42.55	61.15	61.15	61.15
5	Add above extra for inter state works	26.20	28.75	42.10	35.35	47.25	59.35

**Note:**

1	The above rates do not include stacking charges [as per Circular Memo No.230 Wks.IV(2)/62-3 dated 10.6.1962 of Chief Engineer (General/ PWD)]
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 column (5) is for the pit measured quantity at the site of excavation only.
5	For conveyance of Lateriate, 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



<b>9) Rates for Conveyance of materials by Head load</b>					
Sl.No	Description of material	Unit	Rate for 2021-22 in Rupees		
			<b>LEAD</b>		<b>LIFT</b>
			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
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1	Rough Stone, Broken Stone Jelly, Cut Stone, RCC Slab, Sand - Cement Block, Wooden Scantling, Wooden plank	cu.m	116.30	48.30	12.50
2	Lime, Lime Stone, Laterite, Brick Jelly, Earth, Sand, Gravel, Surki, Pond Ash (wet/dry), Crushed Stone Sand, Stone Dust	cu.m	61.80	48.30	9.40
3	a) Mangalore Tiles	1000 Nos.	126.00	63.30	15.90
	b) Machine Pressed Tiles	2000 Nos.	126.00	63.30	15.90
	c) Hydraulic Pressed Mosaic Flooring Tiles	1500 Nos.	126.00	63.30	15.90
	d) Terrace Bricks, Flat Tiles and Pan Tiles	2500 Nos.	126.00	63.30	15.90
	e) Bricks	1000 Nos.	126.00	63.30	15.90
4	Cement, A.C. Sheet, Bitumen, Asphalt, Tar	M.T	114.80	63.30	12.50
5	Steel	M.T	193.00	77.60	15.90
<b>Note:</b>					
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/ PWD) 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**



**INFILTRATION WORKS**

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
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	78.80
	Second depth of 2 metres	One Cubic metre	125.10
	Third depth of 2 metres	One Cubic metre	180.70
	Fourth depth of 2 metres	One Cubic metre	251.80
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	639.50
	Second depth of 2 metres	One metre	1178.70
	Third depth of 2 metres	One metre	2477.80
	Fourth depth of 2 metres	One metre	4947.90
	Fifth depth of 2 metres	One metre	9742.90
	Sixth depth of 2 metres	One metre	19501.30
b.	For 1.2 metre dia Ring well (internal)		
	First depth of 2 metres	One metre	710.60
	Second depth of 2 metres	One metre	1421.20
	Third depth of 2 metres	One metre	2833.10
	Fourth depth of 2 metres	One metre	5307.90
	Fifth depth of 2 metres	One metre	9851.00
	Sixth depth of 2 metres	One metre	19680.50
c.	For 1.50 metre dia Ring well (internal)		
	First depth of 2 metres	One metre	821.80
	Second depth of 2 metres	One metre	1631.30
	Third depth of 2 metres	One metre	3228.60
	Fourth depth of 2 metres	One metre	6430.90
	Fifth depth of 2 metres	One metre	12843.30
	Sixth depth of 2 metres	One metre	25576.90

Schedule Item No.	Description	Unit	2021-22 Rate 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	934.60	1348.60
	Second depth of 2 metres	One metre	1572.60	2470.10
	Third depth of 2 metres	One metre	3143.60	4935.60
	Fourth depth of 2 metres	One metre	6205.40	9855.70
	Fifth depth of 2 metres	One metre	11812.90	18508.00
	Sixth depth of 2 metres	One metre	22179.90	34640.10
	Seventh depth of 2 metres	One metre	32543.80	47087.90
	Eighth depth of 2 metres	One metre	42912.40	59534.20
	Nineth depth of 2 metres	One metre	53271.70	71975.80
	Tenth depth of 2 metres	One metre	63638.70	84423.60
b.	For 1.25 metre dia (internal)			
	First depth of 2 metres	One metre	1218.80	1849.10
	Second depth of 2 metres	One metre	2443.80	3704.40
	Third depth of 2 metres	One metre	4876.90	7490.60
	Fourth depth of 2 metres	One metre	8743.40	13464.30
	Fifth depth of 2 metres	One metre	15455.50	23886.90
	Sixth depth of 2 metres	One metre	27908.00	43243.00
	Seventh depth of 2 metres	One metre	40351.10	62608.30
	Eighth depth of 2 metres	One metre	52800.50	81965.90
	Nineth depth of 2 metres	One metre	65256.00	101329.70
	Tenth depth of 2 metres	One metre	77700.80	120691.90
c.	For 2.0 metre dia (internal)			
	First depth of 2 metres	One metre	1897.00	3049.40
	Second depth of 2 metres	One metre	3781.60	6100.30
	Third depth of 2 metres	One metre	7547.80	12179.00
	Fourth depth of 2 metres	One metre	12066.30	22322.00
	Fifth depth of 2 metres	One metre	23585.70	40592.10

Schedule Item No.	Description	Unit	2021-22 Rate in Rupees	
			Ordinary soil (or) loose soil sandy soil	Silt (or) clay pocket
	Sixth depth of 2 metres	One metre	47160.50	75830.00
	Seventh depth of 2 metres	One metre	70730.70	111101.90
	Eighth depth of 2 metres	One metre	94304.00	146358.40
	Nineth depth of 2 metres	One metre	117880.40	181611.80
	Tenth depth of 2 metres	One metre	141450.60	216865.10
d.	For 2.5 metre dia (internal)			
	First depth of 2 metres	One metre	2391.30	3979.30
	Second depth of 2 metres	One metre	4974.20	7824.30
	Third depth of 2 metres	One metre	9943.70	15585.30
	Fourth depth of 2 metres	One metre	18518.80	28963.00
	Fifth depth of 2 metres	One metre	34479.40	53562.10
	Sixth depth of 2 metres	One metre	66586.10	100302.40
	Seventh depth of 2 metres	One metre	98686.60	147036.60
	Eighth depth of 2 metres	One metre	130791.70	193773.80
	Nineth depth of 2 metres	One metre	162892.20	240508.00
	Tenth depth of 2 metres	One metre	195001.90	287243.70
e.	For 3.00 metre dia (internal)			
	First depth of 2 metres	One metre	3089.60	5383.50
	Second depth of 2 metres	One metre	6126.60	10469.00
	Third depth of 2 metres	One metre	12239.30	20945.60
	Fourth depth of 2 metres	One metre	23622.70	39337.80
	Fifth depth of 2 metres	One metre	44149.70	73458.80
	Sixth depth of 2 metres	One metre	83682.10	128080.60
	Seventh depth of 2 metres	One metre	123213.00	182629.80
	Eighth depth of 2 metres	One metre	162742.30	237219.10
	Nineth depth of 2 metres	One metre	202270.10	291813.10
	Tenth depth of 2 metres	One metre	241804.00	346407.10
f.	For 3.50 metre dia (internal)			
	First depth of 2 metres	One metre	3931.50	6308.90
	Second depth of 2 metres	One metre	7646.60	12379.80
	Third depth of 2 metres	One metre	15259.30	24704.10
	Fourth depth of 2 metres	One metre	28572.20	46304.70

Schedule Item No.	Description	Unit	2021-22 Rate in Rupees	
			Ordinary soil (or) loose soil sandy soil	Silt (or) clay pocket
	Fifth depth of 2 metres	One metre	53379.80	88041.50
	Sixth depth of 2 metres	One metre	101139.70	163431.30
	Seventh depth of 2 metres	One metre	148894.90	238824.10
	Eighth depth of 2 metres	One metre	196659.40	314209.30
	Nineth depth of 2 metres	One metre	244416.20	389599.10
	Tenth depth of 2 metres	One metre	292177.70	464991.90
g.	For 4.00 metre dia (internal)			
	First depth of 2 metres	One metre	4495.30	7567.90
	Second depth of 2 metres	One metre	8655.40	14488.50
	Third depth of 2 metres	One metre	17249.00	28950.70
	Fourth depth of 2 metres	One metre	32395.50	54243.30
	Fifth depth of 2 metres	One metre	60589.30	101156.70
	Sixth depth of 2 metres	One metre	114874.30	191472.10
	Seventh depth of 2 metres	One metre	169157.80	281782.90
	Eighth depth of 2 metres	One metre	223439.70	372104.50
	Nineth depth of 2 metres	One metre	277760.30	461797.30
	Tenth depth of 2 metres	One metre	332012.90	545754.50
h.	For 4.50 metre dia (internal)			
	First depth of 2 metres	One metre	5366.60	9050.90
	Second depth of 2 metres	One metre	10524.60	18002.80
	Third depth of 2 metres	One metre	21127.90	35930.00
	Fourth depth of 2 metres	One metre	36745.60	67380.10
	Fifth depth of 2 metres	One metre	63694.30	125996.70
	Sixth depth of 2 metres	One metre	118462.80	209946.10
	Seventh depth of 2 metres	One metre	173416.70	293895.50
	Eighth depth of 2 metres	One metre	228285.70	377846.40
	Nineth depth of 2 metres	One metre	283143.80	462421.40
	Tenth depth of 2 metres	One metre	338006.60	552736.80
i.	For 5.00 metre dia (internal)			
	First depth of 2 metres	One metre	6656.40	11227.40
	Second depth of 2 metres	One metre	12990.00	20836.00
	Third depth of 2 metres	One metre	25841.00	41605.50

Schedule Item No.	Description	Unit	2021-22 Rate in Rupees	
			Ordinary soil (or) loose soil sandy soil	Silt (or) clay pocket
	Fourth depth of 2 metres	One metre	48489.00	81476.20
	Fifth depth of 2 metres	One metre	87554.90	152254.80
	Sixth depth of 2 metres	One metre	171212.30	288488.70
	Seventh depth of 2 metres	One metre	254866.70	424724.20
	Eighth depth of 2 metres	One metre	338519.50	560959.70
	Nineth depth of 2 metres	One metre	422180.00	697196.70
	Tenth depth of 2 metres	One metre	505838.90	833433.70
j.	For 6.00 metre dia (internal)			
	First depth of 2 metres	One metre	9568.40	15647.10
	Second depth of 2 metres	One metre	18548.10	30260.60
	Third depth of 2 metres	One metre	35234.80	60490.40
	Fourth depth of 2 metres	One metre	69437.70	113341.90
	Fifth depth of 2 metres	One metre	129789.10	211415.20
	Sixth depth of 2 metres	One metre	246024.40	400014.00
	Seventh depth of 2 metres	One metre	362276.60	588609.70
	Eighth depth of 2 metres	One metre	478514.90	777206.90
	Nineth depth of 2 metres	One metre	594759.40	965799.50
	Tenth depth of 2 metres	One metre	710997.80	1154396.80
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	



<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
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	91.10
	Second depth of 2 m	One cubic metre	129.80
	Third depth of 2 m	One cubic metre	190.00
	Fourth depth of 2 m	One cubic metre	254.90
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	1703.90
	Second depth of 2 m	One cubic metre	2408.30
	Third depth of 2 m	One cubic metre	3613.20
	Fourth depth of 2 m	One cubic metre	5243.00
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	2833.10
	Second depth of 2 m	One cubic metre	3937.60
	Third depth of 2 m	One cubic metre	6151.30
	Fourth depth of 2 m	One cubic metre	9205.30
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	1980.40
	Second depth of 2 m	One cubic metre	2640.00
	Third depth of 2 m	One cubic metre	4112.20
	Fourth depth of 2 m	One cubic metre	7109.10

Schedule Item No.	Description	Unit	2021-22 Rate 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	
	<b>Pipe laying works</b>		
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	271.90
ii	225 mm dia stoneware pipes	One metre	333.70
iii	300 mm dia stoneware pipes	One metre	390.80
iv	350 mm dia stoneware pipes	One metre	452.60
v	375 mm dia stoneware pipes	One metre	562.30
vi	450 mm dia stoneware pipes	One metre	579.30
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	200.80
	315 mm dia (OD) PVC pipes	One metre	309.00

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
c	Refilling gallery trench and filter basins with clean excavated sand free from silt and clay	One cubic metre	21.50
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	281.10
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	1396.50
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	529.90
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	359.90
e.	Cost of hard granite metal of size (B.S.S.) 6 mm to 12 mm filter media (machine crushed)	One cubic metre	1897.00
	(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.		

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	(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.		
	(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.		

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
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	13.40
	100 mm dia C.I Pipes and Specials	One metre	15.00
	125 mm dia C.I Pipes and Specials	One metre	19.80
	150 mm dia C.I Pipes and Specials	One metre	27.20
	200 mm dia C.I Pipes and Specials	One metre	32.90
	250 mm dia C.I Pipes and Specials	One metre	38.20
	300 mm dia C.I Pipes and Specials	One metre	41.30
	350 mm dia C.I pipes and specials	One metre	52.50
	400 mm dia C.I pipes and specials	One metre	61.60
	450 mm dia C.I pipes and specials	One metre	71.20
	500 mm dia C.I pipes and specials	One metre	78.00
	600 mm dia C.I pipes and specials	One metre	95.50
	700 mm dia C.I pipes and specials	One metre	122.80
	750 mm dia C.I pipes and specials	One metre	138.90
	800 mm dia C.I pipes and specials	One metre	158.50
	900 mm dia C.I pipes and specials	One metre	187.50
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	14.10
	100 mm dia D.I Pipes and Specials	One metre	15.80
	125 mm dia D.I Pipes and Specials	One metre	20.10
	150 mm dia D.I Pipes and Specials	One metre	27.20
	200 mm dia D.I Pipes and Specials	One metre	33.50
	250 mm dia D.I Pipes and Specials	One metre	39.30
	300 mm dia D.I Pipes and Specials	One metre	43.70
	350 mm dia D.I pipes and specials	One metre	54.40
	400 mm dia D.I pipes and specials	One metre	61.60

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	450 mm dia D.I pipes and specials	One metre	74.10
	500 mm dia D.I pipes and specials	One metre	78.50
	600 mm dia D.I pipes and specials	One metre	96.30
	700 mm dia D.I pipes and specials	One metre	119.50
	750 mm dia D.I pipes and specials	One metre	133.70
	800 mm dia D.I pipes and specials	One metre	160.00
	900 mm dia D.I pipes and specials	One metre	189.10
	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.		
b	Lowering GI pipes and specials in the trenches and laying to proper grade and alignment, jointing with GI Specials and as directed by the TWAD Officers		
	15mm to 40mm dia	One metre	17.40
	50mm to 65mm dia	One metre	17.40
	80mm to 100mm dia	One metre	23.40
	125mm to 150mm dia	One metre	23.40
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.		
	For depth upto 2 m		
	80 mm dia C.I. Pipes and specials	One metre	14.70
	100mm dia C.I. Pipes and specials	One metre	17.10
	125 mm dia C.I. Pipes and specials	One metre	19.80
	150 mm dia C.I. Pipes and specials	One metre	27.20
	200 mm dia C.I. Pipes and specials	One metre	29.70
	250 mm dia C.I. Pipes and specials	One metre	46.80
	300 mm dia C.I. Pipes and specials	One metre	49.70
	350 mm dia C.I. Pipes and specials	One metre	64.60
	400 mm dia C.I. Pipes and specials	One metre	69.40

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	450 mm dia C.I. Pipes and specials	One metre	81.70
	500 mm dia C.I.pipes and specials	One metre	89.30
	600 mm dia C.I.pipes and specials	One metre	109.10
	700 mm dia C.I.pipes and specials	One metre	126.40
	800 mm dia C.I.pipes and specials	One metre	138.90
	825 mm dia C.I.pipes and specials	One metre	158.80
	900 mm dia C.I.pipes and specials	One metre	176.00
	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	42.80
	400 mm Dia	One metre	51.50
	450 mm Dia	One metre	56.80
	500 mm Dia	One metre	59.20
	600 mm Dia	One metre	73.60
	700 mm Dia	One metre	97.50
	900 mm Dia	One metre	139.30
	1000 mm Dia	One metre	179.60
	1050 mm Dia	One metre	188.00
	1100 mm Dia	One metre	194.50
	1200 mm Dia	One metre	200.10
	1400 mm Dia	One metre	305.50
	1600 mm Dia	One metre	412.70
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	20%	

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
8a	Joining 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	550.70
	100 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	684.30
	125 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	891.70
	150 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	1027.30
	200 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	1426.00
	250 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	1959.30
	300 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	2205.00
	350 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	2745.00
	400 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	3261.40
	450 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	4344.80
	500 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	4718.60
	600 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	5962.90
	700 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	6503.50
	750 mm dia C.I/ D.I - S/S pipes and specials	Each Joint	8110.90
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	15%	
8b	Joining 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	44.40
	100 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	59.70
	125 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	60.70
	150 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	63.70
	200 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	73.00
	250 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	105.50
	300 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	118.90



Schedule Item No.	Description	Unit	2021-22 Rate in Rupees
	350 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	131.90
	400 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	151.90
	450 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	229.70
	500 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	249.70
	600 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	335.40
	700 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	396.70
	750 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	491.50
	800 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	639.40
	900 mm dia C.I/ D.I-S/S pipes and specials	Each Joint	973.40
	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 with IS-638(1979) and M.S. bolts and nuts of IS 1364-1 (2002), including cost of jointing materials such as bolt and nuts Rubber insertion and labour charges etc.. complete.		
	For depth upto 2m		
	For works above water level		
	80 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	161.60
	100 mm dia C.I./D.I. Double flanged pipes and specials	Each Joint	276.40
	125 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	287.40
	150 mm dia C.I./D.I. Double flanged pipes and specials	Each Joint	463.10
	200 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	520.20
	250 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	735.00
	300 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	825.80
	350 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	1065.60
	400 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	1603.40
	450 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	1836.20

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	500 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	2243.50
	600 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	3150.10
	700 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	3215.00
	750 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	3306.50
	800 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	3320.10
	900 mm dia C.I/ D.I Double flanged pipes and specials	Each Joint	3915.00
	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	334.90
	100 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	498.80
	125 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	556.10
	150 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	794.30
	200 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	915.90
	250 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	1251.10
	300 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	1380.30
	350 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	1710.40

Schedule Item No.	Description	Unit	2021-22 Rate in Rupees
	400 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	2350.80
	450 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	2616.50
	500 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	3073.30
	600 mm dia C.I/ D.I Double flanged Pipes and specials	Each Joint	4327.10
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	10%	
	4m to 6m	15%	
8e	Joining 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	139.30
	100mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	143.90
	125mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	187.10
	150mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	215.60
	200mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	339.50
	250mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	401.70
	300mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	469.70
	350mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	572.20
	400mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	654.80
	450mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	806.20
	500mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	906.10
	600mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	1123.40
	700mm dia C.I/ D.I-S/S Pipes and Specials	Each Joint	1232.30
	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		

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	150mm dia R.C.C. Pipes and Specials	One metre	44.50
	200mm dia R.C.C. Pipes and Specials	One metre	46.80
	250mm dia R.C.C. Pipes and Specials	One metre	59.50
	300mm dia R.C.C. Pipes and Specials	One metre	69.40
	350mm dia R.C.C. Pipes and Specials	One metre	86.70
	400mm dia R.C.C. Pipes and Specials	One metre	94.10
	450mm dia R.C.C. Pipes and Specials	One metre	109.10
	500mm dia R.C.C. Pipes and Specials	One metre	126.40
	600mm dia R.C.C. Pipes and Specials	One metre	146.30
	700mm dia R.C.C. Pipes and Specials	One metre	163.70
	750mm dia R.C.C. Pipes and Specials	One metre	171.00
	800mm dia R.C.C. Pipes and Specials	One metre	208.40
	900mm dia R.C.C. Pipes and Specials	One metre	245.50
	1000mm dia R.C.C. Pipes and Specials	One metre	282.80
	1100mm dia R.C.C. Pipes and Specials	One metre	330.00
	1200mm dia R.C.C. Pipes and Specials	One metre	367.30
	1300mm dia R.C.C. Pipes and Specials	One metre	404.40
	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		
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	240.50
	200mm dia R.C.C. Pipes and Specials	Each Joint	295.10
	250mm dia R.C.C. Pipes and Specials	Each Joint	362.30
	300mm dia R.C.C. Pipes and Specials	Each Joint	407.00
	350mm dia R.C.C. Pipes and Specials	Each Joint	436.90
	400mm dia R.C.C. Pipes and Specials	Each Joint	471.50
	450mm dia R.C.C. Pipes and Specials	Each Joint	553.30
	500mm dia R.C.C. Pipes and Specials	Each Joint	610.70
	600mm dia R.C.C. Pipes and Specials	Each Joint	727.30
	700mm dia R.C.C. Pipes and Specials	Each Joint	846.40

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	750mm dia R.C.C. Pipes and Specials	Each Joint	893.80
	800mm dia R.C.C. Pipes and Specials	Each Joint	928.40
	900mm dia R.C.C. Pipes and Specials	Each Joint	1054.80
	1000mm dia R.C.C. Pipes and Specials	Each Joint	1079.80
	1100mm dia R.C.C. Pipes and Specials	Each Joint	1181.60
	1200mm dia R.C.C. Pipes and Specials	Each Joint	1310.70
	1300mm dia R.C.C. Pipes and Specials	Each Joint	1449.80
	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	255.50
	200mm dia R.C.C. Pipes	Each steel collar	320.10
	250mm dia R.C.C. Pipes	Each steel collar	379.60
	300mm dia R.C.C. Pipes	Each steel collar	439.20
	350mm dia R.C.C. Pipes	Each steel collar	498.80
	400mm dia R.C.C. Pipes	Each steel collar	518.70
	450mm dia R.C.C. Pipes	Each steel collar	650.20
	500mm dia R.C.C. Pipes	Each steel collar	727.30
	600mm dia R.C.C. Pipes	Each steel collar	868.80
	700mm dia R.C.C. Pipes	Each steel collar	1037.60
	800mm dia R.C.C. Pipes	Each steel collar	1194.10

Schedule Item No.	Description	Unit	2021-22 Rate in Rupees
	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	22.10
	100mm dia AC/ GRP Pipes	One metre	29.70
	125mm dia AC/ GRP Pipes	One metre	44.50
	150mm dia AC/ GRP Pipes	One metre	49.60
	200mm dia AC/ GRP Pipes	One metre	66.70
	250mm dia AC/ GRP Pipes	One metre	81.70
	300mm dia AC/ GRP Pipes	One metre	104.10
	350mm dia AC/ GRP Pipes	One metre	116.30
	400mm dia AC/ GRP Pipes	One metre	133.90
	450mm dia AC/ GRP Pipes	One metre	156.30
	500mm dia AC/ GRP Pipes	One metre	186.00
	600mm dia AC/ GRP Pipes	One metre	223.40
	700mm dia AC/ GRP Pipes	One metre	275.40
	NOTE: For depth between	% excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	
11b (i)	Lowering <b>PVC/ DWSC</b> 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	10.20
	50mm to 75mm dia (OD) PVC pipe	One metre	17.30
	90mm to 110mm dia (OD) PVC pipe	One metre	17.40
	125mm to 160mm dia (OD) PVC pipe	One metre	24.60
	180mm to 250mm dia (OD) PVC pipe	One metre	32.00
	Over 250mm to 315mm dia (OD) PVC pipe	One metre	45.80

Schedule Item No.	Description	Unit	2021-22 Rate in Rupees
	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	14.70
	90mm to 110mm dia (OD) HDPE pipe	One metre	14.70
	125mm to 160mm dia (OD) HDPE pipe	One metre	20.70
	180mm to 250mm dia (OD) HDPE pipe	One metre	26.60
	Over 250mm to 315mm dia (OD) HDPE pipe	One metre	38.60
	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	116.30
	400mm diameter	One metre	136.20
	450mm diameter	One metre	158.60
	500mm diameter	One metre	186.00
	600mm diameter	One metre	225.50
	700mm diameter	One metre	253.20
	800mm diameter	One metre	275.40
	900mm diameter	One metre	300.20
	1000mm diameter	One metre	327.50
	1100mm diameter	One metre	352.50
	1200mm diameter	One metre	407.00
	1300mm diameter	One metre	451.70
	1400mm diameter	One metre	518.70
	1500mm diameter	One metre	575.70
	NOTE: For depth between	Percentage excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
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	1238.80
	400mm diameter	Each collar	1449.80
	450mm diameter	Each collar	1660.80
	500mm diameter	Each collar	1869.20
	600mm diameter	Each collar	2279.00
	700mm diameter	Each collar	2899.70
	800mm diameter	Each collar	3115.50
	900mm diameter	Each collar	3530.30
	1000mm diameter	Each collar	4146.20
	1100mm diameter	Each collar	4565.40
	1200mm diameter	Each collar	5188.80
	1300mm diameter	Each collar	5819.30
	NOTE: For depth between	% excess allowed over basic rate	
	2m to 4m	15%	
	4m to 6m	30%	
11e	Testing of pipes for water supply 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	63.50
	125mm	One metre	74.80
	150mm	One metre	84.00
	200mm	One metre	102.70
	250mm	One metre	128.80
	300mm	One metre	156.90
	350mm	One metre	184.90



<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	400mm	One metre	214.90
	450mm	One metre	246.70
	500mm	One metre	300.90
	600mm	One metre	358.90
	700mm	One metre	456.00
	750mm	One metre	532.60
	900mm	One metre	614.80
	1050mm	One metre	792.50
	1200mm	One metre	996.20
12a	Cutting C.I. Pipes true to axis and filing smoothly and finishing the ends complete		
	80mm dia CI pipes	Each cutting	44.50
	100mm dia CI pipes	Each cutting	49.60
	125mm dia CI pipes	Each cutting	61.80
	150mm dia CI pipes	Each cutting	69.40
	175mm dia CI pipes	Each cutting	81.70
	200mm dia CI pipes	Each cutting	111.40
	250mm dia CI pipes	Each cutting	141.30
	300mm dia CI pipes	Each cutting	158.60
	350mm dia CI pipes	Each cutting	201.00
	375mm dia CI pipes	Each cutting	248.20
	400mm dia CI pipes	Each cutting	260.40
	450mm dia CI pipes	Each cutting	280.10
	500mm dia CI pipes	Each cutting	310.00
	525mm dia CI pipes	Each cutting	374.60
	600mm dia CI pipes	Each cutting	382.30
	675mm dia CI pipes	Each cutting	456.60
	700mm dia CI pipes	Each cutting	481.50
	750mm dia CI pipes	Each cutting	496.50
	800mm dia CI pipes	Each cutting	521.20
	825mm dia CI pipes	Each cutting	568.30
	850mm dia CI pipes	Each cutting	595.70
	900mm dia CI pipes	Each cutting	610.70
12b	Cutting A.C. Pipes true to axis and finishing the ends complete		
	80mm dia AC pipes	Each cutting	17.10
	100mm dia AC pipes	Each cutting	19.80
	125mm dia AC pipes	Each cutting	22.10

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	150mm dia AC pipes	Each cutting	27.20
	200mm dia AC pipes	Each cutting	36.90
	250mm dia AC pipes	Each cutting	59.50
	300mm dia AC pipes	Each cutting	61.80
	350mm dia AC pipes	Each cutting	74.30
	400mm dia AC pipes	Each cutting	91.50
	450mm dia AC pipes	Each cutting	104.10
	500mm dia AC pipes	Each cutting	119.10
	600mm dia AC pipes	Each cutting	136.20
	700mm dia AC pipes	Each cutting	151.20
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	5.70
	90mm dia PVC pipes	Each cutting	8.70
	110mm dia PVC pipes	Each cutting	8.70
	125mm dia PVC pipes	Each cutting	8.70
	140mm dia PVC pipes	Each cutting	8.70
	160mm dia PVC pipes	Each cutting	14.70
	180mm dia PVC pipes	Each cutting	17.60
	200mm dia PVC pipes	Each cutting	17.60
	250mm dia PVC pipes	Each cutting	20.70
	315mm dia PVC pipes	Each cutting	23.50
12d.	Cutting and Threading of GI pipes		
a.i	15mm dia GI pipe, Cutting	Each	8.10
ii.	15mm dia GI pipe, Threading	Each	11.50
b.i	20mm dia GI pipe, Cutting	Each	8.10
ii.	20mm dia GI pipe, Threading	Each	11.70
c.i	25mm dia GI pipe, Cutting	Each	9.70
ii.	25mm dia GI pipe, Threading	Each	24.20
d.i	32mm dia GI pipe, Cutting	Each	11.70
ii	32mm dia GI pipe, Threading	Each	32.70
e.i	40mm dia GI pipe, Cutting	Each	15.80
ii	40mm dia GI pipe, Threading	Each	36.80
f.i	50mm dia GI pipe, Cutting	Each	20.30
ii.	50mm dia GI pipe, Threading	Each	40.90
g.i	65mm dia GI pipe, Cutting	Each	22.00
ii	65mm dia GI pipe, Threading	Each	49.40
h.i	80mm dia GI pipe, Cutting	Each	28.70

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
ii.	80mm dia GI pipe, Threading	Each	62.20
i.i	100mm dia GI pipe, Cutting	Each	40.90
ii.	100mm dia GI pipe, Threading	Each	82.40
j.i.	125mm dia GI pipe, Cutting	Each	43.60
j.ii.	125mm dia GI pipe, Threading	Each	87.40
13	Cutting R.C.C. Pipes true to axis and finishing the ends complete		
	150mm dia R.C.C. Pipes	Each cutting	61.80
	200mm dia R.C.C. Pipes	Each cutting	69.40
	250mm dia R.C.C. Pipes	Each cutting	89.30
	300mm dia R.C.C. Pipes	Each cutting	116.30
	350mm dia R.C.C. Pipes	Each cutting	121.40
	400mm dia R.C.C. Pipes	Each cutting	156.00
	450mm dia R.C.C. Pipes	Each cutting	171.00
	500mm dia R.C.C. Pipes	Each cutting	190.90
	600mm dia R.C.C. Pipes	Each cutting	213.30
	650mm dia R.C.C. Pipes	Each cutting	223.40
	700mm dia R.C.C. Pipes	Each cutting	245.50
	750mm dia R.C.C. Pipes	Each cutting	253.20
	800mm dia R.C.C. Pipes	Each cutting	277.90
	900mm dia R.C.C. Pipes	Each cutting	295.10
	1000mm dia R.C.C. Pipes	Each cutting	317.80
	1100mm dia R.C.C. Pipes	Each cutting	339.90
	1200mm dia R.C.C. Pipes	Each cutting	364.70
	1300mm dia R.C.C. Pipes	Each cutting	379.60
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.		
	For depth upto 2m		
	80mm dia C.I. Pipes	Each	1149.50
	100mm dia C.I. Pipes	Each	1442.20
	125mm dia C.I. Pipes	Each	1884.00
	150mm dia C.I. Pipes	Each	2375.70

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	200mm dia C.I. Pipes	Each	3314.20
	250mm dia C.I. Pipes	Each	4555.70
	300mm dia C.I. Pipes	Each	5796.90
	350mm dia C.I. Pipes	Each	6564.20
	400mm dia C.I. Pipes	Each	8386.40
	450mm dia C.I. Pipes	Each	9136.30
	500mm dia C.I. Pipes	Each	10251.00
	600mm dia C.I. Pipes	Each	12542.70
	700mm dia C.I. Pipes	Each	13692.00
	750mm dia C.I. Pipes	Each	15713.00
	800mm dia C.I. Pipes	Each	17746.40
	825mm dia C.I. Pipes	Each	21045.90
	900mm dia C.I. Pipes	Each	25676.40
	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	665.20
	100mm dia AC. Pipes	Each	786.80
	125mm dia AC. Pipes	Each	990.20
	150mm dia AC. Pipes	Each	1268.40
	200mm dia AC. Pipes	Each	1779.90
	250mm dia AC. Pipes	Each	2276.40
	300mm dia AC. Pipes	Each	2835.10
	350mm dia AC. Pipes	Each	3113.30
	375mm dia AC. Pipes	Each	3502.80
	400mm dia AC. Pipes	Each	3709.00
	450mm dia AC. Pipes	Each	3788.40
	500mm dia AC. Pipes	Each	4160.90

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	600mm dia AC. Pipes	Each	4843.50
	700mm dia AC. Pipes	Each	5965.80
	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	339.90
	75mm dia (OD) PVC Pipes	Each	426.80
	90mm dia (OD) PVC Pipes	Each	568.30
	110mm dia (OD) PVC Pipes	Each	690.10
	125mm dia (OD) PVC Pipes	Each	819.20
	140mm dia to 160mm dia (OD) PVC Pipes	Each	1010.40
	180mm dia to 200mm dia (OD) PVC Pipes	Each	1548.20
	250mm dia to 280mm dia (OD) PVC Pipes	Each	1886.80
	315mm dia (OD) PVC Pipes	Each	2102.60
	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		
	For depth upto 2m		
	150mm dia RCC Pipes	Each	1847.10
	200mm dia RCC Pipes	Each	2596.80

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
	250mm dia RCC Pipes	Each	3227.50
	300mm dia RCC Pipes	Each	3833.10
	350mm dia RCC Pipes	Each	4538.20
	375mm dia RCC Pipes	Each	5392.40
	400mm dia RCC Pipes	Each	5806.80
	450mm dia RCC Pipes	Each	6492.10
	500mm dia RCC Pipes	Each	7224.60
	525mm dia RCC Pipes	Each	8222.70
	600mm dia RCC Pipes	Each	8446.10
	650mm dia RCC Pipes	Each	9424.40
	700mm dia RCC Pipes	Each	9613.00
	800mm dia RCC Pipes	Each	10608.60
	900mm dia RCC Pipes	Each	11718.40
	1000mm dia RCC Pipes	Each	12810.80
	1100mm dia RCC Pipes	Each	13957.80
	1200mm dia RCC Pipes	Each	15065.10
	1300mm dia RCC Pipes	Each	15805.10
	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 crete and pouring the cement slurry mixed with use of hard crete 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	12152.80
	Upto 1000mm dia PSC pipes	Each	9714.60
	Upto 800mm dia PSC pipes	Each	5665.50
	Upto 700mm dia PSC pipes	Each	5593.20
	Upto 600mm dia PSC pipes	Each	5526.40
	Upto 500mm dia PSC pipes	Each	5355.00

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
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 crete into the stepped collar including cost of jointing materials such as cement, yarn, bolt and nuts, MS washers, RI sheet and hard crete etc. but excluding cost of step collar and as directed by TWAD Officers		
	For 500mm dia AC pipe	Each	4049.00
	For 600mm dia AC pipe	Each	4451.10
	For 700mm dia AC pipe	Each	5062.10
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.		
	<b>Slow Sand / Rapid Sand Filter Works</b>		
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	131.30
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	248.20

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
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	21.60
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	24.40
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	29.50
<b>DRAINAGE WORKS</b>			
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	78.70
2	63mm	Joint	98.00
3	75mm	Joint	117.30
4	90mm	Joint	142.60
5	110mm	Joint	172.30
6	125mm	Joint	196.10



<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>2021-22 Rate in Rupees</b>
7	140mm	Joint	219.80
8	160mm	Joint	249.50
9	180mm	Joint	288.20
10	200mm	Joint	319.40
11	225mm	Joint	360.90
12	250mm	Joint	401.00
13	280mm	Joint	447.10
14	315mm	Joint	503.50
15	355mm	Joint	567.40
16	400mm	Joint	640.20
17	450mm	Joint	718.90
18	500mm	Joint	799.10
19	560mm	Joint	923.90
20	630mm	Joint	1056.10
<b>18</b>	Jointing of mechanical joint collar, nuts, gasket and fixing in position as directed by departmental officers.		
1	100mm	Joint	99.50
2	150mm	Joint	242.10
3	200mm	Joint	249.50
4	250mm	Joint	368.40
5	400mm	Joint	775.40
6	450mm	Joint	855.60
7	600mm	Joint	1568.50
19	Disjointing if GI pipes as directed by the departmental officers		
1	upto 80mm	Each	65.40
2	Above 80mm	Each	86.20
20	Welding of GI pipes as directed by the departmental officers for the sizes		
1	upto 80mm	One welding Joint	210.90
2	Above 80mm	One welding Joint	242.10

Note: The Basic rates 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)**

1	2	3	4	5	6	7	8	9	10	Labour for Laying and jointing				15	16	17	18	19	20				
										Mason I Class (769.00)	Fitter II Class (660.00)	Mazdoor Category I (502.00)	Mazdoor Category II (412.00)										
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.) (5960-20+118.4=6058)	Quantity of sand in cubic metres for 50 mortar joints	Cost of sand required for 50 mortar joints at Rs. Per cum (447+ 276.4 = 723)	Quantity of spun of tarred yarn in Kg	Cost of yarn at Rs. 13.00/ Kg	Total cost of materials (Total of columns 5,7,& 9)	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	272.61	0.04	28.92	3.63	47.19	348.72	2	1538	1	660	5	2130	2	824	5152	5500.72	264.95	288.09	6053.76	201.79
150	60	750	68	411.94	0.07	50.61	5.45	70.85	533.40	3	2307	2	1320	6	2556	3	1236	7419	7952.40	456.82	390.26	8799.48	293.32
200	60	1043	98	593.68	0.08	57.84	6.90	89.70	741.22	4	3076	2	1320	6	2556	3	1236	8188	8929.22	635.28	393.61	9958.11	331.94
225	60	1185	104	630.03	0.10	72.3	8.17	106.21	808.54	5	3845	3	1980	7	2982	5	2060	10867	11675.54	864.33	455.58	12995.45	433.18
250	60	1375	115	696.67	0.11	79.53	8.35	108.55	884.75	5	3845	3	1980	7	2982	5	2060	10867	11751.75	1002.91	470.66	13225.32	440.84
300	60	2180	150	908.7	0.15	108.45	11.34	147.42	1164.57	6	4614	3	1980	12	5112	6	2472	14178	15342.57	1590.07	599.63	17532.27	584.41
375	60	2425	318	1926.44	0.28	202.44	18.14	235.82	2364.70	7	5383	3	1980	14	5964	7	2884	16211	18575.70	2050.48	673.32	21299.51	709.98

Note 1. For other diametre 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 baling charges, baling 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.



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



**EARTH EXCAVATION OTHER THAN PIPE LAYING WORKS  
AND OPEN WELLS**

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
	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	70.70
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	64.50
3	Slush and silt under water upto 0.75 metre depth requiring the aid of baskets and vessels SS 20 B	Cu.m	80.70
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	16.40
4a	7.50 cm to 15cm thick	Sq.m	19.90
5	Sectioning during forming bunds when earth moving machinery, lorries and rollers are used for consolidation.	Cu.m	12.00
6	Hard stiff clay, stiff black cotton, hard red earth, shales, murrum, gravel, stoney earth and earth mixed with small size boulders SS 20A	Cu.m	102.90
7	Hard stiff clay, stiff black cotton, hard red earth, shales, murrum, gravel, stoney earth and earth mixed with small size boulders SS 20B	Cu.m	96.60
8	Soft disintegrated rock, laterite, soft rock or kankar, not requiring blasting	Cu.m	143.90
9	In loose boulders in excavation of various sizes 150mm to 625mm	Cu.m	228.50
10	Medium Rock and Dense Medium Rock not requiring blasting	Cu.m	252.70
11	Extra for every additional 10 metres lead or part thereof over the initial lead	Cu.m	11.70

12	Extra for every additional 1 metre lift or part thereof over the initial lift	Cu.m	9.30
13	Breaking clods, consolidating and sectioning	Cu.m	5.75
14	Breaking clods, consolidating and sectioning the earth scooped by bull dozers	Cu.m	17.80.
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	19.80
b)	By power roller including hire charges	Cu.m	33.60
16	Benching old embankment slopes 45cm x 45cm	Sq.m	3.65
17	Puddle wall work	Cu.m	159.60
18	Turfing in slopes including watering and fixing with initial lead upto 50m.	Sq.m	33.60
19a	Refilling with excavated sand complying with standard specification for filling in foundation and basement	Cu.m	29.50
19.b	Refilling with excavated soil (other than sand) complying with the standard specification for filling in foundation and basement	Cu.m	33.60
20	<b>QUARRYING AND BLASTING</b>		
a)	Hard rock measured in solid including blasting and stacking	Cu.m	683.00
b)	Removing hard rock by wedging chiselling and trimming to proper shape where blasting is prohibited.	Cu.m	1365.00
c)	Medium rock and dense medium rock requiring blasting	Cu.m	348.00
d)	Extra for every additional 10 metres lead or part thereof over the initial lead for blasted materials	Cu.m	8.15
e)	Extra for every additional 1 metre lift or part thereof over the initial lift of 2 m for blasted materials	Cu.m	8.40
f)	Benching hard rock upto an average 10cm depth	Sq.m	661.00
g)	Drilling holes in hard granite 32mm diameter	RM	185.00

h)	Drilling holes in hard granite 40mm diameter	RM	218.00
i)	Drilling holes in hard granite 45mm diameter	RM	256.00
j)	Drilling holes in hard granite 50mm diameter	RM	307.00
k)	Drilling holes in hard granite 75mm diameter	RM	349.00

The following foot note is applicable for the classifications of soils come under " Quarrying and blasting" and "Earth Work"

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, abutments, 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, trial pits and pits for poles, towers and toe walls for revetment 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 drains, channels, contour trenches and canals having bed width 1.25 m and below. The extra percentage is applicable only 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 drains, channels and canals having bed width 1.25m to 2.00m. 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 baling charges are to be paid as per actual in case baling is done departmentally or at actual plus 10 percent extra in case baling is done by other agencies. However for estimate purpose baling 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.

h 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.

h 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)

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



<b>EARTH WORK EXCAVATION FOR PIPE LAYING WORKS FOR WATER SUPPLY AND SEWERAGE WORKS</b>			
<b>Schedule item No</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
1	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	161.25
b	Hard stiff clay, stiff black cotton, hard red earth, shales, murrum gravel, stoney earth and earth mixed with small size boulders and hard gravelly soil.SS20B	One cubic metre	241.50
<b>II</b>	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	287.80
b	In Medium rock and dense medium rock not requiring blasting.	Cum	505.40
c	In Medium rock and Dense medium rock requiring blasting.	Cum	696.00
d	In hard rock including blasting, removal and stacking.	Cum	1366.00
<b>III</b>			
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 TWAD Board Officers.	Cum	721.00

Schedule item No	Description	Unit	Rates for 2021-22 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 open blasting is prohibited and as directed by TWAD Board Officers.	Cum	1318.00

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



**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	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				241.5
					Cost of refilling				33.60
					Cost of loose soil				161.25
CI/DI/	80	0.75	1.05	0.79	0.098	0.780	190.79	127.39	26.21
MS	100	0.75	1.05	0.79	0.118	0.777	190.79	127.39	26.11
	125	0.75	1.05	0.79	0.144	0.771	190.79	127.39	25.91
	150	0.75	1.05	0.79	0.170	0.765	190.79	127.39	25.70
	200	0.80	1.10	0.88	0.222	0.841	212.52	141.90	28.26
	250	0.80	1.20	0.96	0.274	0.901	231.84	154.80	30.27
	300	0.80	1.35	1.08	0.326	0.997	260.82	174.15	33.50
	350	0.90	1.45	1.31	0.378	1.193	316.37	211.24	40.08
	400	0.90	1.55	1.40	0.429	1.251	338.10	225.75	42.03
	450	1.00	1.70	1.70	0.480	1.519	410.55	274.13	51.04
	500	1.00	1.85	1.85	0.532	1.628	446.78	298.31	54.70
	525	1.00	1.85	1.85	0.532	1.628	446.78	298.31	54.70
AC CI 15	80	0.75	1.05	0.79	0.104	0.779	190.79	127.39	26.17
	100	0.75	1.05	0.79	0.124	0.775	190.79	127.39	26.04
	125	0.75	1.05	0.79	0.151	0.770	190.79	127.39	25.87
	150	0.75	1.05	0.79	0.178	0.763	190.79	127.39	25.64
	200	0.80	1.10	0.88	0.235	0.837	212.52	141.90	28.12
	250	0.80	1.20	0.96	0.286	0.896	231.84	154.80	30.11
	300	0.80	1.35	1.08	0.340	0.989	260.82	174.15	33.23
	350	0.90	1.45	1.31	0.396	1.162	316.37	211.24	39.04
	400	0.90	1.55	1.40	0.452	1.235	338.10	225.75	41.50
	450	1.00	1.70	1.70	0.502	1.502	410.55	274.13	50.47
	500	1.00	1.85	1.85	0.559	1.605	446.78	298.31	53.93
AC CI 10	80	0.75	1.05	0.79	0.104	0.779	190.79	127.39	26.17
	100	0.75	1.05	0.79	0.124	0.775	190.79	127.39	26.04
	125	0.75	1.05	0.79	0.149	0.770	190.79	127.39	25.87
	150	0.75	1.05	0.79	0.175	0.763	190.79	127.39	25.64
	200	0.80	1.10	0.88	0.229	0.839	212.52	141.90	28.19
	250	0.80	1.20	0.96	0.281	0.898	231.84	154.80	30.17
	300	0.80	1.35	1.08	0.333	0.993	260.82	174.15	33.36
	350	0.90	1.45	1.31	0.389	1.186	316.37	211.24	39.85
	400	0.90	1.55	1.40	0.436	1.246	338.10	225.75	41.87
	450	1.00	1.70	1.70	0.486	1.515	410.55	274.13	50.90



Type	Pipe size in mm	Bed Width	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.
	500	1.00	1.85	1.85	0.541	1.620	446.78	298.31	54.43
PVC/ HDPE/ GRP	40	0.60	1.05	0.63	0.040	0.629	152.15	101.59	21.13
	50	0.60	1.05	0.63	0.050	0.628	152.15	101.59	21.10
	63	0.60	1.05	0.63	0.063	0.627	152.15	101.59	21.07
	75	0.60	1.05	0.63	0.075	0.626	152.15	101.59	21.03
	90	0.60	1.05	0.63	0.090	0.624	152.15	101.59	20.97
	110	0.60	1.05	0.63	0.110	0.621	152.15	101.59	20.87
	125	0.60	1.05	0.63	0.125	0.618	152.15	101.59	20.76
	140	0.60	1.05	0.63	0.140	0.615	152.15	101.59	20.66
	160	0.60	1.05	0.63	0.160	0.610	152.15	101.59	20.50
	180	0.75	1.05	0.79	0.180	0.760	190.79	127.39	25.54
	200	0.80	1.10	0.88	0.200	0.850	212.52	141.90	28.56
PSC/ BWSC	350	0.90	1.45	1.31	0.464	1.136	316.37	211.24	38.17
	400	0.90	1.55	1.40	0.514	1.188	338.10	225.75	39.92
	450	1.00	1.70	1.70	0.564	1.450	410.55	274.13	48.72
	500	1.00	1.85	1.85	0.614	1.554	446.78	298.31	52.21
GI	15	0.75	1.05	0.79	0.020	0.787	190.79	127.39	26.44
	20	0.75	1.05	0.79	0.030	0.787	190.79	127.39	26.44
	25	0.75	1.05	0.79	0.030	0.787	190.79	127.39	26.44
	32	0.75	1.05	0.79	0.040	0.786	190.79	127.39	26.41
	40	0.75	1.05	0.79	0.050	0.786	190.79	127.39	26.41
	50	0.75	1.05	0.79	0.060	0.786	190.79	127.39	26.41
	65	0.75	1.05	0.79	0.070	0.784	190.79	127.39	26.34
	80	0.75	1.05	0.79	0.090	0.781	190.79	127.39	26.24
	100	0.75	1.05	0.79	0.110	0.778	190.79	127.39	26.14
	125	0.75	1.05	0.79	0.140	0.772	190.79	127.39	25.94
	150	0.75	1.05	0.79	0.160	0.767	190.79	127.39	25.77

Note:

(i) For Earth work excavation for loose soil SS-20B and ordinary soil SS-20B

a) with bed width less than 1.25m and depth more than 2.00m, the quantities may be worked out separately with extra cost as per note (d) of IV (B) & additional lift charges may be adopted

b) with bed width more than 1.25m, the quantities may be worked out separately with extra cost as per note (e) of IV (B) & additional lift charges may be adopted for depth more than 2.00m

(ii) For 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).

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



**RATES FOR MISCELLANEOUS WORKS**

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
	<b>PLUMBING</b>		
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	17.80
	40 mm to 50 mm dia	One metre	17.80
	65 mm to 150 mm dia	One metre	23.80
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	496.50
	6" Casing Pipes	Each	526.20
	8 " Casing Pipes	Each	578.40
2	Labour for cutting open road for laying water mains or sewer.		
a.	B.T. Roads (or) Maccadam road	One cu.m	729.00
b.	Concrete Roads	One cu.m	1020.90
3	Labour for drilling, cutting, Threading and Fixing Ferrules in distribution pipes.		
	10 mm dia	Each	76.20
	15 mm dia	Each	95.50
	20mm dia	Each	119.90
	25 mm dia	Each	141.80
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	2677.40
5	Drilling holes in C.I./G.I. Dummy Flanges.		
	12 mm dia	Each	26.70
	15 mm dia	Each	53.80
	20 mm dia	Each	77.90
	22 mm dia	Each	104.90
	25 mm dia	Each	131.80

Schedule Item No.	Description	Unit	Rates for 2021-22 in Rupees
6	Labour for refilling with sand the socket hollows of pipes including conveyance and stacking	One cu.m	26.70
	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 / DI/ MS Pipes in vertical direction for service reservoir pipe connection		
	0 to 2 m	Qtl	226.50
	2 to 4 m	Qtl	341.10
	4 to 6 m	Qtl	535.00
	6 m to 8 m	Qtl	739.90
	8 m to 10 m	Qtl	944.80
	10 m to 12 m	Qtl	1147.00
	12 m to 14 m	Qtl	1357.10
	14 m to 16 m	Qtl	1545.90
	16 m to 18 m	Qtl	1750.40
	18 m to 20 m	Qtl	1955.10
	20 m to 22 m	Qtl	2154.80
	22 m to 24 m	Qtl	2356.60
	<b>DRILLING WORKS</b>		
	<b>Using Hand Bore set</b>		
	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	854.40
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	1004.90

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
c	<b>Using Hand Bore set (For Investigation purpose)</b>		
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	636.10
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	745.40
	<b>Using Calyx Drill</b>		
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	3198.00
ii.	For Plain area	One metre	2642.30
e	Drilling 4 1/2" dia meter bores by using In-Well rig in Hilly areas	One metre	1345.80
f	Reaming from 6" Pilot bore to 12" size bore as directed by the TWAD Board Officers	One metre	351.30
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	336.50
9 a	Driving sheet piles for one metre length of gallery each side in sandy soil		
i.	First depth of 2 m	One metre	663.50
ii	Second depth of 2 m	One metre	1013.10
iii	Third depth of 2 m	One metre	1902.70
b	Removing sheet piles from one metre length of gallery on each side including stacking the sheet piles properly		
i.	First depth of 2 m	One metre	103.20
ii	Second depth of 2m	One metre	158.00
iii	Third depth of 2 m	One metre	229.40
10	Drilling of borwell inside well 115mm dia.		
	a) Vertical	One metre	734.50
	b) Horizontal	One metre	805.60
11	Drilling of borewell inside well 150mm dia.		
	a) Vertical	One metre	919.60
	b)Horizontal	One metre	972.00

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
12	Drilling of Borewells anywhere in Tamilnadu including transportation from one place to another with in 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	1536.10
ii	From 60 m upto 90 m Depth ending from ground level	One metre	1663.60
iii	From 90 m upto 120 m Depth ending from ground level	One metre	1763.80
iv	From 120 m upto 150 m Depth ending from ground level	One metre	1857.30
v	From 150 m upto 180 m Depth ending from ground level	One metre	1886.20
vi	From 180 m upto 210 m Depth ending from ground level	One metre	1947.30
vii	From 210 m upto 240 m Depth ending from ground level	One metre	2003.40
viii	From 240 m upto 270 m Depth ending from ground level	One metre	2073.10
ix	From 270 m upto 300 m Depth ending from ground level	One metre	2119.00
x	From 300 m upto 330 m Depth ending from ground level	One metre	2169.90
xi	From 330 m upto 360 m Depth ending from ground level	One metre	2215.80
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	385.70
ii	From 60 m depth and upto 90 mt depth ending below ground level	One metre	409.50
iii	From 90 m upto 120 mt depth ending below ground level	One metre	436.70
iv	From 120 m upto 150 mt depth ending below ground level	One metre	443.50

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
v	From 150 m upto 180 mt depth ending below ground level	One metre	463.90
vi	From 180 m upto 210 mt depth ending below ground level	One metre	487.70
vii	From 210 m upto 240 mt depth ending below ground level	One metre	509.80
viii	From 240 m upto 270 mt depth ending below ground level	One metre	528.50
ix	From 270 m upto 300 mt depth ending below ground level	One metre	557.40
x	From 300 m upto 330 mt depth ending below ground level	One metre	579.40
xi	From 330 m upto 360 mt depth ending below ground level	One metre	599.80
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	433.30
ii	From 60 m depth and upto 90 mt depth ending below ground level	One metre	458.80
iii	From 90 m upto 120 m depth ending below ground level	One metre	487.70
iv	From 120 m upto 150 m depth ending below ground level	One metre	503.00
v	From 150 m upto 180 m depth ending below ground level	One metre	520.00
vi	From 180 m upto 210 m depth ending below ground level	One metre	559.10
vii	From 210 m upto 240 m depth ending below ground level	One metre	638.90
viii	From 240 m upto 270 m depth ending below ground level	One metre	655.90
ix	From 270 m upto 300 m depth ending below ground level	One metre	671.20
x	From 300 m upto 330 m depth ending below ground level	One metre	693.30
xi	From 330 m upto 360 m depth ending below ground level	One metre	710.30
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	594.70
ii	From 60 m depth and upto 90 m depth ending below ground level	One metre	666.10



<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
iii	From 90 m upto 120 m depth ending below ground level	One metre	710.30
iv	From 120 m upto 150 m depth ending below ground level	One metre	752.80
v	From 150 m upto 180 m depth ending below ground level	One metre	783.40
vi	From 180 m upto 210 m depth ending below ground level	One metre	805.40
vii	From 210 m upto 240 m depth ending below ground level	One metre	824.10
viii	From 240 m upto 270 m depth ending below ground level	One metre	863.20
ix	From 270 m upto 300 m depth ending below ground level	One metre	895.50
x	From 300 m upto 330 m depth ending below ground level	One metre	939.70
xi	From 330 m upto 360 m depth ending below ground level	One metre	972.00
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.		
i.	150 mm dia Casing Pipes assembly	One metre	346.30
ii	200 mm dia Casing Pipes assembly	One metre	346.30
iii	250 mm dia Casing Pipes assembly	One metre	352.20
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	335.70
ii	200 mm dia Casing Pipes assembly	One metre	346.30
iii	250 mm dia Casing Pipes assembly	One metre	346.30

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
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	2263.90
	Note : I) 150 mm dia bore, reaming should be done upto 300mm dia. II) 200 mm dia bore, reaming should be done upto 300mm dia and thereafter 400,450 etc.		
14	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 60 m depth ending below ground level.	One metre	1119.80
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	316.10
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	284.10
d.	Labour Charges for inserting PVC casing pipes assembly (with slots or without slots) in the drilled hole including the jointing the pipes with PVC couplers with cement paste etc. complete		
i.	140 mm OD PVC Casing Pipes Assembly	One metre	243.00
ii	165 mm/168 mm dia PVC Casing pipes Assembly	One metre	284.10
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	1760.70

Schedule Item No.	Description	Unit	Rates for 2021-22 in Rupees
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 within 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	2155.10
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	645.60
ii	Conveyance 10 to 20 Kms		810.20
ii	Conveyance 20 to 40 Kms		987.40
iv	Conveyance above 40 Kms		1144.40
	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	1144.10
ii	Above 40 m	Each	1305.20
c.	Erection of shallow well hand pumps	Each	505.00
d.	Erection Extra deep well hand pumps	Each	1477.30
e.	Removal of deep well hand pumps from borewell		
i.	Up to 40 m	Each	1144.10
ii	Above 40 m	Each	1441.70
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	1215.00
ii)	Above 30 M	Each	1420.60

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
16 a	Erection of filter point with G.I. Pipes of 32 mm to 65 mm dia.	Each	330.30
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	548.90
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 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	7391.80
ii	Above 3 HP upto 7.5 HP	Each	9514.10
iii	Above 7.5 HP to 20 HP	Each	11148.80
iv	Above 20HP to 30 HP	Each	12477
v	Above 30 HP to 40 HP	Each	16164
vi	Above 40Hp to 50HP	Each	22543.5
17 b	ERECTION OF POWER PUMPS IN BORE WELL		
	Erection of power pumps in borewell 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	9888.00
ii	Above 3 HP upto 7.5 HP	Each	11553.20

Schedule Item No.	Description	Unit	Rates for 2021-22 in Rupees
iii	Beyond 7.5 HP upto 20 HP	Each	13210.00
	Note : If depth of erection exceeds beyond 30 m 10% increase over the basic rate is allowed		
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 trail run for 10 days.		
i.	Upto 5 HP	Each	10051.10
ii)	Above 5.00 HP to 10.00 HP	Each	11517.60
iii)	Above 10.00 HP to 20.00 HP	Each	12778.40
iv	Above 20HP to 30 HP	Each	13895.5
v	Above 30 HP to 40 HP	Each	17706.90
vi	Above 40Hp to 50HP	Each	23394.8
17 d	Conveyance of power pumpset (centrifugal, jet and submersible) and its accessories from divisional stores to site of works.		
	Conveyance upto 10 Kms	Each Power Pump and its accessories	1405.30
	Conveyance 10 to 20 Kms	-do-	1544.60
	Conveyance 20 to 40 Kms	-do-	2286.40
	Conveyance 40 to 60 Kms	-do-	2787.90
	Conveyance 60 to 80 Kms	-do-	3659.00
	Conveyance above 80 Kms	-do-	4195.90
	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.		
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	5.70

Schedule Item No.	Description	Unit	Rates for 2021-22 in Rupees
b	Sheet piles (For dingham)	Per Pile/Per day	8.80
c	Compartment sheet with Grills (3' - 0" Wide)	Per sheet/Per day	8.80
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	2263.60
ii)	300/250 Cfm (100 PSI)	1 hour (or) Part there of	1760.70
ii)	125 Cfm (100 PSI)	1 hour (or) Part there of	1613.10
	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	8.60
f	Hand test pump	Per day/8 hours	81.80
g	Pile hammer	Per day/8 hours	8.60
h	Concrete mixer 5 Cft. With driver (Excluding cost of fuel)	Per day/8 hours	772.50
i.	Concrete mixer 7 Cft. With driver (Excluding cost of fuel)	Per day/8 hours	1165.80
j	Hand operated winch	Per day/8 hours	76.10
k	Pile cap	Per day/8 hours	20.40
l	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	233.20
ii)	Hire charges for Diesel Pump set for 5 HP	Per Hour	296.50
iii)	Hire charges for Diesel Pump set for 7.5 HP	Per Hour	405.80
iv)	Hire charges for Diesel Pump set for 10 HP	Per Hour	520.00
v)	Hire charges for Diesel Pump set for 12.5 HP	Per Hour	599.20
vi)	Hire charges for Diesel Pump set for 15 HP	Per Hour	673.40
vii)	Hire charges for Diesel Pump set for 20 HP	Per Hour	821.80
viii)	Hire charges for Diesel Pump set for 40 HP	Per Hour	1380.50
ix)	Hire charges for Diesel Pump set for 50 HP	Per Hour	1642.40
x)	Hire charges for Diesel Pump set for 60 HP	Per Hour	1939.30
xi)	Hire charges for Diesel Pump set for 70 HP	Per Hour	2246.10
m	Hire charges for Centrifugal slugde removal pumpset with fuel and crew charges including transportations, fixing and dismantling		

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
(i)	Upto 2HP	Per Hour	213.30
(ii)	Above 2HP to 5HP	Per Hour	277.30
19 a	Labour for tying barbed wire fencing horizontally through the holes in RCC posts with required tension.	One metre	8.80
b	Labour for tying barbed wire fencing vertically with required tension	One metre	8.80
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	461.30
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.	1834.70
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 Assistant 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.	1KM	3950
<b>23</b>	<b>Dismantling</b>		
	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	59.20
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	19.65
iii	Mud / sun dried brick walls under 3 m high	cu.m	39.65

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
iv	Mud / sun dried brick walls, add for every additional 3 m or part thereof over the initial height of 3 m	cu.m	11.25
v	Brick / stone masonry in lime mortar walls under 3 m high	cu.m	181.10
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	20.00
vii	Brick / stone masonry in Cement mortar walls under 3 m high	cu.m	221.90
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	23.45
ix	Terracing work in roof or floor	sqm	60.10
x	Flag stone in roof or floor including lifting	sqm	31.70
xi	Cut stone slab over culverts upto 3.3.m height below ground level	cu.m	925.00
xii	Cut stone slab over culverts over 3.3.m height below ground level	cu.m	964.00
xiii	Removal of cut stone slabs / RCC Cover slabs	sqm	402.00
xiv	Refixing cut stone slabs/ RCC Cover slab	sqm	441.00
xv	Pantile or Mangalore tiled roof without roof timbers	sqm	15.60
xvi	Flat and Pan tiles or Mangalore tiles over flat tiles, without roof timbers	sqm	21.85
xvii	Asbestos cement sheets roofing without roof timbers	sqm	13.90
xviii	Corrugated iron sheet roofing over pan tiles, without roof timbers	sqm	23.45
xix	Old Thatched roof, including tying materials into small bundles for reuse	sqm	6.75
xx	Wrought and put up framed timbers in roofs / floors	cu.m	581.00
xxi	Doors and windows including removal of frames, hinges and fastenings	sqm	120.40
xxii	Drystone apron or revetment, stacking within 40m lead	cu.m	103.10
xxiii	Grouted stones apron or revetment, stacking within 40 m lead	cu.m	120.40
xxiv	Dry stone masonry walls	cu.m	87.80
xxv	*Dismantling lime concrete	cu.m	278.00
xxvi	*Dismantling plain cement concrete	cu.m	381.00
xxvii	*Dismantling reinforced cement concrete	cu.m	5800.00



Schedule Item No.	Description	Unit	Rates for 2021-22 in Rupees
	Note * 1) The rate for dismantling lime concrete, cement concrete and R.C. concrete are exclusive of baling out water charges. The rate is same in all floors. 2) For dismantling 0.70m below ground level 25% extra over the basic rates (i.e. the rates already available in the schedule of rate) for dismantling is allowed. 3) Add 25% extra for cause of restricted partial dismantling in existing structures where extra care is required for safeguarding the main structure		
xxviii	Dismantling RCC using deploying machineries	cu.m	3550.00
xxix	Chipping of concrete and roughening the surface	sqm	31.70
xxx	Pressed tiles & weathering course	sqm	36.10
xxxi	One course of pressed tile roof finish in Cement Mortar	sqm	20.00
xxxii	One course of terrace bricks roof finish in Cement Mortar	sqm	23.40
xxxiii	Two course of flat tiles roof finish in Cement Mortar	sqm	23.40
xxxiv	Mosaic-in-situ finish in cement mortar in flooring and in wall surface	sqm	49.60
xxxv	Floor finish and dadoing walls in Cement Mortar with mosaic tiles/ glazed tiles/ cuddapah slabs.	sqm	47.80
xxxvi	Clearing the site		
a	Clearing Heavy jungle	sqm	6.75
b	Clearing Light jungle	sqm	5.05
c	Clearing Scrub jungle	sqm	4.70
d	Uprooting and removing large palmyrah/ coconut stumps	each	138.80
e	Uprooting and removing small palmyrah/ coconut stumps	each	99.70
f	Removing weeds in channel and drain	sqm	1.80
g	Cleaning juliflora jungle with uprooting	sqm	7.70
h	Cleaning juliflora jungle without uprooting	sqm	5.85
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 Circumference of 30 cm and more will be measured for payment. The Sl. No d, is for Stumps of Diametre above 30 cm and Sl. No. e is for stumps of diametre 15 to 30 cm.			
<b>24.OPEN WELL EXCAVATION</b>			
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	64.50

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
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	96.30
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	148.40
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	238.90
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	358.00
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	700.00
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	100.00
8	Sinking well in sand, including bailing or pumping charges if necessary etc. complete - First depth of 2 metres	Cu.m	140.40

Schedule Item No.	Description	Unit	Rates for 2021-22 in Rupees
9	Sinking well in hard stiff clay, light black cotton soil, hard red earth, shales, murrum, 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	140.40

**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 baling 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.

Note: Sinking of wells

- a) For sinking of weklls 20% excess will be allowed over the basic rates for wells of diameter 3m and above
- b) For well sinking for rates upto 12m depth, the progress should be y, 2y, 4y, 6y, 8y and 10y and for rates beyond 12m depth the progress should be 13y 16y, 19y and so on
- c) The rates of sinking wells will apply when sinking is under water at the initial depth itself. If water is met with at a lower depth, the rate applicable for open excavation shall be adopted upto the depth at which the water is met with. Beyond that, the rate for the portion under water shall be the rate for the previous stage under open well excavation plus 2y
- d) Schematic working sheet for openwell excavation for sinking of wells and open well excavation for deriving the rates is given below

Open well	Depth in meters	Sinking of wells
x	2	y
2x	4	2y
3x	6	4y
4x	8	6y
5x	10	8y
6x - 12m	12	10y
8x	14	13y
10x and so on	16	16y and so on

Note: x - Basic rate for open well excavation

Note: y- Basic rate for sinking well

<b>25.RATE FOR EARTH WORK BY DEPLOYING MACHINERIES</b>			
<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
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	50.00
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	3.95
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	29.50
b.	Having width of 3 m – 10 m	Cu.m	36.25
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	42.10
<b>26</b>	<b>Lift charges - concrete - Brick or stone Masonry above or below ground level</b>		
	<b>Note:</b> 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)		
	<b>Statement I</b>		
a)	<b>Concrete above ground level</b>		
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	103.30

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
2	Add for works in every upper floor over the rate of preceding floor	Cu.m	203.50
b)	<b>Brick or stone masonry above ground level</b>		
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	68.00
ii.	Add for works in every upper floor over the rate of preceding floor	Cu.m	137.20
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)		
	<b>Statement II</b>		
a)	<b>Concrete below ground level</b>		
1	Add the basic rate for works above 1.5m depth and upto 4.5m depth below ground level	Cu.m	101.70
2	Add the basic rate for works above 4.5m depth and upto 9.0 m depth below ground level	Cu.m	204.00
3	Add extra over the above item 2 for every additional 4.5m depth beyond 9m depth below ground level	Cu.m	204.00
B)	<b>Brick or stone masonry below ground level</b>		
1	Add the basic rates for works above 1.5m depth and up to 4.5m depth below ground level	Cu.m	68.30
2	Add the basic rates for works above 4.5m depth and up to 9.0m depth below ground level	Cu.m	137.00
3	Add extra over the above item 2 for every additional 4.5m depth beyond 9m depth below ground level	Cu.m	137.00

Schedule Item No.	Description	Unit	Rates for 2021-22 in Rupees
<b>Note :</b>			
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.		
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	<b>For concrete mix</b>		
a.	<b>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>		
b.	<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.</b>		
<b>27</b>	<b>CONCRETE VIBRATORS</b>		
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	60.20
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	81.30
<b>28</b>	<b>Plastering</b>		
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	8.15
2	Clean removal of lime plaster from walls	sq.m	6.30
3	Clean removal of cement plaster from walls	sq.m	6.65

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
4	Clean removal of cement plaster from walls and racking out joints 20mm deep	sq.m	8.85
<b>29</b>	<b>White washing and colour washing and distempering</b>		
1	Thorough scrapping of old plastered surface	sq.m	3.65
2	Washing of plastered surface with soap, soda and water (or with soda, lime, brush and water)	sq.m	4.60
<b>30</b>	<b>Painting, Wood Oiling, Tarring, Varnishing, Bee's Waxing etc</b>		
1	Removing old paint from doors and windows by blow lamp and scrapping, including removal and refitting of shutters	sq.m	29.70
2	Removing old paint from doors and windows by scrapping and refitting of shutters	sq.m	12.50
3	Removing paint from doors, windows and wood works by manual labour	sq.m	8.50
4	Removing old paint from structural steel by blow lamp or sand paper	sq.m	17.80
5	Scrapping and removing old paint from structural steel by manual labour	sq.m	7.90
6	Removing old paint from iron surface with sand paper	sq.m	7.40
7	Repolishing the mosaic flooring including polishing stone and hire charges for polishing machine but excluding cost of electrical charges.	sq.m	17.50
31	<b>Miscellaneous</b>		
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	7.45
ii.	Driving piles upto 15 cm dia in river bed	RM	23.30
iii.	Pointing the edge and driving bamboo /casurina/ eucalyptus piles into river bed for the first 1m depth below ground level	Each	19.90
iv.	Driving bamboo/ Casurina/ eucalyptus piles into ground beyond 1m depth from ground level. For every 1m (or) part thereof	RM	19.90

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
<b>32</b>	<b>River Conservancy of Korambu Works</b>		
v.	Brush wood bundles one metre girth and one metre long within an initial lead of 1.6 KM	One bundle	3.80
vi.	Extra for every additional lead of 1.6 KM (for the above item)	One bundle	0.45
vii.	Driving casurina piles into bed including scaffolding etc., complete	RM	9.65
viii.	Casurina walling pieces 40mm to 50mm diameter including fixing with nails and tying with ropes.	RM	13.45
<b>33</b>	<b>Labour wrought and put up for Doors, Windows and Ventilators</b>		
1	Labour wrought and put up in position of frames inclusive of fixing holdfasts for doors, windows and ventilators etc.	Cu.m	11800.00
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	1325.00
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	1105.00
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	1239.00
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	1035.00



<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
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	699.00
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	1239.00
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	1334.00
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	699.00
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	1105.00
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	1035.00
12	Labour charges for fixing doors along with frames in position etc. complete(finished work)	sq.m	197.00
13	Labour charges for fixing windows and ventilators along with frames in position etc. complete	sq.m	247.00
14	Labour wrought and put up in position flush shutters for single leaf shutters.	sq.m	185.00
15	Labour wrought and put up in position flush shutters for Double leaf shutters	sq.m	285.00

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
16	Labour wrought and put up in position fly proof wire gauge shutters for doors, windows and ventilators	sq.m	662.00
17	Labour wrought and put up for providing teak wood weld mesh screen with frames 3"x3" (0.075mx0.075m)	sq.m	925.00
18	Labour charges for fixing aluminium doors, windows and ventilators	sq.m	631.00
<b>34</b>	<b>Breaking metals</b>		
i.	Labour charges for breaking 40mm metal from departmental blasted stones	Cu.m	350.00
ii.	Labour charges for breaking 20mm metal from departmental blasted stones	Cu.m	524.00
iii.	Labour charges for breaking 50mm metal from departmental blasted stones	Cu.m	210.00
<b>35</b>	<b>Cement Mortar</b>		
i.	Grinding Mortar (Special Grinding lime)	Cu.m	318.00
ii.	Grinding Mortar (Ordinary Grinding lime)	Cu.m	242.00
iii.	Mixing Mortar – Cement by manual	Cu.m	100.00
iv.	Mixing Mortar- Cement by Machine Mixing	Cu.m	132.00
<b>36</b>	<b>Metal &amp; Iron works</b>		
i.	Petty iron work for truss, straps etc. (Wrought & fixed) labour only	Kg	47.80
ii.	Iron works for trusses & record racks (labour only)	kg	44.10
iii.	Fixing in position mild steel grills for windows, ventilators, etc.	Kg	27.60
iv.	Fixing MS rods round/square for windows	Kg	25.60
v.	Fixing iron bars in windows and ventilators	Kg	25.60
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	117.45
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	117.45

<b>Schedule Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rates for 2021-22 in Rupees</b>
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	98.20
40	<b>Lighting arrangements (maintenance works) with genset :</b>	Per day	2050.00
	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.		
41	Hire charges for deploying earth moving machinery (JCB/Poclain) for earthwork including diesel, oil and labour charges etc., complete.		
a	JCB	Per Hour	784.00
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 20mm	Cum	4217.90
b	Size : 20 mm to 70 mm	Cum	3857.40

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

SL. No	Description of work	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	50.00
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	93.00

#### 44. SHORING AND STRUTTING FOR THE WSS / UGSS WORKS

	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		
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	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	2718.50
b	0 to 4 m	RM	3681.30
c	0 to 5 m	RM	4664.80
d	0 to 6 m	RM	5628.90
e	0 to 7 m	RM	6611.00
f	0 to 8 m	RM	7692.80

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

SL. No	Description	Unit	Rate in Rupees
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 5m excluding the cost of MS pipes.		
a	For 200mm dia MS encasing pipe for various thickness	RM	9470.00
b	For 250mm dia MS encasing pipe for various thickness	RM	9580.00
c	For 300mm dia MS encasing pipe for various thickness	RM	9700.00
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 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 5m excluding the cost of MS pipes.		
a	For 350mm dia MS encasing pipe for various thickness	RM	11260.00

b	For 400mm dia MS encasing pipe for various thickness	RM	11480.00
c	For 450mm dia MS encasing pipe for various thickness	RM	11760.00
d	For 500mm dia MS encasing pipe for various thickness	RM	11970.00
e	For 600mm dia MS encasing pipe for various thickness	RM	12350.00
f	For 700mm dia MS encasing pipe for various thickness	RM	13330.00
g	For 800mm dia MS encasing pipe for various thickness	RM	13710.00
h	For 900mm dia MS encasing pipe for various thickness	RM	14060.00
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 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 5m excluding the cost of MS pipes.		
a	For 1000mm dia MS encasing pipe for various thickness	RM	15530.00
b	For 1050mm dia MS encasing pipe for various thickness	RM	15930.00
c	For 1100mm dia MS encasing pipe for various thickness	RM	17160.00

d	For 1200mm dia MS encasing pipe for various thickness	RM	18470.00
e	For 1400mm dia MS encasing pipe for various thickness	RM	19920.00
f	For 1600mm dia MS encasing pipe for various thickness	RM	21410.00
g	For 1800mm dia MS encasing pipe for various thickness	RM	23130.00
h	For 2000mm dia MS encasing pipe for various thickness	RM	24900.00
i	For 2200mm dia MS encasing pipe for various thickness	RM	27720.00

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

<b>SL. No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate in Rupees</b>
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	477.80
b.	20mm Dia GI Pipe	1RM	512.40
c.	25mm Dia GI Pipe	1RM	619.80
d.	32mm Dia GI Pipe	1RM	724.80
e.	40mm Dia GI Pipe	1RM	819.40
f.	50mm Dia GI Pipe	1RM	1022.80
g.	65mm Dia GI Pipe	1RM	1536.30
h.	80mm Dia GI Pipe	1RM	1852.00
i.	100mm Dia GI Pipe	1RM	2581.00
j.	125mm Dia GI Pipe	1RM	3452.00



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	250.20
b.	20mm Dia PVC Pipe (10 KSC)	1RM	257.20
c.	25mm Dia PVC Pipe (10 KSC)	1RM	273.50
d.	32mm Dia PVC Pipe (10 KSC)	1RM	294.20
e.	40mm Dia PVC Pipe (10 KSC)	1RM	329.20
f.	50mm Dia PVC Pipe (10KSC)	1RM	343.20
g.	63mm Dia PVC Pipe (10KSC)	1RM	411.80
h.	75mm Dia PVC Pipe (10KSC)	1RM	473.80
i.	90mm Dia PVC Pipe (10KSC)	1RM	594.80
j.	110mm Dia PVC Pipe (10KSC)	1RM	859.10
k.	140mm Dia PVC Pipe (10KSC)	1RM	1248.10
l.	160mm Dia PVC Pipe (10KSC)	1RM	1521.40
m.	180mm Dia PVC Pipe (10KSC)	1RM	1889.20
n.	200mm Dia PVC Pipe (10KSC)	1RM	2431.20

	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	300.20
b.	63mm Dia PVC Pipe (6KSC)	1RM	346.80
c.	75mm Dia PVC Pipe (6KSC)	1RM	390.80
d.	90mm Dia PVC Pipe (6KSC)	1RM	461.80
e.	110mm Dia PVC Pipe (6KSC)	1RM	636.40

f.	140mm Dia PVC Pipe (6KSC)	1RM	872.80
g.	160mm Dia PVC Pipe (6KSC)	1RM	1060.10
h.	180mm Dia PVC Pipe (6KSC)	1RM	1337.90
i.	200mm Dia PVC Pipe (6KSC)	1RM	1713.60
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.		
a.	63mm Dia PVC Pipe (4KSC )	1RM	310.80
b.	75mm Dia PVC Pipe (4KSC)	1RM	344.50
c.	90mm Dia PVC Pipe (4KSC)	1RM	389.80
d.	110mm Dia PVC Pipe (4KSC)	1RM	537.80
e.	140mm Dia PVC Pipe (4KSC)	1RM	695.80
f.	160mm Dia PVC Pipe (4KSC)	1RM	833.10
g.	180mm Dia PVC Pipe (4KSC)	1RM	1061.90
h.	200mm Dia PVC Pipe (4KSC)	1RM	1305.60

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	808.80
b.	100mm Dia AC Pipe	1RM	979.70
c.	125mm Dia AC Pipe	1RM	1413.30

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	2926.80
b.	200mm Dia AC Pipe	1RM	3643.40
c.	250mm Dia AC Pipe	1RM	4440.90
d.	300mm Dia AC Pipe	1RM	5298.80
e.	350mm Dia AC Pipe	1RM	6238.20
f.	400mm Dia AC Pipe	1RM	7273.90

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	406.80
b.	63mm Dia HDPE Pipe	1RM	473.80
c.	75mm Dia HDPE Pipe	1RM	548.80
d.	90mm Dia HDPE Pipe	1RM	646.20
e.	110mm Dia HDPE Pipe	1RM	874.10
f.	125mm Dia HDPE Pipe	1RM	1008.70
g.	140mm Dia HDPE Pipe	1RM	1154.30
h.	160mm Dia HDPE Pipe	1RM	1365.20
i.	200mm Dia HDPE Pipe	1RM	1898.50