सत्यमेव जयते

GOVERNMENT OF TRIPURA

ANALYSIS OF RATES

SCHEDULE OF RATES, 2023
PUBLIC WORKS DEPARTMENT
(WATER RESOURCES)

INDEX

SCHEDULE OF RATES, 2023

CHAPTER – 1
PIPELINE (ANALYSIS)

PUBLIC WORKS DEPARTMENT
(WATER RESOURCES)

ANALYSIS OF RATE
CHAPTER-1
PIPELINE

1.1	**Providing and fitting fixing of different dia rigid UPVC unequal Tee (including earth cutting & backfilling all socketted) suitable for pipes (as per IS specification of Working pressure 4.0 kg/sq.cm as per CPWD Specification & direction of Engineer-in-charge.**

Unequal Tee

1.1.1)	**315x315x250 mm dia**					
	A)Material Cost :-					
	i)315mm dia PVC Pipe	0.85	mtr.	Rs. 2,240.00	/mtr	Rs. 1,904.00
	ii)250 mm dia PVC Pipe	0.30	mtr.	Rs. 1,450.00	/mtr	Rs. 435.00
	B)Labour Cost				**TOTAL(A)=**	Rs. 2,339.00
	Making					
	i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00	/day	Rs. 102.40
	ii) Helper	1 No	per 1/5 day	Rs. 447.00	/day	Rs. 89.40
	Fitting fixing					
	i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00	/day	Rs. 51.20
	ii) Helper	1 No	per 1/10 day	Rs. 447.00	/day	Rs. 44.70
					TOTAL(B)=	Rs. 287.70
	C)Earthwork					
	Average depth=(1.50+0.95)/2	1.225	mtr.			
	width=(0.40+0.20)	0.6	mtr.			
	Minimum length=(1.50+0.75)	2.25	mtr.			
	Total Quantity =	1.654	cum			
	Excavation	1.654	cum	Rs. 231.60	/cum	Rs. 383.009
		(SOR(Bldg)-2023 Item no.2.13)				
	Backfilling	1.654	cum	Rs. 161.30	/cum	Rs. 266.750
		(SOR(Bldg)-2023 Item no.2.16)				
					TOTAL(C)=	Rs. 649.758
	D)Carrying cost upto site of work (in/c loading & unloading)					
	L.S					Rs. 10.00
					TOTAL(D)=	Rs. 10.00
					TOTAL(A+B+D)=	**Rs. 2,636.70**
	Add sundries (L.S)					Rs. 30.000
						Rs. 2,666.700
	Add 1% Water charges & sundries					Rs. 26.667
						Rs. 2,693.367
	Add GST (Multiplying factor) 0.2127					Rs. 572.879
						Rs. 3,266.246
	Add 15% contractors profit					Rs. 489.937
						Rs. 3,756.183
	Add 1% cess					Rs. 37.562
					Net Total (E)	Rs. 3,793.745
					Rate per no (E+C)=	**Rs. 4,443.50**

(Rupees Four thousand four hundred forty three and paisa fifty) only

1.1.2)	315x315x200 mm dia

A)Material Cost :-

i)315mm dia PVC Pipe	0.8	mtr.	Rs. 2,240.00 /mtr	Rs. 1,792.00
ii)200 mm dia PVC Pipe	0.3	mtr.	Rs. 910.00 /mtr	Rs. 273.00
			TOTAL(A)=	Rs. 2,065.00
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00 /day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00 /day	Rs. 89.40
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
			TOTAL(B)=	Rs. 287.70
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=(1.50+0.75)	2.25	mtr.		
Total Quantity =	1.654	cum		
Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.265
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.526
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 440.791
D)Carrying cost upto site of work (in/cl loading & unloading)				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	**Rs. 2,362.70**
Add sundries (L.S)				Rs. 30.000
				Rs. 2,392.700
Add 1% Water charges				Rs. 23.927
				Rs. 2,416.627
Add GST (Multiplying factor) 0.2127				Rs. 514.017
				Rs. 2,930.644
Add 15% contractors profit				Rs. 439.60
				Rs. 3,370.24
Add 1% cess				Rs. 33.702
			Net Total (E)	Rs. 3,403.94
			Rate per no (E+C)=	**Rs. 3,844.73**

(Rupees Three thousand eight hundred forty four and paisa seventy three) only

1.1.3)	**315x315x160 mm dia**

<u>A)Material</u> <u>Cost:-</u>

i)315mm dia PVC Pipe	0.76	mtr.	Rs. 2,240.00	/mtr	Rs. 1,702.40
ii)160 mm dia PVC Pipe	0.3	mtr.	Rs. 570.00	/mtr	Rs. 171.00
				TOTAL(A)=	Rs. 1,873.40
B)Labour Cost					
Making					
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00	/day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00	/day	Rs. 89.40
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00	/day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00	/day	Rs. 44.70
				TOTAL(B)=	Rs. 287.70
C)Earthwork					
Average depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=(1.50+0.75)	2.25	mtr.			
Total Quantity =	1.654	cum			
Excavation	1.654	cum	Rs. 231.60	/cum	Rs. 248.265
	(SOR(Bldg)-2020 Item no.2.13)				
Backfilling	1.654	cum	Rs. 161.30	/cum	Rs. 192.526
	(SOR(Bldg)-2020 Item no.2.16)				
				TOTAL(C)=	Rs. 440.791
D)Carrying cost upto site of work (in/c loading,unloading & carriage)					
L.S					Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 2,171.10
Add sundries (L.S)					Rs. 30.000
					Rs. 2,201.100
Add 1% Water charges					Rs. 22.011
					Rs. 2,223.111
Add GST (Multiplying factor) 0.2127					Rs. 472.856
					Rs. 2,695.967
Add 15% contractors profit					Rs. 404.40
					Rs. 3,100.36
Add 1% cess					Rs. 31.004
				Net Total (E)	**Rs. 3,131.365**
				Rate per no (E+C)=	**Rs. 3,572.16**

(Rupees three thousand five hundred seventy two and paisa sixteen) only

1.1.4)	315x315x140 mm dia

A)Material Cost:-

i)315mm dia PVC Pipe	0.74	mtr.	Rs. 2,240.00 /mtr	Rs. 1,657.60
ii)140 mm dia PVC Pipe	0.3	mtr.	Rs. 440.00 /mtr	Rs. 132.00
			TOTAL(A)=	Rs. 1,789.60
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00 /day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00 /day	Rs. 89.40
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
			TOTAL(B)=	Rs. 287.70
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=(1.50+0.75)	2.25	mtr.		
Total Quantity =	1.654	cum		
Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.265
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.526
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 440.791
D)Carrying cost upto site of work (in/c loading,unloading & carriage)				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 2,087.30
Add sundries (L.S)				Rs. 30.000
				Rs. 2,117.300
Add 1% Water charges				Rs. 21.173
				Rs. 2,138.473
Add GST (Multiplying factor) 0.2127				Rs. 454.853
				Rs. 2,593.326
Add 15% contractors profit				Rs. 389.00
				Rs. 2,982.33
Add 1% cess				Rs. 29.823
			Net Total (E)	Rs. 3,012.15
			Rate per no (E+C)=	**Rs. 3,452.94**

(Rupees three thousand four hundred fifty two and paisa ninety four)only

1.1.5)	315x315x110 mm dia

A)Material Cost:-

i)315mm dia PVC Pipe	0.71	mtr.	Rs. 2,240.00	/mtr	Rs. 1,590.40
ii)110 mm dia PVC Pipe	0.3	mtr.	Rs. 255.00	/mtr	Rs. 76.50
				TOTAL(A)=	Rs. 1,666.90
B)Labour Cost					
Making					
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00	/day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00	/day	Rs. 89.40
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00	/day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00	/day	Rs. 44.70
				TOTAL(B)=	Rs. 287.70
C)Earthwork					
Average depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=(1.50+0.75)	2.25	mtr.			
Total Quantity =	1.654	cum			
Excavation	1.654	cum	Rs. 231.60	/cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)				
Backfilling	1.654	cum	Rs. 161.30	/cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)				
				TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/cl loading,unloading & carriage)					
L.S					Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 1,964.60
Add sundries (L.S)					Rs. 30.000
					Rs. 1,994.600
Add 1% Water charges					Rs. 19.946
					Rs. 2,014.546
Add GST (Multiplying factor) 0.2127					Rs. 428.494
					Rs. 2,443.040
Add 15% contractors profit					Rs. 366.46
					Rs. 2,809.50
Add 1% cess					Rs. 28.095
				Net Total (E)	Rs. 2,379.10
				Rate per no (E+C)=	**Rs. 2,819.89**

(Rupees Two thousand eight hundred nineteen and paisa eighty nine) only

1.1.6)	315x315x90 mm dia

A)Material Cost:-

i)315mm dia PVC Pipe	0.69	mtr.	Rs. 2,240.00	/mtr	Rs. 1,545.60
ii)90 mm dia PVC Pipe	0.3	mtr.	Rs. 180.00	/mtr	Rs. 54.00
				TOTAL(A)=	Rs. 1,599.60
B)Labour Cost Making					
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00	/day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00	/day	Rs. 89.40
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00	/day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00	/day	Rs. 44.70
				TOTAL(B)=	Rs. 287.70
C)Earthwork					
Average depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=(1.50+0.75)	2.25	mtr.			
Total Quantity =	1.654	cum			
Excavation	1.654	cum	Rs. 231.60	/cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)				
Backfilling	1.654	cum	Rs. 161.30	/cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)				
				TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/c loading,unloading & carriage)					
L.S					Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	**Rs. 1,897.30**
Add sundries (L.S)					Rs. 30.000
					Rs. 1,927.300
Add 1% Water charges					Rs. 19.273
					Rs. 1,946.57
Add GST (Multiplying factor) 0.2127					Rs. 414.036
					Rs. 2,360.61
Add 15% contractors profit					Rs. 354.09
					Rs. 2,714.70
Add 1% cess					Rs. 27.147
				Net Total (E)	Rs. 2,741.85
				Rate per no (E+C)=	**Rs. 3,182.64**

(Rupees two thousand one hundred forty and paisa sixty one) only

1.1.7)	250x250x200 mm dia

A)Material Cost:-

i)250 mm dia PVC Pipe	0.8	mtr.	Rs. 1,450.00	/mtr	Rs. 1,160.00
ii)200 mm dia PVC Pipe	0.3	mtr.	Rs. 910.00	/mtr	Rs. 273.00
				TOTAL(A)=	Rs. 1,433.00
B)Labour Cost					
Making					
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00	/day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00	/day	Rs. 89.40
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00	/day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00	/day	Rs. 44.70
				TOTAL(B)=	Rs. 287.70
C)Earthwork					
Average depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=(1.50+0.75)	2.25	mtr.			
Total Quantity =	1.654	cum			
Excavation	1.654	cum	Rs. 231.60	/cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)				
Backfilling	1.654	cum	Rs. 161.30	/cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)				
				TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/c loading,unloading & carriage)					
L.S					Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 1,730.70
Add sundries (L.S)					Rs. 30.000
					Rs. 1,760.700
Add 1% Water charges & sundries					Rs. 17.607
					Rs. 1,778.31
Add GST (Multiplying factor) 0.2127					Rs. 378.246
					Rs. 2,156.55
Add 15% contractors profit					Rs. 323.48
					Rs. 2,480.04
Add 1% cess					Rs. 24.800
				Net Total (E)	Rs. 2,504.84
				Rate per no (E+C)=	**Rs. 2,945.63**

(Rupees two thousand nine hundred forty five and paisa sixty three)only

1.1.8)	250x250x160 mm dia

A)Material Cost:-

i)250 mm dia PVC Pipe	0.76	mtr.	Rs. 1,450.00	/mtr	Rs. 1,102.00
ii)160 mm dia PVC Pipe	0.3	mtr.	Rs. 570.00	/mtr	Rs. 171.00
				TOTAL(A)=	Rs. 1,273.00
B)Labour Cost					
Making					
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00	/day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00	/day	Rs. 89.40
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00	/day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00	/day	Rs. 44.70
				TOTAL(B)=	Rs. 287.70
C)Earthwork					
Average depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=(1.50+0.75)	2.25	mtr.			
Total Quantity =	1.654	cum			
Excavation	1.654	cum	Rs. 231.60	/cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)				
Backfilling	1.654	cum	Rs. 161.30	/cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)				
				TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/c loading,unloading & carriage)					
L.S					Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 1,570.70
Add sundries (L.S)					Rs. 30.000
					Rs. 1,600.700
Add 1% Water charges					Rs. 16.007
					Rs. 1,616.71
Add GST (Multiplying factor) 0.2127					Rs. 343.874
					Rs. 1,960.58
Add 15% contractors profit					Rs. 294.09
					Rs. 2,254.67
Add 1% cess					Rs. 22.547
				Net Total (E)	Rs. 2,277.21
				Rate per no (E+C)=	**Rs. 2,718.01**

(Rupees two thousand seven hundred eighteen and paisa one) only

1.1.9)	**250x250x140 mm dia**				
	A)Material Cost:-				
	i)250 mm dia PVC Pipe	0.74	mtr.	Rs. 1,450.00 /mtr	Rs. 1,073.00
	ii)140 mm dia PVC Pipe	0.3	mtr.	Rs. 440.00 /mtr	Rs. 132.00
				TOTAL(A)=	Rs. 1,205.00
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
	ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
	ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
				TOTAL(B)=	Rs. 215.78
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=(1.50+0.75)	2.25	mtr.		
	Total Quantity =	1.654	cum		
	Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
		(SOR(Bldg)-2023Item no.2.13)			
	Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(C)=	Rs. 440.79
	D)Carrying cost upto site of work (in/c loading,unloading & carriage)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 1,430.78
	Add sundries (L.S)				Rs. 30.000
					Rs. 1,460.775
	Add 1% Water charges				Rs. 14.608
					Rs. 1,475.383
	Add GST (Multiplying factor) 0.2127				Rs. 313.814
					Rs. 1,789.20
	Add 15% contractors profit				Rs. 214.62
					Rs. 2,003.81
	Add 1% cess				Rs. 20.038
				Net Total (E)	Rs. 2,023.85
				Rate per no (E+C)=	**Rs. 2,464.64**

(Rupees two thousand four hundred sixty four and paisa sixty four) only

1.1.10)	250x250x110 mm dia				
	A)Material Cost:-				
	i)250 mm dia PVC Pipe	0.71	mtr.	Rs. 1,450.00 /mtr	Rs. 1,029.50
	ii)110 mm dia PVC Pipe	0.3	mtr.	Rs. 255.00 /mtr	Rs. 76.50
				TOTAL(A)=	Rs. 1,106.00
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
	ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
	ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
				TOTAL(B)=	Rs. 215.78
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=(1.50+0.75)	2.25	mtr.		
	Total Quantity =	1.654	cum		
	Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(C)=	Rs. 440.791
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 1,331.78
	Add sundries (L.S)				Rs. 30.000
					Rs. 1,361.775
	Add 1% Water charges				Rs. 13.618
					Rs. 1,375.393
	Add GST (Multiplying factor) 0.2127				Rs. 292.546
					Rs. 1,667.94
	Add 15% contractors profit				Rs. 250.19
					Rs. 1,918.13
	Add 1% cess				Rs. 19.181
				Net Total (E)	Rs. 1,937.31
				Rate per no (E+C)=	**Rs. 2,378.10**

(Rupees two thousand three hundred seventy eight and paisa ten) only

1.1.11)	**250x250x90 mm dia**				
	A)Material Cost:-				
	i)250 mm dia PVC Pipe	0.69	mtr.	Rs. 1,450.00 /mtr	Rs. 1,000.50
	ii)90 mm dia PVC Pipe	0.3	mtr.	Rs. 180.00 /mtr	Rs. 54.00
				TOTAL(A)=	Rs. 1,054.50
	B)Labour Cost Making				
	i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
	ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
	ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
				TOTAL(B)=	Rs. 215.78
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=(1.50+0.75)	2.25	mtr.		
	Total Quantity =	1.654	cum		
	Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(C)=	Rs. 440.79
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 1,280.28
	Add sundries (L.S)				Rs. 30.000
					Rs. 1,310.275
	Add 1% Water charges				Rs. 13.103
					Rs. 1,323.378
	Add GST (Multiplying factor) 0.2127				Rs. 281.482
					Rs. 1,604.86
	Add 15% contractors profit				Rs. 240.73
					Rs. 1,845.59
	Add 1% cess				Rs. 18.456
				Net Total (E)	Rs. 1,864.05
				Rate per no (E+C)=	**Rs. 2,304.84**

(Rupees two thousand three hundred four and paisa eighty four) only

1.1.12)	200x200x160 mm dia

A)Material Cost:-				
i)200 mm dia PVC Pipe	0.76	mtr.	Rs. 910.00 /mtr	Rs. 691.60
ii)160 mm dia PVC Pipe	0.3	mtr.	Rs. 570.00 /mtr	Rs. 171.00
			TOTAL(A)=	Rs. 862.60
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00 /day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00 /day	Rs. 89.40
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
			TOTAL(B)=	Rs. 287.70
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=(1.50+0.75)	2.25	mtr.		
Total Quantity =	1.654	cum		
Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/c loading,unloading)				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 1,160.30
Add sundries (L.S)				Rs. 30.000
				Rs. 1,190.300
Add 1% Water charges				Rs. 11.903
				Rs. 1,202.203
Add GST (Multiplying factor) 0.2127				Rs. 255.709
				Rs. 1,457.91
Add 15% contractors profit				Rs. 218.69
				Rs. 1,676.60
Add 1% cess				Rs. 16.766
			Net Total (E)	Rs. 1,693.36
			Rate per no (E+C)=	**Rs. 2,134.16**

(Rupees two thousand one hundred thirty four and paisa sixteen) only

1.1.13)	200x200x140 mm dia				
	A)Material Cost:-				
	i)200 mm dia PVC Pipe	0.74	mtr.	Rs. 910.00 /mtr	Rs. 673.40
	ii)140 mm dia PVC Pipe	0.3	mtr.	Rs. 440.00 /mtr	Rs. 132.00
				TOTAL(A)=	Rs. 805.40
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
	ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
	ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
				TOTAL(B)=	Rs. 215.78
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=(1.50+0.75)	2.25	mtr.		
	Total Quantity =	1.654	cum		
	Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(C)=	Rs. 440.79
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 1,031.18
	Add sundries (L.S)				Rs. 30.000
					Rs. 1,061.175
	Add 1% Water charges				Rs. 10.612
					Rs. 1,071.787
	Add GST (Multiplying factor) 0.2127				Rs. 227.969
					Rs. 1,299.76
	Add 15% contractors profit				Rs. 194.96
					Rs. 1,494.72
	Add 1% cess				Rs. 14.947
				Net Total (E)	Rs. 1,509.67
				Rate per no (E+C)=	**Rs. 1,950.46**

(Rupees one thousand nine hundred fifty and paisa forty six) only

1.1.14)	200x200x110 mm dia

A)Material Cost:-

i)200 mm dia PVC Pipe	0.71	mtr.	Rs. 910.00 /mtr	Rs. 646.10
ii)110 mm dia PVC Pipe	0.3	mtr.	Rs. 255.00 /mtr	Rs. 76.50
			TOTAL(A)=	Rs. 722.60
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
			TOTAL(B)=	Rs. 215.78
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=(1.50+0.75)	2.25	mtr.		
Total Quantity =	1.654	cum		
Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/c loading,unloading)				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 948.38
Add sundries (L.S)				Rs. 30.000
				Rs. 978.375
Add 1% Water charges				Rs. 9.784
				Rs. 988.159
Add GST (Multiplying factor) 0.2127				Rs. 210.181
				Rs. 1,198.34
Add 15% contractors profit				Rs. 179.75
				Rs. 1,378.09
Add 1% cess				Rs. 13.781
			Net Total (E)	Rs. 1,391.87
			Rate per no (E+C)=	**Rs. 1,832.66**

(Rupees one thousand eight hundred thirty two and paise sixty six) only

1.1.15)	200x200x90 mm dia				
	A)Material Cost:-				
	i)200 mm dia PVC Pipe	0.69	mtr.	Rs. 910.00 /mtr	Rs. 627.90
	ii)90 mm dia PVC Pipe	0.3	mtr.	Rs. 180.00 /mtr	Rs. 54.00
				TOTAL(A)=	Rs. 681.90
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
	ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
	ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
				TOTAL(B)=	Rs. 215.78
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=(1.50+0.75)	2.25	mtr.		
	Total Quantity =	1.654	cum		
	Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(C)=	Rs. 440.79
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 907.68
	Add sundries (L.S)				Rs. 30.000
					Rs. 937.675
	Add 1% Water charges & sundries				Rs. 9.377
					Rs. 947.05
	Add GST (Multiplying factor) 0.2127				Rs. 201.438
					Rs. 1,148.49
	Add 15% contractors profit				Rs. 172.27
					Rs. 1,320.76
	Add 1% cess				Rs. 13.208
				Net Total (E)	Rs. 1,333.97
				Rate per no (E+C)=	**Rs. 1,774.76**

(Rupees one thousand seven hundred seventy four and paisa seventy six) only

1.1.16)	160x160x140 mm dia				
	A)Material Cost:-				
	i)160 mm dia PVC Pipe	0.74	mtr.	Rs. 570.00 /mtr	Rs. 421.80
	ii)140 mm dia PVC Pipe	0.30	mtr.	Rs. 440.00 /mtr	Rs. 132.00
				TOTAL(A)=	Rs. 553.80
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
	ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00 /day	Rs. 42.67
	ii) Helper	1 No	per 1/12 day	Rs. 447.00 /day	Rs. 37.25
				TOTAL(B)=	Rs. 199.79
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=(1.50+0.75)	2.25	mtr.		
	Total Quantity =	1.654	cum		
	Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(C)=	Rs. 440.79
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 763.59
	Add sundries (L.S)				Rs. 30.000
					Rs. 793.592
	Add 1% Water charges				Rs. 7.936
					Rs. 801.528
	Add GST (Multiplying factor) 0.2127				Rs. 170.485
					Rs. 972.01
	Add 15% contractors profit				Rs. 145.80
					Rs. 1,117.81
	Add 1% cess				Rs. 11.178
				Net Total (E)	Rs. 1,128.99
				Rate per no (E+C)=	**Rs. 1,569.78**

(Rupees one thousand five hundred sixty nine and paisa seventy eight) only

1.1.17)	160x160x110 mm dia				

A)Material Cost:-					
i)160 mm dia PVC Pipe	0.74	mtr.	Rs. 570.00	/mtr	Rs. 421.80
ii)110 mm dia PVC Pipe	0.3	mtr.	Rs. 255.00	/mtr	Rs. 76.50
				TOTAL(A)=	Rs. 498.30
B)Labour Cost					
Making					
i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00	/day	Rs. 64.00
ii) Helper	1 No	per 1/8 day	Rs. 447.00	/day	Rs. 55.88
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00	/day	Rs. 42.67
ii) Helper	1 No	per 1/12 day	Rs. 447.00	/day	Rs. 37.25
				TOTAL(B)=	Rs. 199.79
C)Earthwork					
Average depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=(1.50+0.75)	2.25	mtr.			
Total Quantity =	1.654	cum			
Excavation	1.654	cum	Rs. 231.60	/cum	Rs. 248.27
	(SOR(Bldg)-2020 Item no.2.13)				
Backfilling	1.654	cum	Rs. 161.30	/cum	Rs. 192.53
	(SOR(Bldg)-2020 Item no.2.16)				
				TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/c loading,unloading)					
L.S					Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 708.09
Add sundries (L.S)					Rs. 30.000
					Rs. 738.092
Add 1% Water charges					Rs. 7.381
					Rs. 745.473
Add GST (Multiplying factor) 0.2127					Rs. 158.562
					Rs. 904.03
Add 15% contractors profit					Rs. 135.61
					Rs. 1,039.64
Add 1% cess					Rs. 10.396
				Net Total (E)	Rs. 1,050.04
				Rate per no (E+C)=	**Rs. 1,490.83**

(Rupees one thousand four hundred ninety and paisa eighty three) only

1.1.18)	160x160x90 mm dia				
	A)Material Cost:-				
	i)160 mm dia PVC Pipe	0.74	mtr.	Rs. 570.00 /mtr	Rs. 421.80
	ii)90 mm dia PVC Pipe	0.3	mtr.	Rs. 180.00 /mtr	Rs. 54.00
				TOTAL(A)=	Rs. 475.80
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
	ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00 /day	Rs. 42.67
	ii) Helper	1 No	per 1/12 day	Rs. 447.00 /day	Rs. 37.25
				TOTAL(B)=	Rs. 199.79
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=(1.50+0.75)	2.25	mtr.		
	Total Quantity =	1.654	cum		
	Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(C)=	Rs. 440.79
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 685.59
	Add sundries (L.S)				Rs. 30.000
					Rs. 715.592
	Add 1% Water charges				Rs. 7.156
					Rs. 722.748
	Add GST (Multiplying factor) 0.2127				Rs. 153.728
					Rs. 876.48
	Add 15% contractors profit				Rs. 131.47
					Rs. 1,007.95
	Add 1% cess				Rs. 10.079
				Net Total (E)	Rs. 1,018.03
				Rate per no (E+C)=	**Rs. 1,458.82**

(Rupees one thousand four hundred fifty eight and paisa eighty two) only

1.1.19)	140x140x110 mm dia				
	A)Material Cost:-				
	i)140 mm dia PVC Pipe	0.71	mtr.	Rs. 440.00 /mtr	Rs. 312.40
	ii)110 mm dia PVC Pipe	0.3	mtr.	Rs. 255.00 /mtr	Rs. 76.50
				TOTAL(A)=	Rs. 388.90
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
	ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00 /day	Rs. 42.67
	ii) Helper	1 No	per 1/12 day	Rs. 447.00 /day	Rs. 37.25
				TOTAL(B)=	Rs. 199.79
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=(1.50+0.75)	2.25	mtr.		
	Total Quantity =	1.654	cum		
	Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(C)=	Rs. 440.79
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 598.69
	Add sundries (L.S)				Rs. 30.000
					Rs. 628.692
	Add 1% Water charges				Rs. 6.287
					Rs. 634.979
	Add GST (Multiplying factor) 0.2127				Rs. 135.060
					Rs. 770.04
	Add 15% contractors profit				Rs. 115.51
					Rs. 885.54
	Add 1% cess				Rs. 8.855
				Net Total (E)	Rs. 894.40
				Rate per no (E+C)=	**Rs. 1,335.19**

(Rupees one thousand three hundred thirty five and paisa nineteen) only

1.1.20)	140x140x90 mm dia				
	A)Material Cost:-				
	i)140 mm dia PVC Pipe	0.69	mtr.	Rs. 440.00 /mtr	Rs. 303.60
	ii)90 mm dia PVC Pipe	0.3	mtr.	Rs. 180.00 /mtr	Rs. 54.00
				TOTAL(A)=	Rs. 357.60
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
	ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00 /day	Rs. 42.67
	ii) Helper	1 No	per 1/12 day	Rs. 447.00 /day	Rs. 37.25
				TOTAL(B)=	Rs. 199.79
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=(1.50+0.75)	2.25	mtr.		
	Total Quantity =	1.654	cum		
	Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(C)=	Rs. 440.79
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 567.39
	Add sundries (L.S)				Rs. 30.000
					Rs. 597.392
	Add 1% Water charges				Rs. 5.974
					Rs. 603.366
	Add GST (Multiplying factor) 0.2127				Rs. 128.336
					Rs. 731.70
	Add 15% contractors profit				Rs. 109.76
					Rs. 841.46
	Add 1% cess				Rs. 8.415
				Net Total (E)	Rs. 849.87
				Rate per no (E+C)=	**Rs. 1,290.66**

(Rupees one thousand two hundred nineteen and paisa sixty six) only

1.1.21)	110x110x90 mm dia

A)Material Cost:-

i)110 mm dia PVC Pipe	0.69	mtr.	Rs. 255.00	/mtr	Rs. 175.95
ii)90 mm dia PVC Pipe	0.3	mtr.	Rs. 180.00	/mtr	Rs. 54.00
				TOTAL(A)=	Rs. 229.95

B)Labour Cost

Making

i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00	/day	Rs. 64.00
ii) Helper	1 No	per 1/8 day	Rs. 447.00	/day	Rs. 55.88
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/15 day	Rs. 512.00	/day	Rs. 34.13
ii) Helper	1 No	per 1/15 day	Rs. 447.00	/day	Rs. 29.80
				TOTAL(B)=	Rs. 183.81

C)Earthwork

Average depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=(1.50+0.75)	2.25	mtr.			
Total Quantity =	1.654	cum			
Excavation	1.654	cum	Rs. 231.60	/cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)				
Backfilling	1.654	cum	Rs. 161.30	/cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)				
				TOTAL(C)=	Rs. 440.79

D)Carrying cost upto site of work (in/c loading,unloading)

L.S		Rs. 10.00
	TOTAL(D)=	Rs. 10.00
	TOTAL(A+B+D)=	Rs. 423.76
Add sundries (L.S)		Rs. 30.000
		Rs. 453.758
Add 1% Water charges		Rs. 4.538
		Rs. 458.296
Add GST (Multiplying factor) 0.2127		Rs. 97.480
		Rs. 555.78
Add 15% contractors profit		Rs. 83.37
		Rs. 639.14
Add 1% cess		Rs. 6.391
	Net Total (E)	Rs. 645.53
	Rate per no (E+C)=	**Rs. 1,086.32**

(Rupees one thousand eighty six and paisa thirty two) only

1.2	**Providing and fitting fixing of different dia rigid UPVC equal Tee (including earth cutting & backfilling all socketted) suitable for pipes as per IS specification of Working pressure 4.0 kg/sq.cm confirming to IS: 10124 (Part-V) as per CPWD Specification & direction of Engineer-in-charge.**
	Equal Tee
1.2.1)	**315x315x315 mm dia**

A)Material Cost:-				
i)315 mm dia PVC Pipe	0.90	mtr.	Rs. 2,240.00 /mtr	Rs. 2,016.00
			TOTAL(A)=	Rs. 2,016.00
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00 /day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00 /day	Rs. 89.40
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
			TOTAL(B)=	Rs. 287.70
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.60	mtr.		
Minimum length=(1.50+0.75)	2.25	mtr.		
Total Quantity =	1.654	cum		
Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/c loading,unloading)				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 2,313.70
Add sundries (L.S)				Rs. 30.000
				Rs. 2,343.700
Add 1% Water charges				Rs. 23.437
				Rs. 2,367.137
Add GST (Multiplying factor) 0.2127				Rs. 503.490
				Rs. 2,870.63
Add 15% contractors profit				Rs. 430.59
				Rs. 3,301.22
Add 1% cess				Rs. 33.012
			Net Total (E)	Rs. 3,334.23
			Rate per no (E+C)=	**Rs. 3,775.02**

(Rupees three thousand seven hundred seventy five and paisa two) only

1.2.2)	250x250x250 mm dia

A)Material Cost:-				
i)250 mm dia PVC Pipe	0.9	mtr.	Rs. 1,450.00 /mtr	Rs. 1,305.00
			TOTAL(A)=	Rs. 1,305.00
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00 /day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00 /day	Rs. 89.40
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
			TOTAL(B)=	Rs. 287.70
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=(1.50+0.75)	2.25	mtr.		
Total Quantity =	1.654	cum		
Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/c loading,unloading)				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 1,602.70
Add sundries (L.S)				Rs. 30.000
				Rs. 1,632.700
Add 1% Water charges				Rs. 16.327
				Rs. 1,649.027
Add GST (Multiplying factor) 0.2127				Rs. 350.748
				Rs. 1,999.78
Add 15% contractors profit				Rs. 299.97
				Rs. 2,299.74
Add 1% cess				Rs. 22.997
			Net Total (E)	Rs. 2,322.74
			Rate per no (E+C)=	**Rs. 2,763.53**

(Rupees two thousand seven hundred sixty three and paisa fifty three) only

1.2.3)	200x200x200 mm dia

A)Material Cost:-				
i)200 mm dia PVC Pipe	0.9	mtr.	Rs. 910.00 /mtr	Rs. 819.00
			TOTAL(A)=	Rs. 819.00
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00 /day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00 /day	Rs. 89.40
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
			TOTAL(B)=	Rs. 287.70
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=(1.50+0.75)	2.25	mtr.		
Total Quantity =	1.654	cum		
Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/c loading,unloading)				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 1,116.70
Add sundries (L.S)				Rs. 30.000
				Rs. 1,146.700
Add 1% Water charges				Rs. 11.467
				Rs. 1,158.167
Add GST (Multiplying factor) 0.2127				Rs. 246.342
				Rs. 1,404.51
Add 15% contractors profit				Rs. 210.68
				Rs. 1,615.19
Add 1% cess				Rs. 16.152
			Net Total (E)	Rs. 1,631.34
			Rate per no (E+C)=	**Rs. 2,072.13**

(Rupees two thousand seventy two and paisa thirteen) only

1.2.4)	160x160x160 mm dia				

A)Material Cost:-

i)160 mm dia PVC Pipe	0.9	mtr.	Rs. 570.00 /mtr	Rs. 513.00
			TOTAL(A)=	Rs. 513.00
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00 /day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00 /day	Rs. 89.40
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00 /day	Rs. 42.67
ii) Helper	1 No	per 1/12 day	Rs. 447.00 /day	Rs. 37.25
			TOTAL(B)=	Rs. 271.72
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=(1.50+0.75)	2.25	mtr.		
Total Quantity =	1.654	cum		
Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 440.79
D)Carrying cost upto site of work (in/c loading,unloading)				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 794.72
Add sundries (L.S)				Rs. 30.000
				Rs. 824.717
Add 1% Water charges				Rs. 8.247
				Rs. 832.964
Add GST (Multiplying factor) 0.2127				Rs. 177.171
				Rs. 1,010.14
Add 15% contractors profit				Rs. 151.52
				Rs. 1,161.66
Add 1% cess				Rs. 11.617
			Net Total (E)	Rs. 1,173.27
			Rate per no (E+C)=	**Rs. 1,614.06**

(Rupees One thousand six hundred forteen and paisa six) only

1.2.5)	140x140x140 mm dia			

A)Material Cost:-

i)140 mm dia PVC Pipe	0.9	mtr.	Rs. 440.00 /mtr	Rs. 396.00
			TOTAL(A)=	Rs. 396.00
<u>B)Labour Cost</u>				
<u>Making</u>				
i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00 /day	Rs. 42.67
ii) Helper	1 No	per 1/12 day	Rs. 447.00 /day	Rs. 37.25
			TOTAL(B)=	Rs. 199.79
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=(1.50+0.75)	2.25	mtr.		
Total Quantity =	1.654	cum		
Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 440.79

<u>D)Carrying cost upto site of work (in/c loading,unloading)</u>

L.S		Rs. 10.00
	TOTAL(D)=	Rs. 10.00
	TOTAL(A+B+D)=	Rs. 605.79
Add sundries (L.S)		Rs. 30.000
		Rs. 635.792
Add 1% Water charges		Rs. 6.358
		Rs. 642.150
Add GST (Multiplying factor) 0.2127		Rs. 136.585
		Rs. 778.73
Add 15% contractors profit		Rs. 116.81
		Rs. 895.55
Add 1% cess		Rs. 8.955
	Net Total (E)	Rs. 904.50
	Rate per no (E+C)=	**Rs. 1,345.29**

(Rupees one thousand three hundred forty five and paisa twenty nine) only

1.2.6)	110x110x110 mm dia				
	A)Material Cost:-				
	i)110 mm dia PVC Pipe	1.01	mtr.	Rs. 255.00 /mtr	Rs. 257.55
				TOTAL(A)=	Rs. 257.55
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
	ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/15 day	Rs. 512.00 /day	Rs. 34.13
	ii) Helper	1 No	per 1/15 day	Rs. 447.00 /day	Rs. 29.80
				TOTAL(B)=	Rs. 183.81
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=(1.50+0.75)	2.25	mtr.		
	Total Quantity =	1.654	cum		
	Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(C)=	Rs. 440.79
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 451.36
	Add sundries (L.S)				Rs. 30.000
					Rs. 481.358
	Add 1% Water charges				Rs. 4.814
					Rs. 486.172
	Add GST (Multiplying factor) 0.2127				Rs. 103.409
					Rs. 589.58
	Add 15% contractors profit				Rs. 88.44
					Rs. 678.02
	Add 1% cess				Rs. 6.780
				Net Total (E)	Rs. 684.80
				Rate per no (E+C)=	**Rs. 1,125.59**

(Rupees one thousand one hundred twenty five and paisa fifty nine) only

1.2.7)	90x90x90 mm dia

A)Material Cost:-

i)90 mm dia PVC Pipe	0.99	mtr.	Rs. 180.00 /mtr	Rs. 178.20
			TOTAL(A)=	Rs. 178.20
<u>B)Labour Cost</u>				
<u>Making</u>				
i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/15 day	Rs. 512.00 /day	Rs. 34.13
ii) Helper	1 No	per 1/15 day	Rs. 447.00 /day	Rs. 29.80
			TOTAL(B)=	Rs. 183.81
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=(1.50+0.75)	2.25	mtr.		
Total Quantity =	1.654	cum		
Excavation	1.654	cum	Rs. 231.60 /cum	Rs. 248.27
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.654	cum	Rs. 161.30 /cum	Rs. 192.53
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 440.79

<u>D)Carrying cost upto site of work (in/c loading,unloading)</u>

L.S		Rs. 10.00
	TOTAL(D)=	Rs. 10.00
	TOTAL(A+B+D)=	Rs. 372.01
Add sundries (L.S)		Rs. 30.000
		Rs. 402.008
Add 1% Water charges		Rs. 4.020
		Rs. 406.028
Add GST (Multiplying factor) 0.2127		Rs. 86.362
		Rs. 492.39
Add 15% contractors profit		Rs. 73.86
		Rs. 566.25
Add 1% cess		Rs. 5.662
	Net Total (E)	Rs. 571.91
	Rate per no (E+C)=	**Rs. 1,012.70**

(Rupees one thousand twelve and paisa seventy) only

1.3	**Providing and fitting fixing rigid UPVC Reducing socket (one size lower at one end, both end socketted) suitable for pipes of Working pressure 4.0 kg/sq.cm. as per CPWD Specification & direction of Engineer-in-charge.**

1.3.1)	**315x250 mm dia**

A)Material Cost:-					
i)315 mm dia PVC Pipe	0.3	mtr.	Rs. 2,240.00	/mtr	Rs. 672.00
ii)250 mm dia PVC Pipe	0.3	mtr.	Rs. 1,450.00	/mtr	Rs. 435.00
				TOTAL(A)=	Rs. 1,107.00
B)Labour Cost					
Making					
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00	/day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00	/day	Rs. 44.70
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00	/day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00	/day	Rs. 44.70
				TOTAL(B)=	Rs. 191.80
C)Earthwork					
Avg.depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=	1.0	mtr.			
Total Quantity =					
(1.00x0.60x1.225)	0.735	cum			
Excavation	0.735	cum	Rs. 231.60	/cum	Rs. 110.32
	(SOR(Bldg)-2020 Item no.2.13)				
Backfilling	0.735	cum	Rs. 161.30	/cum	Rs. 85.55
	(SOR(Bldg)-2020 Item no.2.16)				
				TOTAL(c)=	Rs. 195.88
D)Carrying cost upto site of work (in/c loading,unloading)					
L.S					Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 1,308.80
Add sundries (L.S)					Rs. 30.000
					Rs. 1,338.800
Add 1% Water charges					Rs. 13.388
					Rs. 1,352.188
Add GST (Multiplying factor) 0.2127					Rs. 287.610
					Rs. 1,639.80
Add 15% contractors profit					Rs. 245.97
					Rs. 1,885.77
Add 1% cess					Rs. 18.858
				Net Total (E)	Rs. 1,904.63
				Rate per no (E+C)=	**Rs. 2,100.50**

(Rupees two thousand one hundred and paisa fifty) only

1.3.2)	250x200 mm dia				

A)Material Cost:-					
i)250 mm dia PVC Pipe	0.3	mtr.	Rs. 1,450.00	/mtr	Rs. 435.00
ii)200 mm dia PVC Pipe	0.3	mtr.	Rs. 910.00	/mtr	Rs. 273.00
				TOTAL(A)=	Rs. 708.00
B)Labour Cost					
Making					
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00	/day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00	/day	Rs. 44.70
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00	/day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00	/day	Rs. 44.70
				TOTAL(B)=	Rs. 191.80
C)Earthwork					
Average depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=	1.0	mtr.			
Total Quantity = (1.00x0.60x1.225)	0.735	cum			
Excavation	0.735	cum	Rs. 231.60	/cum	Rs. 110.32
	(SOR(Bldg)-2023 Item no.2.13)				
Backfilling	0.735	cum	Rs. 161.30	/cum	Rs. 85.55
	(SOR(Bldg)-2023 Item no.2.16)				
				TOTAL(c)=	Rs. 195.88
D)Carrying cost upto site of work (in/c loading,unloading)					
L.S					Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 909.80
Add sundries (L.S)					Rs. 30.000
					Rs. 939.800
Add 1% Water charges					Rs. 9.398
					Rs. 949.198
Add GST (Multiplying factor) 0.2127					Rs. 201.894
					Rs. 1,151.09
Add 15% contractors profit					Rs. 172.66
					Rs. 1,323.76
Add 1% cess					Rs. 13.238
				Net Total (E)	Rs. 1,336.99
				Rate per no (E+C)=	**Rs. 1,532.87**

(Rupees one thousand five hundred thirty two and paisa eighty seven) only

1.3.3)	200x160 mm dia				
	A)Material Cost:-				
	i)200 mm dia PVC Pipe	0.3	mtr.	Rs. 910.00 /mtr	Rs. 273.00
	ii)160 mm dia PVC Pipe	0.3	mtr.	Rs. 570.00 /mtr	Rs. 171.00
				TOTAL(A)=	Rs. 444.00
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
	ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
	ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
				TOTAL(B)=	Rs. 191.80
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=	1.0	mtr.		
	Total Quantity = (1.00x0.60x1.225)	0.735	cum		
	Excavation	0.735	cum	Rs. 231.60 /cum	Rs. 110.32
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	0.735	cum	Rs. 161.30 /cum	Rs. 85.55
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(c)=	Rs. 195.88
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 645.80
	Add sundries (L.S)				Rs. 30.000
					Rs. 675.800
	Add 1% Water charges				Rs. 6.758
					Rs. 682.558
	Add GST (Multiplying factor) 0.2127				Rs. 145.180
					Rs. 827.74
	Add 15% contractors profit				Rs. 124.16
					Rs. 951.90
	Add 1% cess				Rs. 9.519
				Net Total (E)	Rs. 961.42
				Rate per no (E+C)=	**Rs. 1,157.30**

(Rupees one thousand one hundred fifty seven and paisa thirty) only

1.3.4)	160x140 mm dia

A)Material Cost:-

i)160 mm dia PVC Pipe	0.3	mtr.	Rs. 570.00 /mtr	Rs. 171.00
ii)140 mm dia PVC Pipe	0.3	mtr.	Rs. 440.00 /mtr	Rs. 132.00
			TOTAL(A)=	Rs. 303.00

B)Labour Cost

Making				
i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00 /day	Rs. 42.67
ii) Helper	1 No	per 1/12 day	Rs. 447.00 /day	Rs. 37.25
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/15 day	Rs. 512.00 /day	Rs. 34.13
ii) Helper	1 No	per 1/15 day	Rs. 447.00 /day	Rs. 29.80
			TOTAL(B)=	Rs. 143.85

C)Earthwork

Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=	1.0	mtr.		
Total Quantity = (1.00x0.60x1.225)	0.735	cum		
Excavation	0.735	cum	Rs. 231.60 /cum	Rs. 110.32
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	0.735	cum	Rs. 161.30 /cum	Rs. 85.55
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(c)=	Rs. 195.88

D)Carrying cost upto site of work (in/c loading,unloading)

L.S		Rs. 10.00
	TOTAL(D)=	Rs. 10.00
	TOTAL(A+B+D)=	Rs. 456.85
Add sundries (L.S)		Rs. 30.000
		Rs. 486.850
Add 1% Water charges		Rs. 4.869
		Rs. 491.719
Add GST (Multiplying factor) 0.2127		Rs. 104.589
		Rs. 596.31
Add 15% contractors profit		Rs. 89.45
		Rs. 685.75
Add 1% cess		Rs. 6.858
	Net Total (E)	Rs. 692.61
	Rate per no (E+C)=	**Rs. 888.49**

(Rupees eight hundred eighty eight and paisa forty nine) only

1.3.5)	140x110 mm dia

A)Material Cost:-

i)140 mm dia PVC Pipe	0.3	mtr.	Rs. 440.00 /mtr	Rs. 132.00
ii)110 mm dia PVC Pipe	0.3	mtr.	Rs. 255.00 /mtr	Rs. 76.50
			TOTAL(A)=	Rs. 208.50
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/15 day	Rs. 512.00 /day	Rs. 34.13
ii) Helper	1 No	per 1/15 day	Rs. 447.00 /day	Rs. 29.80
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/15 day	Rs. 512.00 /day	Rs. 34.13
ii) Helper	1 No	per 1/15 day	Rs. 447.00 /day	Rs. 29.80
			TOTAL(B)=	Rs. 127.87
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=	1.0	mtr.		
Total Quantity = (1.00x0.60x1.225)	0.735	cum		
Excavation	0.735	cum	Rs. 231.60 /cum	Rs. 110.32
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	0.735	cum	Rs. 161.30 /cum	Rs. 85.55
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(c)=	Rs. 195.88
D)Carrying cost upto site of work (in/c loading,unloading)				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 346.37
Add sundries (L.S)				Rs. 30.000
				Rs. 376.367
Add 1% Water charges				Rs. 3.764
				Rs. 380.130
Add GST (Multiplying factor) 0.2127				Rs. 80.854
				Rs. 460.98
Add 15% contractors profit				Rs. 69.15
				Rs. 530.13
Add 1% cess				Rs. 5.301
			Net Total (E)	Rs. 535.43
			Rate per no (E+C)=	**Rs. 731.31**

(Rupees seven hundred thirty one and paisa thirty one) only

1.3.6)	110x90 mm dia

A)Material Cost:-

i)110 mm dia PVC Pipe	0.3	mtr.	Rs. 255.00 /mtr	Rs. 76.50
ii)90 mm dia PVC Pipe	0.3	mtr.	Rs. 180.00 /mtr	Rs. 54.00
			TOTAL(A)=	Rs. 130.50

B)Labour Cost

Making

i)Fitter(Gr-I)	1 No	per 1/15 day	Rs. 512.00 /day	Rs. 34.13
ii) Helper	1 No	per 1/15 day	Rs. 447.00 /day	Rs. 29.80

Fitting fixing

i)Fitter(Gr-I)	1 No	per 1/20 day	Rs. 512.00 /day	Rs. 25.60
ii) Helper	1 No	per 1/20 day	Rs. 447.00 /day	Rs. 22.35
			TOTAL(B)=	Rs. 111.88

C)Earthwork

Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=	1.0	mtr.		
Total Quantity =				
(1.00x0.60x1.225)	0.735	cum		
Excavation	0.735	cum	Rs. 231.60 /cum	Rs. 110.32
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	0.735	cum	Rs. 161.30 /cum	Rs. 85.55
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(c)=	Rs. 195.88

D)Carrying cost upto site of work (in/c loading,unloading)

L.S		Rs. 10.00
	TOTAL(D)=	Rs. 10.00
	TOTAL(A+B+D)=	Rs. 252.38
Add sundries (L.S)		Rs. 30.000
		Rs. 282.383
Add 1% Water charges		Rs. 2.824
		Rs. 285.207
Add GST (Multiplying factor) 0.2127		Rs. 60.664
		Rs. 345.87
Add 15% contractors profit		Rs. 51.88
		Rs. 397.75
Add 1% cess		Rs. 3.978
	Net Total (E)	Rs. 401.73
	Rate per no (E+C)=	**Rs. 597.61**

(Rupees five hundred ninety seven and paisa sixty one) only

1.4	**Providing & fitting fixing rigid UPVC bend(30 degree,45 degree,60 degree, 90 degree) for UPVC pipes as per IS specification of Working pressure 4.0 kg/sq.cm as per CPWD Specification & direction of Engineer-in-charge.**
1.4.1)	**315 mm dia**

A)Material Cost:-

i)315 mm dia PVC Pipe	1.50	mtr.	Rs. 2,240.00 /mtr	Rs. 3,360.00
			TOTAL(A)=	Rs. 3,360.00
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00 /day	Rs. 64.00
ii) Helper	1 No	per 1/8 day	Rs. 447.00 /day	Rs. 55.88
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00 /day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00 /day	Rs. 89.40
			TOTAL(B)=	Rs. 311.68
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=	1.8	mtr.		
Total Quantity = (1.8x0.60x1.225)	1.3230	cum		
Excavation	1.3230	cum	Rs. 231.60 /cum	Rs. 198.58
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.3230	cum	Rs. 161.30 /cum	Rs. 154.00
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(c)=	Rs. 352.58

D)Carrying cost upto site of work (in/c loading,unloading)

L.S		Rs. 10.00
	TOTAL(D)=	Rs. 10.00
	TOTAL(A+B+D)=	Rs. 3,681.68
Add sundries (L.S)		Rs. 30.000
		Rs. 3,711.675
Add 1% Water charges		Rs. 37.117
		Rs. 3,748.792
Add GST (Multiplying factor) 0.2127		Rs. 797.368
		Rs. 4,546.16
Add 15% contractors profit		Rs. 681.92
		Rs. 5,228.08
Add 1% cess		Rs. 52.281
	Net Total (E)	Rs. 5,280.36
	Rate per no (E+C)=	**Rs. 5,632.94**

(Rupees five thousand six hundred thirty two and paisa ninety four) only

1.4.2)	250 mm dia

A)Material Cost:-

i)250 mm dia PVC Pipe	1.50	mtr.	Rs. 1,450.00	/mtr	Rs. 2,175.00
				TOTAL(A)=	Rs. 2,175.00
B)Labour Cost					
Making					
i)Fitter(Gr-I)	1 No	per 1/8 day	Rs. 512.00	/day	Rs. 64.00
ii) Helper	1 No	per 1/8 day	Rs. 447.00	/day	Rs. 55.88
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00	/day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00	/day	Rs. 89.40
				TOTAL(B)=	Rs. 311.68
C)Earthwork					
Average depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=	1.8	mtr.			
Total Quantity = (1.8x0.60x1.225)	1.3230	cum			
Excavation	1.3230	cum	Rs. 231.60	/cum	Rs. 198.58
	(SOR(Bldg)-2023 Item no.2.13)				
Backfilling	1.3230	cum	Rs. 161.30	/cum	Rs. 154.00
	(SOR(Bldg)-2023 Item no.2.16)				
				TOTAL(c)=	Rs. 352.58
D)Carrying cost upto site of work (in/c loading,unloading)					
L.S					Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 2,496.68
Add sundries (L.S)					Rs. 30.000
					Rs. 2,526.675
Add 1% Water charges					Rs. 25.267
					Rs. 2,551.942
Add GST (Multiplying factor) 0.2127					Rs. 542.798
					Rs. 3,094.74
Add 15% contractors profit					Rs. 464.21
					Rs. 3,558.95
Add 1% cess					Rs. 35.590
				Net Total (E)	Rs. 3,594.54
				Rate per no (E+C)=	**Rs. 3,947.12**

(Rupees three thousand nine hundred forty seven and paisa twelve) only

1.4.3)	200 mm dia

A)Material Cost:-

i)200 mm dia PVC Pipe	1.50	mtr.	Rs. 910.00 /mtr	Rs. 1,365.00
			TOTAL(A)=	Rs. 1,365.00
<u>B)Labour Cost</u>				
<u>Making</u>				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/5 day	Rs. 512.00 /day	Rs. 102.40
ii) Helper	1 No	per 1/5 day	Rs. 447.00 /day	Rs. 89.40
			TOTAL(B)=	Rs. 287.70
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=	1.8	mtr.		
Total Quantity = (1.8x0.60x1.225)	1.3230	cum		
Excavation	1.3230	cum	Rs. 231.60 /cum	Rs. 198.58
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.3230	cum	Rs. 161.30 /cum	Rs. 154.00
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(c)=	Rs. 352.58
<u>D)Carrying cost upto site of work (in/c loading,unloading)</u>				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 1,662.70
Add sundries (L.S)				Rs. 30.000
				Rs. 1,692.700
Add 1% Water charges				Rs. 16.927
				Rs. 1,709.627
Add GST (Multiplying factor) 0.2127				Rs. 363.638
				Rs. 2,073.26
Add 15% contractors profit				Rs. 310.99
				Rs. 2,384.25
Add 1% cess				Rs. 23.843
			Net Total (E)	Rs. 2,408.10
			Rate per no (E+C)=	**Rs. 2,760.68**

(Rupees two thousand seven hundred sixty and paisa sixty eight) only

1.4.4)	160 mm dia

A)Material Cost:-				
i)160 mm dia PVC Pipe	1.00	mtr.	Rs. 570.00 /mtr	Rs. 570.00
			TOTAL(A)=	Rs. 570.00
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
			TOTAL(B)=	Rs. 191.80
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=	1.5	mtr.		
Total Quantity =				
(1.5x0.60x1.225)	1.1025	cum		
Excavation	1.1025	cum	Rs. 231.60 /cum	Rs. 165.49
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.1025	cum	Rs. 161.30 /cum	Rs. 128.33
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(C)=	Rs. 293.82
	D)Carrying cost upto site of work (in/c loading,unloading)			
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 771.80
Add sundries (L.S)				Rs. 30.000
				Rs. 801.800
Add 1% Water charges				Rs. 8.018
				Rs. 809.818
Add GST (Multiplying factor) 0.2127				Rs. 172.248
				Rs. 982.07
Add 15% contractors profit				Rs. 147.31
				Rs. 1,129.38
Add 1% cess				Rs. 11.294
			Net Total (E)	Rs. 1,140.67
			Rate per no (E+C)=	**Rs. 1,434.49**

(Rupees one thousand four hundred thirty four and paisa forty nine) only

1.4.5)	**140 mm dia**				
	A)Material Cost:-				
	i)140 mm dia PVC Pipe	1.00	mtr.	Rs. 440.00 /mtr	Rs. 440.00
				TOTAL(A)=	Rs. 440.00
	B)Labour Cost				
	Making				
	i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
	ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
	Fitting fixing				
	i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
	ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
				TOTAL(B)=	Rs. 191.80
	C)Earthwork				
	Average depth=(1.50+0.95)/2	1.225	mtr.		
	width=(0.40+0.20)	0.6	mtr.		
	Minimum length=	1.5	mtr.		
	Total Quantity =				
	(1.5x0.60x1.225)	1.1025	cum		
	Excavation	1.1025	cum	Rs. 231.60 /cum	Rs. 165.49
		(SOR(Bldg)-2023 Item no.2.13)			
	Backfilling	1.1025	cum	Rs. 161.30 /cum	Rs. 128.33
		(SOR(Bldg)-2023 Item no.2.16)			
				TOTAL(c)=	Rs. 293.82
	D)Carrying cost upto site of work (in/c loading,unloading)				
	L.S				Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 641.80
	Add sundries (L.S)				Rs. 30.000
					Rs. 671.800
	Add 1% Water charges & sundries				Rs. 6.718
					Rs. 678.518
	Add GST (Multiplying factor) 0.2127				Rs. 144.321
					Rs. 822.84
	Add 15% contractors profit				Rs. 123.43
					Rs. 946.26
	Add 1% cess				Rs. 9.463
				Net Total (E)	Rs. 955.73
				Rate per no (E+C)=	**Rs. 1,249.54**

(Rupees one thousand two hundred forty nine and paisa fifty four) only

1.4.6)	110 mm dia

A)Material Cost:-

i)110 mm dia PVC Pipe	1.00	mtr.	Rs. 255.00	/mtr	Rs. 255.00
				TOTAL(A)=	Rs. 255.00
B)Labour Cost					
Making					
i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00	/day	Rs. 42.67
ii) Helper	1 No	per 1/12 day	Rs. 447.00	/day	Rs. 37.25
Fitting fixing					
i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00	/day	Rs. 42.67
ii) Helper	1 No	per 1/12 day	Rs. 447.00	/day	Rs. 37.25
				TOTAL(B)=	Rs. 159.83
C)Earthwork					
Average depth=(1.50+0.95)/2	1.225	mtr.			
width=(0.40+0.20)	0.6	mtr.			
Minimum length=	1.5	mtr.			
Total Quantity = (1.5x0.60x1.225)	1.1025	cum			
Excavation	1.1025	cum	Rs. 231.60	/cum	Rs. 165.49
	(SOR(Bldg)-2023 Item no.2.13)				
Backfilling	1.1025	cum	Rs. 161.30	/cum	Rs. 128.33
	(SOR(Bldg)-2023 Item no.2.16)				
				TOTAL(c)=	Rs. 293.82
D)Carrying cost upto site of work (in/c loading,unloading)					
L.S					Rs. 10.00
				TOTAL(D)=	Rs. 10.00
				TOTAL(A+B+D)=	Rs. 424.83
Add sundries (L.S)					Rs. 30.000
					Rs. 454.833
Add 1% Water charges					Rs. 4.548
					Rs. 459.382
Add GST (Multiplying factor) 0.2127					Rs. 97.710
					Rs. 557.09
Add 15% contractors profit					Rs. 83.56
					Rs. 640.66
Add 1% cess					Rs. 6.407
				Net Total (E)	Rs. 647.06
				Rate per no (E+C)=	**Rs. 940.88**

(Rupees nine hundred forty and paisa eighty eight) only

1.4.7)	90 mm dia

A)Material Cost:-

i)90 mm dia PVC Pipe	1.00	mtr.	Rs. 180.00 /mtr	Rs. 180.00
			TOTAL(A)=	Rs. 180.00
B)Labour Cost				
Making				
i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00 /day	Rs. 42.67
ii) Helper	1 No	per 1/12 day	Rs. 447.00 /day	Rs. 37.25
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/12 day	Rs. 512.00 /day	Rs. 42.67
ii) Helper	1 No	per 1/12 day	Rs. 447.00 /day	Rs. 37.25
			TOTAL(B)=	Rs. 159.83
C)Earthwork				
Average depth=(1.50+0.95)/2	1.225	mtr.		
width=(0.40+0.20)	0.6	mtr.		
Minimum length=	1.5	mtr.		
Total Quantity = (1.5x0.60x1.225)	1.1025	cum		
Excavation	1.1025	cum	Rs. 231.60 /cum	Rs. 165.49
	(SOR(Bldg)-2023 Item no.2.13)			
Backfilling	1.1025	cum	Rs. 161.30 /cum	Rs. 128.33
	(SOR(Bldg)-2023 Item no.2.16)			
			TOTAL(c)=	Rs. 293.82
D)Carrying cost upto site of work (in/c loading,unloading)				
L.S				Rs. 10.00
			TOTAL(D)=	Rs. 10.00
			TOTAL(A+B+D)=	Rs. 349.83
Add sundries (L.S)				Rs. 30.000
				Rs. 379.833
Add 1% Water charges				Rs. 3.798
				Rs. 383.632
Add GST (Multiplying factor) 0.2127				Rs. 81.598
				Rs. 469.03
Add 15% contractors profit				Rs. 70.35
				Rs. 539.38
Add 1% cess				Rs. 5.394
			Net Total (E)	Rs. 544.78
			Rate per no (E+C)=	**Rs. 838.59**

(Rupees eight hundred thirty eight and paisa fifty nine) only

1.5	**Dismentalling of existing PVC pipe from underground including necessary earth cutting etc.and dismentalled pipes,couplers,tees,etc properly stacking in safe site as per CPWD Specification & direction of Engineer-in-charge.**
	a) Pipes,cables etc exceeding 75 mm dia but not exceeding 315 mm dia.

Details of labour cost for 110 mtr length of a pipe

slope assumed 1 in 200

A) Labour cost for dismentalling & stacking etc. complete

i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00	/day	Rs. 256.00
ii) Helper	1 No	per 1/2 day	Rs. 447.00	/day	Rs. 223.50
				Total(A)=	Rs. 479.50

B)Earthwork

Minimum depth of trench=(0.75+0.20) =	0.95	mtr.			
Average depth=(1.5+0.95)/2 =	1.225	mtr.			
Width = 0.40+0.20 =	0.6	mtr.			
Total Quantity = (110x0.60x1.225)=	80.85	cum			
5% for collars =	4.04	cum			
Total =	84.89	cum			
Excavation	84.89	cum	Rs. 231.60	/cum	Rs. 12,741.99
	(SOR(Bldg)-2023 Item no.2.13)				
Backfilling	84.89	cum	Rs. 161.30	/cum	Rs. 9,881.20
	(SOR(Bldg)-2023 Item no.2.16)				
				TOTAL(B)=	Rs. 22,623.19

Add GST (Multiplying factor) 0.2127 on (A)		Rs. 101.990
		Rs. 581.49
Add 15% contractors profit		Rs. 87.22
		Rs. 668.71
Add 1% cess		Rs. 6.687
	TOTAL(C)=	Rs. 675.40
Dismentalling Cost of 110.0 mtr length of pipe(B+C) =		Rs. 23,298.59
	Total=	Rs. 23,298.59
	Rate per meter =(23298.59/110)=	**Rs. 211.81**

(Rupees two hundred elevan and paisa eighty one) only

1.6	**Labour charge for laying different dia rigid UPVC pipes of Working Pressure 4.0 kg/ sq.cm. complete with necessary coupler and solvent cement joints.(pipes, coupler and solvent cement will be issued free of cost) as per CPWD Specification & direction of Engineer-in-charge.**
1.6.1)	**90 mm dia**

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	2 No	per 1/2 day	Rs. 447.00 /day	Rs. 447.00
b)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)				
L.S				Rs. 300.00
			TOTAL=	Rs. 1,003.00
Add sundries (L.S)				Rs. 30.000
				Rs. 1,033.000
Add 1% Water charges				Rs. 10.330
				Rs. 1,043.330
Add GST (Multiplying factor) 0.2127				Rs. 221.916
				Rs. 1,275.58
Add 15% contractors profit				Rs. 191.34
				Rs. 1,466.91
Add 1% cess				Rs. 14.669
			GRAND TOTAL=	Rs. 1,481.58
			Rate per meter =(1481.58/102)=	**Rs. 14.53**

(Rupees Forteen and paisa fifty three) only

1.6.2)	**110 mm dia**

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	2 No	per 1/2 day	Rs. 447.00 /day	Rs. 447.00
b)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)				
L.S				Rs. 320.00
			TOTAL=	Rs. 1,023.00
Add sundries (L.S)				Rs. 30.000
				Rs. 1,053.000
Add 1% Water charges				Rs. 10.530
				Rs. 1,063.530
Add GST (Multiplying factor) 0.2127				Rs. 226.213
				Rs. 1,300.27
Add 15% contractors profit				Rs. 195.04
				Rs. 1,495.31
Add 1% cess				Rs. 14.953
			GRAND TOTAL=	Rs. 1,510.27
			Rate per meter =(1510.27/102)=	**Rs. 14.81**

(Rupees Forteen and paisa eighty one) only

1.6.3)	140 mm dia

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	2 No	per 1/2 day	Rs. 447.00 /day	Rs. 447.00
b)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)				
L.S				Rs. 350.00
			TOTAL=	Rs. 1,053.00
Add sundries (L.S)				Rs. 30.000
				Rs. 1,083.000
Add 1% Water charges				Rs. 10.830
				Rs. 1,093.830
Add GST (Multiplying factor) 0.2127				Rs. 232.658
				Rs. 1,337.32
Add 15% contractors profit				Rs. 200.60
				Rs. 1,537.92
Add 1% cess				Rs. 15.379
			GRAND TOTAL=	Rs. 1,553.29
			Rate per meter = 1553.29/102.00=	**Rs. 15.23**

(Rupees fifteen and paisa twenty three) only

1.6.4)	160 mm dia

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	2 No	per 1/2 day	Rs. 447.00 /day	Rs. 447.00
b)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)				
L.S				Rs. 380.00
			TOTAL=	Rs. 1,083.00
Add sundries (L.S)				Rs. 30.000
				Rs. 1,113.000
Add 1% Water charges				Rs. 11.130
				Rs. 1,124.130
Add GST (Multiplying factor) 0.2127				Rs. 239.102
				Rs. 1,363.23
Add 15% contractors profit				Rs. 204.48
				Rs. 1,567.72
Add 1% cess				Rs. 15.677
				Rs. 1,583.39
			Rate per meter = 1583.39/102.00=	**Rs. 15.52**

(Rupees fifteen and paisa fifty two) only

1.6.5)	200 mm dia

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Labour cost for fitting fixing

i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	3 No	per 1/2 day	Rs. 447.00 /day	Rs. 670.50

b)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)

L.S		Rs. 400.00
	TOTAL=	Rs. 1,326.50
Add sundries (L.S)		Rs. 30.000
		Rs. 1,356.500
Add 1% Water charges & sundries		Rs. 13.565
		Rs. 1,370.065
Add GST (Multiplying factor) 0.2127		Rs. 291.413
		Rs. 1,661.48
Add 15% contractors profit		Rs. 249.22
		Rs. 1,910.70
Add 1% cess		Rs. 19.107
	GRAND TOTAL=	Rs. 1,929.81
	Rate per meter = 1929.81/102.00=	**Rs. 18.92**

(Rupees eighteen and paisa ninety two) only

1.6.6)	250 mm dia

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Labour cost for fitting fixing

i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	3 No	per 1/2 day	Rs. 447.00 /day	Rs. 670.50

b)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)

L.S	Rs. 400.00 /each	Rs. 400.00
	TOTAL=	Rs. 1,326.50
Add sundries (L.S)		Rs. 40.000
		Rs. 1,366.500
Add 1% Water charges		Rs. 13.665
		Rs. 1,380.165
Add GST (Multiplying factor) 0.2127		Rs. 293.561
		Rs. 1,673.73
Add 15% contractors profit		Rs. 251.06
		Rs. 1,924.79
Add 1% cess		Rs. 19.248
	GRAND TOTAL=	Rs. 1,944.03
	Rate per meter = 1944.03/102.00=	**Rs. 19.06**

(Rupees nineteen and paisa six) only

1.6.7)	**315 mm dia**

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Labour cost for fitting fixing

i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	3 No	per 1/2 day	Rs. 447.00 /day	Rs. 670.50
b)Carrying cost of the unit (in/cl loading,unloading & carriage upto work site from Sub-Divisional store by mini truck)			L.S.	Rs. 420.00
			TOTAL=	Rs. 1,346.50
Add sundries (L.S)				Rs. 30.000
				Rs. 1,796.500
Add 1% Water charges				Rs. 17.965
				Rs. 1,814.465
Add GST (Multiplying factor) 0.2127				Rs. 385.937
				Rs. 2,200.40
Add 15% contractors profit				Rs. 330.06
				Rs. 2,530.46
Add 1% cess				Rs. 25.305
			GRAND TOTAL=	Rs. 2,555.77
			Rate per meter = 2555.77/102.00=	**Rs. 25.06**

(Rupees twenty five and paisa six) only

1.7	**Providing and fitting fixing of G.I hydrant suitable for PVC pipes as per standard specification complete as per direction of Engineer-in-charge (Rate excluding the cost of NTP control valve). 80X50 mm dia**

<u>Cost of Materials:-</u>

i)80 mm dia GI Pipe	0.3	mtr.	Rs. 1,188.00 /mtr	Rs. 356.40
ii)50 mm dia GI Pipe	1.25	mtr.	Rs. 745.00 /mtr	<u>Rs. 931.25</u>
			TOTAL(A)=	Rs. 1,287.65
Cost of manufactring:-				
Manufacturing cost including cutting,welding & threading etc. complete			L.S	Rs. 500.00
<u>b)Labour Cost</u>				
Fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/10 day	Rs. 512.00 /day	Rs. 51.20
ii) Helper	1 No	per 1/10 day	Rs. 447.00 /day	Rs. 44.70
			TOTAL=	Rs. 95.90
<u>Carrying cost upto site(in/c loading & unloading)</u>			<u>L.S</u>	Rs. 50.00
			NET TOTAL=	Rs. 1,933.55
Add sundries (L.S)				Rs. 30.000
				Rs. 2,013.550
Add 1% Water charges				Rs. 20.136
				Rs. 2,033.686
Add GST (Multiplying factor) 0.2127				Rs. 432.565
				Rs. 2,466.25
Add 15% contractors profit				Rs. 369.94
				Rs. 2,836.19
Add 1% cess				Rs. 28.362
			Rate per no=	**Rs. 2,864.55**

(Rupees Two Thousand eight hundred sixty four and paisa fifty five) only

1.8	**Providing & fitting fixing MS tail piece with MS flange suitable for pipes complete as per CPWD Specification & direction of Engineer-in-charge.**
1.8.1)	**80 mm dia**

a)Materials cost:-					
80 mm dia	1	No.	450.00	/No.	Rs. 450.00
				TOTAL(A)=	Rs. 450.00
B)Labour Cost					
i)Fitter(Gr-I)	1 No	per 1/22 day	Rs. 512.00	/day	Rs. 23.27
ii) Helper	1 No	per 1/22 day	Rs. 447.00	/day	Rs. 20.32
				TOTAL(B)=	Rs. 43.59
Carrying cost upto site(in/c loading & unloading)					
L.S					Rs. 10.00
				TOTAL(C)=	Rs. 10.00
				TOTAL(A+B+C)=	Rs. 503.59
Add sundries (L.S)					Rs. 30.000
					Rs. 533.591
Add 1% Water charges					Rs. 5.336
					Rs. 538.927
Add GST (Multiplying factor) 0.2127					Rs. 114.630
					Rs. 653.56
Add 15% contractors profit					Rs. 98.03
					Rs. 751.59
Add 1% cess					Rs. 7.516
				Rate per no=	**Rs. 759.11**

(Rupees seven hundred fifty nine and paisa eleven) only

1.8.2)	**100 mm dia**

a)Materials cost:-					
100 mm dia	1	No.	500.00	/No.	Rs. 500.00
				TOTAL(A)=	Rs. 500.00
B)Labour Cost					
i)Fitter(Gr-I)	1 No	per 1/22 day	Rs. 512.00	/day	Rs. 23.27
ii) Helper	1 No	per 1/22 day	Rs. 447.00	/day	Rs. 20.32
				TOTAL(B)=	Rs. 43.59
Carrying cost upto site(in/c loading & unloading)					
L.S.					Rs. 10.00
				TOTAL(C)=	Rs. 10.00
				TOTAL(A+B+C)=	Rs. 553.59
Add sundries (L.S)					Rs. 30.000
					Rs. 583.591
Add 1% Water charges & sundries					Rs. 5.836
					Rs. 589.427
Add GST (Multiplying factor) 0.2127					Rs. 125.371
					Rs. 714.80
Add 15% contractors profit					Rs. 107.22
					Rs. 822.02
Add 1% cess					Rs. 8.220
				Rate per no=	**Rs. 830.24**

(Rupees eight hundred thirty and paisa twenty four) only

1.8.3)	125 mm dia

a)Materials cost:-

125 mm dia	1	No.	700.00	/No.	Rs. 700.00
				TOTAL(A)=	Rs. 700.00
B)Labour Cost					
i)Fitter(Gr-I)	1 No	per 1/22 day	Rs. 512.00	/day	Rs. 23.27
ii) Helper	1 No	per 1/22 day	Rs. 447.00	/day	Rs. 20.32
				TOTAL(B)=	Rs. 43.59
Carrying cost upto site(in/c loading & unloading)					
L.S					Rs. 15.00
				TOTAL(C)=	Rs. 15.00
				TOTAL(A+B+C)=	Rs. 758.59
Add sundries (L.S)					Rs. 30.000
					Rs. 788.591
Add 1% Water charges					Rs. 7.886
					Rs. 796.477
Add GST (Multiplying factor) 0.2127					Rs. 169.411
					Rs. 965.89
Add 15% contractors profit					Rs. 144.88
					Rs. 1,110.77
Add 1% cess					Rs. 11.108
				Rate per no=	**Rs. 1,121.88**

(Rupees one thousand one hundred twenty one and paisa eighty eight) only

1.8.4)	150 mm dia

a)Materials cost:-					
150 mm dia	1	No.	850.00	/No.	Rs. 850.00
				TOTAL(A)=	Rs. 850.00
B)Labour Cost					
i)Fitter(Gr-I)	1 No	per 1/20 day	Rs. 512.00	/day	Rs. 25.60
ii) Helper	1 No	per 1/20 day	Rs. 447.00	/day	Rs. 22.35
				TOTAL(B)=	Rs. 47.95
Carrying cost upto site(in/c loading & unloading)					
L.S					Rs. 20.00
				TOTAL(C)=	Rs. 20.00
				TOTAL(A+B+C)=	Rs. 917.95
Add sundries (L.S)					Rs. 30.000
					Rs. 947.950
Add 1% Water charges					Rs. 9.480
					Rs. 957.430
Add GST (Multiplying factor) 0.2127					Rs. 203.645
					Rs. 1,161.07
Add 15% contractors profit					Rs. 174.16
					Rs. 1,335.24
Add 1% cess					Rs. 13.352
				Rate per no=	**Rs. 1,348.59**

(Rupees one thousand three hundred forty eight and paisa fifty nine) only

1.8.5)	200 mm dia

a)Materials cost:-

200 mm dia	1	No.	1350.00	/No.	Rs. 1,350.00
				TOTAL(A)=	Rs. 1,350.00
B)Labour Cost					
i)Fitter(Gr-I)	1 No	per 1/20 day	Rs. 512.00	/day	Rs. 25.60
ii) Helper	1 No	per 1/20 day	Rs. 447.00	/day	Rs. 22.35
				TOTAL(B)=	Rs. 47.95
Carrying cost upto site(in/c loading & unloading)					
L.S					Rs. 30.00
				TOTAL(C)=	Rs. 30.00
				TOTAL(A+B+C)=	Rs. 1,427.95
Add sundries (L.S)					Rs. 30.000
					Rs. 1,457.950
Add 1% Water charges & sundries					Rs. 14.580
					Rs. 1,472.530
Add GST (Multiplying factor) 0.2127					Rs. 313.207
					Rs. 1,785.74
Add 15% contractors profit					Rs. 267.86
					Rs. 2,053.60
Add 1% cess					Rs. 20.536
				Rate per no=	**Rs. 2,074.13**

(Rupees two thousand seventy four and paisa thirteen) only

1.8.6)	250 mm dia

a)Materials cost:-

250 mm dia	1	No.	1700.00	/No.	Rs. 1,700.00
				TOTAL(A)=	Rs. 1,700.00
B)Labour Cost					
i)Fitter(Gr-I)	1 No	per 1/20 day	Rs. 512.00	/day	Rs. 25.60
ii) Helper	1 No	per 1/20 day	Rs. 447.00	/day	Rs. 22.35
				TOTAL(B)=	Rs. 47.95
Carrying cost upto site(in/c loading & unloading)					
L.S					Rs. 30.00
				TOTAL(C)=	Rs. 30.00
				TOTAL(A+B+C)=	Rs. 1,777.95
Add sundries (L.S)					Rs. 30.000
					Rs. 1,807.950
Add 1% Water charges					Rs. 18.080
					Rs. 1,826.030
Add GST (Multiplying factor) 0.2127					Rs. 388.396
					Rs. 2,214.43
Add 15% contractors profit					Rs. 332.16
					Rs. 2,546.59
Add 1% cess					Rs. 25.466
				Rate per no=	**Rs. 2,572.06**

(Rupees two thousand five hundred seventy two and paisa six) only

1.8.7)	300 mm dia

a)Materials cost:-

300 mm dia	1	No.	2500.00	/No.	Rs. 2,500.00
				TOTAL(A)=	Rs. 2,500.00

B)Labour Cost

i)Fitter(Gr-I)	1 No	per 1/20 day	Rs. 512.00	/day	Rs. 25.60
ii) Helper	1 No	per 1/20 day	Rs. 447.00	/day	Rs. 22.35
				TOTAL(B)=	Rs. 47.95

Carrying cost upto site(in/c loading & unloading)

L.S		Rs. 30.00
	TOTAL(C)=	Rs. 30.00
	TOTAL(A+B+C)=	Rs. 2,577.95
Add sundries (L.S)		Rs. 30.000
		Rs. 2,607.950
Add 1% Water charges & sundries		Rs. 26.080
		Rs. 2,634.030
Add GST (Multiplying factor) 0.2127		Rs. 560.258
		Rs. 3,194.29
Add 15% contractors profit		Rs. 479.14
		Rs. 3,673.43
Add 1% cess		Rs. 36.734
	Rate per no=	**Rs. 3,710.17**

(Rupees three thousand seven hundred ten and paisa seventeen) only

1.9	**Providing and laying different dia rigid UPVC pipes of Working Pressure 4.0 kg/ sq.cm. complete with necessary coupler and solvent cement as per CPWD Specification & direction of Engineer-in-charge.**
1.9.1)	**90 mm dia**

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Cost of 90 mm dia pipe	102	mtr	Rs. 180.00 /mtr	Rs. 18,360.00
b) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	2 No	per 1/2 day	Rs. 447.00 /day	Rs. 447.00
c)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)				
L.S				Rs. 300.00
			TOTAL=	Rs. 19,363.00
Add sundries (L.S)				Rs. 30.000
				Rs. 19,393.000
Add 1% Water charges				Rs. 193.930
				Rs. 19,586.930
Add GST (Multiplying factor) 0.2127				Rs. 4,166.140
				Rs. 23,947.00
Add 15% contractors profit				Rs. 3,592.05
				Rs. 27,539.05
Add 1% cess				Rs. 275.391
			GRAND TOTAL=	Rs. 27,814.44
			Rate per meter =(27814.44/102)=	**Rs. 272.69**

(Rupees two hundred seventy two and paisa sixty nine) only

1.9.2)	110 mm dia

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Cost of 110 mm dia pipe	102	mtr	Rs. 255.00 /mtr	Rs. 26,010.00
b) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	2 No	per 1/2 day	Rs. 447.00 /day	Rs. 447.00
c)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)				
L.S				Rs. 320.00
			TOTAL=	Rs. 27,033.00
Add sundries (L.S)				Rs. 30.000
				Rs. 27,063.000
Add 1% Water charges				Rs. 270.630
				Rs. 27,333.630
Add GST (Multiplying factor) 0.2127				Rs. 5,813.863
				Rs. 33,418.12
Add 15% contractors profit				Rs. 5,012.72
				Rs. 38,430.84
Add 1% cess				Rs. 384.308
			GRAND TOTAL=	Rs. 38,815.15
			Rate per meter =(38815.15/102)=	**Rs. 380.54**

(Rupees three hundred eighty and paisa fifty Four) only

1.9.3)	140 mm dia

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Cost of 140 mm dia pipe	102	mtr	Rs. 440.00 /mtr	Rs. 44,880.00
a) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	2 No	per 1/2 day	Rs. 447.00 /day	Rs. 447.00
b)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)				
L.S				Rs. 350.00
			TOTAL=	Rs. 45,933.00
Add sundries (L.S)				Rs. 30.000
				Rs. 45,963.000
Add 1% Water charges				Rs. 459.630
				Rs. 46,422.630
Add GST (Multiplying factor) 0.2127				Rs. 9,874.093
				Rs. 56,756.35
Add 15% contractors profit				Rs. 8,513.45
				Rs. 65,269.81
Add 1% cess				Rs. 652.698
			GRAND TOTAL=	Rs. 65,922.50
			Rate per meter = 65922.50/102.00=	**Rs. 646.30**

(Rupees six hundred forty Six and paisa thirty) only

1.9.4)	160 mm dia			

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Cost of 160 mm dia pipe	102	mtr	Rs. 570.00 /mtr	Rs. 58,140.00
a) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	2 No	per 1/2 day	Rs. 447.00 /day	Rs. 447.00
b)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)				
L.S				Rs. 380.00
			TOTAL=	Rs. 59,223.00
Add sundries (L.S)				Rs. 30.000
				Rs. 59,253.000
Add 1% Water charges				Rs. 592.530
				Rs. 59,845.530
Add GST (Multiplying factor) 0.2127				Rs. 12,729.144
				Rs. 72,574.67
Add 15% contractors profit				Rs. 10,886.20
				Rs. 83,460.88
Add 1% cess				Rs. 834.609
				Rs. 84,295.48
			Rate per meter = 84295.48/102.00=	**Rs. 826.43**

(Rupees eight Hundred two hundred six and paisa Forty three) only

1.9.5)	200 mm dia			

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Cost of 200 mm dia pipe	102	mtr	Rs. 910.00 /mtr	Rs. 92,820.00
a) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	3 No	per 1/2 day	Rs. 447.00 /day	Rs. 670.50
b)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)				
L.S				Rs. 400.00
			TOTAL=	Rs. 94,146.50
Add sundries (L.S)				Rs. 30.000
				Rs. 94,176.500
Add 1% Water charges & sundries				Rs. 941.765
				Rs. 95,118.265
Add GST (Multiplying factor) 0.2127				Rs. 20,231.655
				Rs. 1,15,349.92
Add 15% contractors profit				Rs. 17,302.49
				Rs. 1,32,652.41
Add 1% cess				Rs. 1,326.524
			GRAND TOTAL=	Rs. 1,33,978.93
			Rate per meter = 133978.93/102.00=	**Rs. 1,313.52**

(Rupees One Thousand Three Hundred Thirteen and paisa Fifty Two) only

1.9.6)	250 mm dia

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Cost of 250 mm dia pipe	102	mtr	Rs. 1,450.00 /mtr	Rs. 1,47,900.00
b) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	3 No	per 1/2 day	Rs. 447.00 /day	Rs. 670.50
c)Carrying cost (in/c loading,unloading) upto work site from Sub-Divisional store)				
L.S			Rs. 400.00 /each	Rs. 400.00
			TOTAL=	Rs. 1,49,226.50
Add sundries (L.S)				Rs. 40.000
				Rs. 1,49,266.500
Add 1% Water charges				Rs. 1,492.665
				Rs. 1,50,759.165
Add GST (Multiplying factor) 0.2127				Rs. 32,066.474
				Rs. 1,82,825.64
Add 15% contractors profit				Rs. 27,423.85
				Rs. 2,10,249.49
Add 1% cess				Rs. 2,102.495
			GRAND TOTAL=	Rs. 2,12,351.98
			Rate per meter = 212351.98/102.00=	**Rs. 2,081.88**

(Rupees Two Thousand Eighty One and paisa Eighty Eight) only

1.9.7)	315 mm dia

Details of cost for 102.00 mtr Length.(considering 17 Nos. Pipe @ 6.00 Mtr. each)

a) Cost of 315 mm dia pipe	102	mtr	Rs. 2,240.00 /mtr	Rs. 2,28,480.00
a) Labour cost for fitting fixing				
i)Fitter(Gr-I)	1 No	per 1/2 day	Rs. 512.00 /day	Rs. 256.00
ii) Helper	3 No	per 1/2 day	Rs. 447.00 /day	Rs. 670.50
b)Carrying cost of the unit (in/cl loading,unloading & carriage upto work site from Sub-Divisional store by mini truck)				
L.S				Rs. 420.00
			TOTAL=	Rs. 2,29,826.50
Add sundries (L.S)				Rs. 30.000
				Rs. 2,30,276.500
Add 1% Water charges				Rs. 2,302.765
				Rs. 2,32,579.265
Add GST (Multiplying factor) 0.2127				Rs. 49,469.610
				Rs. 2,82,048.87
Add 15% contractors profit				Rs. 42,307.33
				Rs. 3,24,356.21
Add 1% cess				Rs. 3,243.562
			GRAND TOTAL=	Rs. 3,27,599.77
			Rate per meter = 327599.77/102.00=	**Rs. 3,211.76**

(Rupees Three Thousand Two Hundred Eleven and paisa Seventy Six) only

1.10	**Providing and fitting fixing of M.S shore manifold made with 3mm thick MS sheet of size one way 315 mm dia & three way 125 mm dia made with suitable flange(all end) including coating with steel primer(tail piece if required will be paid separately) including proper alignment with pipe line & earth cutting, backfilling complete as per direction of Engineer-in-charge.**

A)Cost of Materials:-

i)M.S Sheet 3mm thick										Basic Rate TSR-2023 (code NO.05041) on Rs. 5950.00
a)Manifold(5' length & 16" dia)	sqm	1	1.52	3.14	0.41	1.94				
b)Manifold sides(16" dia)	sqm	1	2.00	0.41	0.41	0.33				
c)Three way(1' length & 5" dia)	sqm	3	3.14	0.13	0.30	0.36				
d)Oneway(1' length & 12" dia)	sqm	1	3.14	0.30	0.30	0.29				
Total	sqm					2.93				
Add 5% extra for wastage	sqm					0.15				
Net Total	sqm					3.08				
M.S Sheet 3 mm thick @ 23.75 kg/sqm	Qtl.					0.73	Rs. 5,950.00	/qtl	Rs. 4,349.63	
ii)5" dia MS flange 10 mm thick	Nos.	1x3				3	Rs. 211.00	/No	Rs. 633.00	As per basic rate of PWD(DWS), 2023
iii)12" dia MS flange 10 mm thick	Nos.	1x1				1	Rs. 1,450.00	/No	Rs. 1,450.00	As per recent basic rate of PWD(WR), 2020

iv)5" dia Rubber Flange washer 6 mm thick	Nos.	1x3				3	Rs. 70.00	/No	Rs. 210.00	As per recent basic rate of PWD(WR), 2023
v)12" dia rubber Flange washer 6 mm thick	Nos.	1x1				1	Rs. 280.00	/No	Rs. 280.00	As per recent basic rate of PWD(WR), 2023
vi)Bolts and Nuts 16 mm dia 65 mm long	Nos.									As per recent basic rate of PWD(WR), 2023
For 5" dia MS flange	Nos.	1x3x8				24				
For 12" dia MS flange	Nos.	1x12				12				
Total=	Nos.					36				
	Kg	.@0.10 kg/no				3.6	Rs. 110.00	/No	Rs. 396.00	

Rs. 7,318.63

TOTAL(A)= **Rs. 7,318.63**

B)Cutting & Welding of Manifold:-

i)welding										Basic Rate TSR-2023 i.e Rs. 2.00
a)Manifold(Longitudinal)	cm									
b)Manifold both sides	cm	1.0	152.4			152.4				
c)5" dia three way (oval shaped & flanges)	cm	1.0	2.0	3.1	40.6	255.2				
d)5" dia three way(longitudinal)	cm	2.0	3.0	3.1	12.7	239.3				
e)12" dia one way(oval shaped & flanges)	cm	1.0	3.0	30.5		91.4				
d)12" dia one way(longitudinal)	cm	1	2	3.14	30.48	191.41				
	cm	1	30.48			30.48				
ii)Cutting										
a)5" dia three way (oval shaped)	cm	1	3	3.14	12.7	119.63				
b)12" dia one way(oval shaped)	cm	1	3.14	30.48		95.707				
				TOTAL(B)=		1175.6	Rs. 2.50	/Cm	Rs. 2,938.91	

C)Labour cost of making Manifold:-

a)Blacksmith 1st class	Day	1	No.				Rs. 512.00	/Day	Rs. 512.00	As per recent basic rate of PWD(WR), 2023
b)Blacksmith 2nd class	Day	2	No.				Rs. 475.00	/Day	Rs. 950.00	
c)Belder skilled	Day	2	Nos.				Rs. 447.00	/Day	Rs. 894.00	
				TOTAL(C)=					Rs. 2,356.00	

D)Earthwork & backfilling:-

a)Earthwork	cum	1	1.8	1.5	1.25	3.375	Rs. 231.60	/cum	Rs. 781.65	TSR-2023 (code no.2.13 &2.16)
b)Filling available excavated earth	cum	1	1.8	1.5	1.25	3.375	Rs. 161.30	/cum	Rs. 544.39	
				TOTAL(D)=					Rs. 1,326.04	

E)Carrying cost upto site(in/c loading & unloading)

Lumpsum									Rs. 300.00	L.S
				TOTAL(E)=					Rs. 300.00	

F)Applying priming coat with ready mixed red oxide zinc chromate primer on steel work:-

a)Manifold(5' length & 16" dia)	sqm	1	1.524	3.14	0.4064	1.9448				TSR-2023 (code no. 12.33.3)
b)Manifold sides(16" dia)	sqm	1	2	0.4064	0.4064	0.3303				
c)Three way(1' length & 5"dia)	sqm	3	3.14	0.127	0.3048	0.3646				
d)One way(1' length & 12" dia)	sqm	1	3.14	0.3048	0.3048	0.2917				
				TOTAL(F)=		2.9315	Rs. 42.40	/Sqm	Rs. 124.29	

Total of Basic Rates(A+B+C+E)=	Rs. 12,913.54
Add sundries =	Rs. 50.00
	Rs. 12,963.54
Add 1% Water charges =	Rs. 129.64
	Rs. 13,093.18
Add GST (Multiplying factor) 0.2127	Rs. 2,784.92
	Rs. 15,878.09
Adding 15% Contractor's p	Rs. 2,381.71
	Rs. 18,259.81
Add 1% cess=	Rs. 182.60
Net total (G)=	Rs. 18,442.4
Rate per no =	**Rs. 19,892.74**

(Rupees Nineteen thousand eight hundred ninety two and paisa seventy four) only

1.11	Labour charge for repairing of leakage in existing UPVC distribution system including required earth cutting and fitting fixing of necessary coupler etc. complete and refilling the trench with available excavated earth as per direction of the Engineer-in-charge. (Payment of couplers, tees, reducers etc will be made separately)
1.11.1)	**315 mm dia**

Considering 02(two) No. leakage					
A)Labour charge for fitting fixing Lumpsum (for 3 Nos.)					
	2.0	Nos.	Rs. 50.00	Nos.	Rs. 100.00
B) Carrying cost upto site of work (in/c loading & unloading)					
L.S	2.0	Nos.	Rs. 20.00	Nos.	Rs. 40.00
C) Sundries (L.S)					Rs. 20.00
			Total(A+B)		Rs. 160.00
D) Add for Water charges			1%		Rs. 1.60
					Rs. 161.60
E) Add GST (Multiplying factor)			0.2127		Rs. 34.37
					Rs. 195.97
F) Add for contractors profit and overheads			15%		Rs. 29.40
					Rs. 225.37
G) Add cess			1%		Rs. 2.25
				Total(H)	Rs. 227.62
I) Labour charge for earth cutting and filling					
i)315mm dia PVC Pipe	2	15.00	30.00 mtr		
			Rs. 30.00	212.40 /mtr	Rs. 6,372.00
				Total(H+I)=	Rs. 6,599.62
Average Rate =6599.62/3				**Rate per no=**	**Rs. 2,199.87**

(Rupees Two thousand one hundred Ninety nine and paisa eighty seven) only

1.11.2)	**250 mm dia to 110 mm dia**

Considering 05(five) No. leakage					
A)Labour charge for fitting fixing Lumpsum (for 3 Nos.)					
	5.0	Nos.	Rs. 50.00	Nos.	Rs. 250.00
B) Carrying cost upto site of work (in/c loading & unloading)					
L.S	5.0	Nos.	Rs. 20.00	Nos.	Rs. 100.00
C) Sundries (L.S)					Rs. 20.00
			Total(A+B)		Rs. 370.00
D) Add for Water charges			1%		Rs. 3.70
					Rs. 373.70
E) Add GST (Multiplying factor)			0.2127		Rs. 79.49
					Rs. 453.19
F) Add for contractors profit and overheads			15%		Rs. 67.98
					Rs. 521.16
G) Add cess			1%		Rs. 5.21
				Total(H)	Rs. 526.38
I) Labour charge for earth cutting and filling					
i)250 mm dia PVC Pipe	1	15.00	15.00 mtr		
ii) 200 mm dia PVC Pipe	1	15.00	15.00 mtr		
iii)160 mm dia PVC Pipe	1	12.0	12.00 mtr		
iv)140 mm dia PVC Pipe	1	9.0	9.00 mtr		
iii) 110 mm dia PVC Pipe	1	8.0	8.00 mtr		
		Total=	59.00 mtr	106.40 /mtr	Rs. 6,277.60
				Total(H+I)=	Rs. 6,803.98
Average Rate =6803.98/3				**Rate per no=**	**Rs. 1,360.80**

(Rupees One thousand three hundred sixty and paisa eighty) only

1.11.3)	90 mm dia

Considering 01(One) No. leakage

A)Labour charge for fitting fixingLumpsum (for 4 Nos.)

	5	Nos.	Rs. 50.00	Nos.	Rs. 250.00

B) Carrying cost upto site of work (including loading & unloading)

L.S	5	Nos.	Rs. 20.00	Nos.	Rs. 100.00
C) Sundries (L.S)					Rs. 20.00
			Total(B+C+D)		Rs. 370.00
D)Add for Water charges			1%		Rs. 3.70
					Rs. 373.70
E)Add GST (Multiplying factor)			0.2127		Rs. 79.49
					Rs. 453.19
F)Add for contractors profit and overheads			15%		Rs. 67.98
					Rs. 521.16
G)Add cess			1%		Rs. 5.21
				Total(H)	Rs. 526.38

I) Labour charge for earth cutting and filling

	5	8.00	40.00 mtr		
iv) 90 mm dia PVC Pipe					
		Total=	40.00 mtr	87.60 /mtr	Rs. 3,504.0
			Grand Total (H+I) =		Rs. 4,030.38
			Rate per no = 3810.94/4=		**Rs. 806.08**

(Rupees Eight hundredsix and paisa eight) only

SCHEDULE OF RATES, 2023

CHAPTER – 2
PUMP HOUSE (ANALYSIS)

PUBLIC WORKS DEPARTMENT
(WATER RESOURCES)

ANALYSIS OF RATE
CHAPTER-2
PUMP HOUSE

2.1	**Providing & fixing of fabricated post made of 100mm dia medium class MS pipe (9.75 kg/mtr) 3.00 mtr long fitted with 3 nos. 75X45X6 mm cleat and 2 nos. 200 X200X10mm gusset plate at top and bottom including cutting making necessary holes in the gusset plates, welding etc. complete (excluding nuts & bolts) as per direction of the Engineer - in- Charge.**

(for 1 no. Post considering 3.00 mtr long)

Total pipe require :- (113.90 mm outer dia & 3 mm thickness)

i) For 1(one) post :-	1	3.00 mtr	@	Rs. 9.75	kg/mtr		29.25	kg
Total =		29.25 kg	@	Rs. 62.00	/kg			Rs. 1,814
				Basic rate TSR-2023 code- 09013				
ii)200X200X10mm gusset plate:-								
	2 Nos.@	3.14 kg/each=					6.28	kg
75X45X6mm cleat=								
	3 Nos. @	0.159 kg/each=					0.477	kg
						=	6.757	Kg
			6.757 kg @	Rs. 5,954.00	kg/mtr		=	Rs. 402.31
				Basic rate TSR-2023 code- 05026				
iii)Manufacturing charge in/c welding (29.25+6.28+0.477)kg			36.007 kg @	Rs. 25.00	/kg		=	Rs. 900.18
				Lum sum Rate				
iv) Labour charge for fitting fixing of tubular truss (L.S. rate)			36.007 kg @	Rs. 25.00	/kg		=	Rs. 900.18
				Lum sum Rate				
v) Carrying the tubular truss from manufacturing place to work site.=					(L.S)		=	Rs. 400.00
vi) Sundries (L.S)								Rs. 20.00
			Total (A) = (i+ii+iii+iv+v+vi)					Rs. 4,436.16
Add for Water charges			@	1%			=	Rs. 44.36
								Rs. 4,480.52
Add GST (multiplying factor)				0.2127			=	**Rs. 953.01**
								Rs. 5,433.53
Add for contractor profit and overheads				15%			=	Rs. 815.03
								Rs. 6,248.56
Add cess			@	1%			=	Rs. 62.49
					Grand Total			Rs. 6,311.05

(Rupees Six thousand Three hundred eleven and paisa five) only.

2.2	**Fabricating and supplying at site of work, steel tublar trusses of M.S pipe conforming to IS specification, complete with purlin, bracing and other necessary fittings such as cleat gusset plate etc of thickness not less than 6.00 mm including applying a primming coat (two or more coats)as per direction of the Engineer - in-Charge and approved standard design. (Member used in trusses as rafter, bottom tie and purlin are of 40.00 mm dia and struts etc are of 20.00 mm dia and bottom runner are of 25.00 mm dia conforming to IS 1239 part-II /1990 light class) . One set comprising of 4(four) nos trusses with 6(six) nos. purlin and 4.00 mtr span as per approved drawing and design etc complete excluding nuts & bolts.**

i) Electric resistance or induction but welded tubes
Total pipe require :- (48.30 mm outer dia)

For Rafter :-	1	4	2	2.68	=	21.44	mtr @	3.27	kg/mtr	=	70.11	kg
Bottom tie:-	1	1	4	4.00	=	16	mtr @	3.61	kg/mtr	=	57.76	kg
Purlin:-	1	1	6	10.40	=	62.4	mtr @	3.61	kg/mtr	=	225.26	kg
Struts:-	1	1	4	6.38	=	25.52	mtr @	1.42	kg/mtr	=	36.24	kg
Bottom Runner:-	1	1	5	9.50	=	47.5	mtr @	2.65	kg/mtr	=	125.88	kg
										=	515.25	kg
							@	Rs. 62.0	/kg	=	Rs. 31,945.26	

Basic rate TSR-2023 code- 09013

ii) 40x5mm flat for cleat=	1	94	0.076	=	7.144	mtr
	1	8	0.250	=	2.00	mtr
				=	9.144	mtr

@ 1.57 kg/mtr = 14.36 kg @ 62.00 kg/mtr = Rs. 890.08

Basic rate TSR-2023 code- 09013

iii) 200X200X10mm gusset plate:-

8 nos @ 3.14 kg/mtr 25.12 kg @ 62.00 kg/mtr = Rs. 1,557.44

Basic rate TSR-2023 code- 09013

iv) Manufacturing charge in/c welding (L.S.) rate (515.25+14.36+25.12)kg	554.72	kg	@	Rs. 25.0	/kg	=	Rs. 13,868.06
				Lum sum Rate			
v) Labour charge for fitting fixing of tubular truss (L.S.) rate	554.72	kg	@	Rs. 25.00	/kg	=	Rs. 13,868.06
				Lum sum Rate			

vi) Carrying the tubular truss from manufacturing place to work site.(L.S) = Rs. 2,000.00

vii) Sundries (L.S) Rs. 30.0

	Total (A) = (i+ii+iii+iv+v+vi+vii)			Rs. 64,158.90
Add for Water charges	@	1%	=	Rs. 641.59
				Rs. 64,800.48
Add GST (multiplying factor)		0.2127	=	Rs. 13,783.06
				Rs. 78,583.55
Add for contractor profit and overheads		15%	=	Rs. 11,787.53
				Rs. 90,371.08
Add cess	@	1%	=	Rs. 903.71
	Grand Total			Rs. 91,274.79

Rate for one complete job= Rs. 91,274.79

Rate per kg = $\frac{\mathbf{91274.79}}{\mathbf{554.72}}$

= Rs. 164.54

(Rupees One Hundred Sixty Four and paisa Fifty Four) only.

2.3	**Fabricating and supplying at site of work steel tublar trusses of M.S pipe conforming to IS Specification, complete with purlin, bracing and other necessary fittings such as cleat gusset plate etc of thickness not less than 6.00 mm thick including applying a primming coat (two or more coats) as per direction of the Engineer - in-Charge and approved standard design.(Member used in trusses as rafter, bottom tie and purlin are of 40.00 mm dia and struts etc are of 20.00 mm dia and bottom runner are of 25.00 mm dia conforming to IS 1239 part-II /1990 light class) . One set comprising of 3(three) nos trusses with 5(five) nos. purlin and 3.00 mtr span as approved drawing and design etc complete.**

i) Electric resistance or induction but welded tubes

Total pipe require :- (48.30 mm outer dia)

For Rafter :-	1	1	3	3.61	=	10.83	mtr @	3.27	kg/mtr	=	35.41	kg
	1	1	3	2.25	=	6.75	mtr @	3.27	kg/mtr	=	22.07	kg
Bottom Tie:-	1	1	3	3.00	=	9.00	mtr @	3.61	kg/mtr	=	32.49	kg
	1	1	3	1.50	=	4.50	mtr @	3.61	kg/mtr	=	16.25	kg
Purlin:-	1	1	5	4.90	=	24.50	mtr @	3.61	kg/mtr	=	88.45	kg
Struts:-	1	1	3	5.56	=	16.68	mtr @	1.42	kg/mtr	=	23.69	kg
Bottom Runner:-	1	1	4	4.00	=	16.00	mtr @	2.65	kg/mtr	=	42.40	kg
									Total	=	260.75	kg
							@	Rs. 62.0	/kg	=	Rs. 16,167	

Basic rate TSR-2023 code- 09013

ii) 40x5mm flat :- for cleat=	1	67	0.076	=	5.092	mtr
	1	8	0.25	=	2.00	mtr
				=	7.092	mtr

@ 1.57 kg/mtr = 11.134 kg @ 62.00 kg/mtr Rs. 690.34

Basic rate TSR-2023 code- 09013

iii) 200X200X10mm gusset plate:-

6 nos @ 3.14 kg/mtr 18.84 kg @ 62.00 kg/mtr Rs. 1,168.08

Basic rate TSR-2023 code- 09013

iv)Manufacturing charge in/c welding (L.S.) rate (260.75+11.13+18.84)kg	290.73	kg	@	Rs. 25.00	/kg	=	Rs. 6,518.81
				Lum sum Rate			
v) Labour charge for fitting fixing of tubular truss	290.73	kg	@	Rs. 25.00	/kg	=	Rs. 6,518.81
				Lum sum Rate			

vi) Carrying the tubular truss from manufacturing place to work site.= = Rs. 1,500.00 (L.S)

vii) Sundries (L.S) Rs. 30.0

	Total (A) = (i+ii+iii+iv+v+vi+vii)		=	Rs. 32,592.66
Add for Water charges	@	1%	=	Rs. 325.93
				Rs. 32,918.59
Add GST (multiplying factor)		0.2127	=	Rs. 7,001.78
				Rs. 39,920.37
Add for contractor profit and overheads		15%	=	Rs. 5,988.06
				Rs. 45,908.43
Add cess	@	1%	=	Rs. 459.08
	Grand Total			Rs. 46,367.51

Rate for one complete job= Rs. 46,367.51

Rate per kg = $\dfrac{\mathbf{46367.51}}{\mathbf{290.73}}$

= **Rs. 159.49**

(Rupees One Hundred Fifty Nine and paisa Forty Nine) only.

2.4	**Providing and fitting G.C.I sheet (0.63 mm thick) for walling including Vertical/curved surface fixed with galvanized steel J or L hooks 8 mm diameter, bolts and nuts with bitumen and G.I limpet washers or with G.I. limpet Washers filled with white lead and including a coat of appoved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/Verticle or curved surfaces) excluding the cost of G.S. sheet purlins rafters and trusses and including cutting to size and shape wherever required as per direction of Engineer -in-Charge.**

0.63 mm thick with zinc coating not less than 275 gm/sqm

Considering 33.151 sq.m of walling

Cost of 1 (one) no. 10'-0" long G.C.I. sheet

As per Civil Engg. Hand book by P.N Khanna, wt. of 1(one) no. G.C.I sheet = 5.32 Kg/Sqm

So, Cost of G.C.I. sheet = 76.00 / Kg

(SOR'2023,Code No11019)

So, cost of 1 sqm G.C.I sheet = Rs. 76.00 X5.32

= 404.32

i) Cost of 33.151 Sq.m G.C.I sheet = Rs.(404.32X33.151)

= 13403.61

ii) Labour Charge for G.C.I sheet walling @ Rs.65.00/Sq.m LS

= Rs.(33.151X65.00)

2154.815

iii) Cost of GI nuts & bolts = 460 nos. @ Rs.4.60/each = 2116

(SOR'2020, 08143)

iv) Cost of GI limpet washer = 460 nos. @ Rs.0.38/each = 174.8

(SOR'2020, 08145)

v) Carrying charge of G.C.I sheet LS = Rs.450.00

Total = (i)+(ii)+(iii)+(iv)+(v) = Rs.(13403.6+2154.82+2116+174.8+450.00)

Total= 18299.22

Add for Sundries[L.S.] 35.00

18334.22

Add 1% water charges 169.87

18504.09

Add GST MF, 0.2127 3935.82

22439.91

Add 15% contractor's profit and overheads 2935.18

25375.09

Add 1% cess 253.75

So, Grand Total = 25628.84

So, cost of per Sq.m G.C.I sheet walling in/c labour, nut & bolts, washer complete

= Rs.(25628.84/33.151)

= **773.09 per sqm**

(Rupees seven hundred seventy three and paisa nine) only

SCHEDULE OF RATES, 2023

CHAPTER – 3
INSTALLATION
(ANALYSIS)

PUBLIC WORKS DEPARTMENT
(WATER RESOURCES)

ANALYSIS OF RATE
CHAPTER-3
INSTALLATION

3.1	**Dismentaling of pump for over hauiling including greasing, gland packing, necessary repairs & reinstallation of the same including trial run for 10 hrs. in two spell complete as per direction of the Engineer-in-Charge.**			
3.1.1	**For LI**			
a)	**Labour cost**			
i)	Mechanic= 1 No	Day	699.00	699.00
ii)	Helper= 1 No	Day	447.00	447.00
b)	Materials (As per Local Market Rate)			
1)	M-Seal (1Packet) (Item no 66)	Per Packet	40.00	40.00
2)	Gasket (1 no) (Item no 35)	Each	50.00	50.00
3)	Grease (500 gm) (Item no 49)	Per Kg	250.00	125.00
4)	Asbestos (500 gm) (Item no 4)	Per Kg	160.00	80.00
				1441.00
c)	T&P- L.S			20.00
	Add for Sundries (L.S.)			20.00
				1481.00
	Add for Water charge @1%			14.81
				1495.81
	Add GST(Multipling factor) 0.2127			318.16
				1813.97
	Add for contractors profit @15% & overhead			272.10
				2086.06
	Add cess @1%			20.86
	Rate per no.			**Rs 2,106.92**

(Rupees Two thousand one hundred six & paisa ninety two) only

3.1.2	**For HPLI**			
a)	**Labour cost**			
i)	Mechanic = 1 No	Day	699.00	699.00
ii)	Helper = 2 No	Day	447.00	894.00
b)	Materials (As per Local Market Rate)			
1)	M-Seal (1Packet) (Item no 66)	Per Packet	40.00	40.00
2)	Gasket (1 no) (Item no 35)	Each	50.00	50.00
3)	Grease (500 gm) (Item no 49)	Per Kg	250.00	125.00
4)	Asbestos (500 gm) (Item no 4)	Per Kg	160.00	80.00
				1888.00
c)	T&P- L.S			20.00
	Add for Sundries (L.S.)			20.00
				1928.00
	Add for Water charge @1%			19.28
				1947.28
	Add GST(Multipling factor) 0.2127			414.19
				2361.47
	Add for contractors profit @15% & overhead			354.22
				2715.69
	Add cess @1%			27.16
	Rate per no.			**Rs 2,742.84**

(Rupees Two thousand seven hundred forty two & paisa eighty four) only

3.2	**Dismantaling of horizontal pump and motor of 20/25 HP from the base and carrying the pump set to the nearest workshop for repairing the body thread of stag nut and carrying the same to the scheme and fitting fixing the pump set as before as per direction of the Engineer-in-charge.**			
a)	**Labour Cost for Dismentalling**			
i)	Mechanic = 1/2 No	Day	699.00	349.50
ii)	Helper = 1/2 No	Day	447.00	223.50
b)	**Carrying Charge of pump set from site to the workshop (bothway) (in/cl loading unloading etc complete)**		L.S.	1000.00
c)	**Repair of body thread of stag nut in the workshop**		L.S.	800.00
d)	**Labour Cost for Reinstalling**			
i)	Mechanic = 1/2 No	Day	699.00	349.50
ii)	Helper= 1/2 No	Day	447.00	223.50
e)	**T&P- L.S.**			20.00
	Add for Sundries (L.S.)			20.00
				2986.00
	Add for Water charge @1%			29.86
				3015.86
	Add GST(Multipling factor) 0.2127			641.47
				3657.33
	Add for contractors profit @15% & overhead			548.60
				4205.93
	Add cess @1%			42.06
	Rate per no.			**Rs 4,247.99**

(Rupees Four thousand two hundred forty seven & paisa ninety nine) only

3.3	**Supplying and fitting fixing of asbestos rope of best quality as per direciton of Engineer-in-charge.**			
3.3.1	**6 to 8 mm thick**			
a)	**Material Cost**			
i)	Asbestos rope(6 to 8 mm thick) - 2 kg	kg	170.00	340.00
b)	**Labour Cost**			
i)	Helper= 1/10 No	Day	447.00	44.70
	Add for Sundries(L.S)			5.00
				389.70
	Add for Water charge @1%			3.90
				393.60
	Add GST(Multipling factor) 0.2127			83.72
				477.32
	Add contractors profit & overheads @ 15%			71.60
				548.91
	Add Cess @1%			5.49
	Rate Per no			554.40
			Rate per kG = 554.40/2 =	**277.20**

(Rupees Two hundred seventy seven and paisa twenty) only

3.3.2	10 to 12 mm thick				
	a)	**Material Cost**			
	i)	Asbestos rope (10 to 12 mm thick)= 2.00	kG	160.00	320.00
	b)	**Labour Cost**			
	i)	Helper = 1/10 No	Day	447.00	44.70
		Add for Sundries(L.S)			5.00
					369.70
		Add for Water charge @1%			3.70
					373.40
		Add GST(Multipling factor) 0.2127			79.42
					452.82
		Add contractors profit & overheads @ 15%			67.92
					520.74
		Add Cess @1%			5.21
		Rate Per no			525.95
				Rate per kg = 554.95/2 =	**262.97**

(Rupees Two hundred sixty two and paisa ninety seven) only

3.4	Supplying and greasing/applying of grease of approved quality as per direction of Engineer-in-charge.				
	a)	**Material Cost**			
	i)	Grease - 1.00	kg	250.00	250.00
	b)	**Labour Cost**			
	i)	Helper= 1/10 No	Day	447.00	44.70
		Add for Sundries(L.S)			5.00
					299.70
		Add for Water charge @1%			3.00
					302.70
		Add GST(Multipling factor) 0.2127			64.38
					367.08
		Add contractors profit & overheads @ 15%			55.06
					422.14
		Add Cess @1%			4.22
		Rate Per no			**426.36**

(Rupees Four hundred twenty six and paisa thirty six) only

3.5	Supplying and fitting fixing of pump cooling pipe of best quality as per direciton of Engineer-in-charge.				
	a)	**Material Cost**			
	i)	Pump cooling pipe - 1 nos	no	290.00	290.00
	b)	**Labour Cost**			
	i)	Helper= 1/30 No	Day	447.00	14.90
		Add for Sundries(L.S)			2.00
					306.90
		Add for Water charge @1%			3.07
					309.97
		Add GST(Multipling factor) 0.2127			65.93
					375.90
		Add contractors profit & overheads @ 15%			56.38
					432.28
		Add Cess @1%			4.32
		Rate Per no			**436.61**

(Rupees Four hundred thirty six and paisa sixty one) only

3.6	**Providing & fitting fixing C.I coupling complete with nuts & bolts of approved quality.**			
3.6.1	**150 mm-Ø**			
A)	**Material Cost**			
i)	C.I. Coupling of 150mm Ø= 1	Pair	1800.00	1800.00
B)	**Lathe machine/workshop Expenditure**			
i)	L/S	Pair	600.00	600.00
C)	**Labour cost**			
i)	Mechanic= 1/3 No	Day	699.00	233.00
ii)	Helper= 1/3 No	Day	447.00	149.00
D)	**Carrying cost of the unit upto site.**			
	L.S			20.00
	Add for Sundries (L.S.)			20.00
				2822.00
	Add for Water charge @1%			28.22
				2850.22
	Add GST(Multipling factor) 0.2127			606.24
				3456.46
	Add for contractors profit @15% & over head			518.47
				3974.93
	Add cess @1%			39.75
	Rate per pair			**Rs 4,014.68**

(Rupees four thousand forteen and paisa sixty eight) only

3.6.2	**190 mm-Ø**			
A)	Material Cost			
i)	C.I. Coupling of 190mm Ø= 1	Pair	2500.00	2500.00
B)	**Lathe machine/workshop Expenditure**			
i)	L/S	Pair	600.00	600.00
C)	**Labour cost**			
i)	Mechanic = 1/3 No	Day	699.00	233.00
ii)	Helper= 1/3 No	Day	447.00	149.00
D)	**Carrying cost of the unit upto site.**			
	L.S			20.00
	Add for Sundries (L.S.)			20.00
				3522.00
	Add for Water charge @1%			35.22
				3557.22
	Add GST(Multipling factor) 0.2127			756.62
				4313.84
	Add for contractors profit @15% & over head			647.08
				4960.92
	Add cess @1%			49.61
	Rate per pair			**Rs 5,010.53**

(Rupees five thousand ten and paisa fifty three) only

3.6.3	**225 mm Ø**			
A)	Material Cost			
i)	C.I. Coupling of 225mm Ø=1	Pair	3000	3000.00
B)	**Lathe machine/workshop Expenditure**			
i)	L/S	Pair	600.00	600.00
C)	**Labour cost**			
i)	Mechanic = 1/3 No	Day	699.00	233.00
ii)	Helper= 1/3 No	Day	447.00	149.00
D)	**Carrying cost of the unit upto site.**			
	L.S			20.00
	Add for Sundries (L.S.)			20.00
				4022.00
	Add for Water charge @1%			40.22
				4062.22
	Add GST(Multipling factor) 0.2127			864.03
				4926.25
	Add for contractors profit @15% & over head			738.94
				5665.19
	Add cess @1%			56.65
	Rate per pair			**Rs 5,721.84**

(Rupees Five thousand seven hundred twenty one and paisa eighty four) only

3.7	**Providing & fitting fixing coupling nuts & bolts (all Size)of approved quality.**			
3.7.1	**For LI**			
A)	Material Cost			
i)	coupling nuts & bolts= 1	No	50.00	50.00
B)	**Labour cost**			
i)	Helper = 1/50 No	Day	447.00	8.94
	Add for Sundries (L.S.)			3.00
				61.94
	Add for Water charge @1%			0.62
				62.56
	Add GST(Multipling factor) 0.2127			13.31
				75.87
	Add for contractors profit @15% & over head			11.38
				87.25
	Add cess @1%			0.87
	Rate per no			**Rs 88.12**

(Rupees Eighty eight and paisa twelve) only

3.7.2	**For HPLI**			
	A) Material Cost			
	i) Coupling nuts & bolts= 1	No	70.00	70.00
	B) **Labour cost**			
	i) Helper= 1/45 No	Day	447.00	8.94
	Add for Sundries (L.S.)			3.00
				81.94
	Add for Water charge @1%			0.82
				82.76
	Add GST(Multipling factor) 0.2127			17.60
				100.36
	Add for contractors profit @15% & over head			15.05
				115.42
	Add cess @1%			1.15
	Rate per no			**Rs 116.57**
	(Rupees One hundred sixteen and paisa fifty seven) only			
3.8	**Providing & fitting fixing coupling rubber bush (All Size)of approved quality.**			
3.8.1	**For LI**			
	A) **Material Cost**			
	i) Coupling rubber bush= 1	No	30.00	30.00
	B) **Labour cost**			
	i) Helper = 1/10 No	Day	447.00	44.70
	C) **Carrying cost of the unit upto site**			
	L.S			3.00
	Add for Sundries (L.S.)			3.00
				80.70
	Add for Water charge @1%			0.81
				81.51
	Add GST(Multipling factor) 0.2127			17.34
				98.84
	Add for contractors profit @15% & over head			14.83
				113.67
	Add cess @1%			1.14
	Rate per no			**Rs 114.81**
	(Rupees one hundred forteen and paisa eighty one) only			
3.8.2	**For HPLI**			
	A) **Material Cost**			
	i) Coupling rubber bush= 1	Each	40.00	40.00
	B) **Labour cost**			
	i) Helper= 1/10 No	Day	447.00	44.70
	C) **Carrying cost of the unit upto site**			
	L.S			3.00
	Add for Sundries (L.S.)			3.00
				90.70
	Add for Water charge @1%			0.91
				91.61
	Add GST(Multipling factor) 0.2127			19.48
				111.09
	Add for contractors profit @15% & over head			16.66
				127.76
	Add cess @1%			1.28
	Rate per no			**Rs 129.03**
	(Rupees one hundred twenty nine and paisa three) only			

3.9	**Providing & fitting fixing coupling star bush (All Size) of approved quality.**
3.9.1	**150 mm dia**

A)	**Material Cost**			
	coupling star bush of 150 mm dia= 1	No	140.00	140.00
B)	**Labour cost**			
i)	Mechanic = 1/10 No	Day	699.00	69.90
ii)	Helper= 1/10 No	Day	447.00	44.70
C)	**Carrying cost of the unit upto site.**			
				3.00
	Add for Sundries (L.S.)			3.00
				260.60
	Add for Water charge @1%			2.61
				263.21
	Add GST(Multipling factor) 0.2127			55.98
				319.19
	Add for contractors profit @15% & over head			47.88
				367.07
	Add cess @1%			3.67
	Rate per no			**Rs 370.74**

(Rupees Three hundred seventy and paisa seventy four) only

3.9.2	**190 mm dia**

A)	**Material Cost**			
	coupling star bush of 190 mm dia= 1	No	170.00	170.00
B)	**Labour cost**			
i)	Mechanic= 1/10 No	Day	699.00	69.90
ii)	Helper= 1/10 No	Day	447.00	44.70
C)	**Carrying cost of the unit upto site.**			
				3.00
	Add for Sundries (L.S.)			3.00
				290.60
	Add for Water charge @1%			2.91
				293.51
	Add GST(Multipling factor) 0.2127			62.43
				355.93
	Add for contractors profit @15% & over head			53.39
				409.32
	Add cess @1%			4.09
	Rate per no			**Rs 413.42**

(Rupees Four hundred thirteen and paisa forty two) only

3.9.3	225 mm dia			
A)	**Material Cost**			
	coupling star bush of 225 mm dia= 1	No	220.00	220.00
B)	**Labour cost**			
i)	Mechanic= 1/10 No	Day	699.00	69.90
ii)	Helper= 1/10 No	Day	447.00	44.70
C)	**Carrying cost of the unit upto site.**			
				3.00
	Add for Sundries (L.S.)			3.00
				340.60
	Add for Water charge @1%			3.41
				344.01
	Add GST(Multipling factor) 0.2127			73.17
				417.18
	Add for contractors profit @15% & over head			62.58
				479.75
	Add cess @1%			4.80
	Rate per no			**Rs 484.55**

(Rupees Four hundred eighty four and paisa fifty five) only

3.9.4	300 mm dia			
A)	**Material Cost**			
	coupling star bush of 300 mm dia= 1	No	300.00	300.00
B)	**Labour cost**			
i)	Mechanic= 1/8 No	Day	699.00	87.38
ii)	Helper = 1/8 No	Day	447.00	55.88
C)	**Carrying cost of the unit upto site.**			
				3.00
	Add for Sundries (L.S.)			3.00
				449.25
	Add for Water charge @1%			4.49
				453.74
	Add GST(Multipling factor) 0.2127			96.51
				550.25
	Add for contractors profit @15% & over head			82.54
				632.79
	Add cess @1%			6.33
	Rate per no			**Rs 639.12**

(Rupees Six hundred thirty nine and paisa twelve) only

3.10	Providing & fitting fixing Pump Shaft of approved quality.			

a)	**Material Cost**			
i)	Pump Shaft= 1	No	5500.00	5500.00
b)	**Labour cost**			
i)	Mechanic = 1/2 No	Day	699.00	349.50
ii)	Helper = 1/2 No	Day	447.00	223.50
B)	**Carrying cost of the unit upto site.**			
	L.S			10.00
	Add for Sundries (L.S.)			10.00
				6093.00
	Add for Water charge @1%			60.93
				6153.93
	Add GST(Multipling factor) 0.2127			1308.94
				7462.87
	Add for contractors profit @15% & over head			1119.43
				8582.30
	Add cess @1%			85.82
	Rate per no			**Rs 8,668.12**

(Rupees eight thousand six hundred sixty eight and paisa twelve) only

3.11	Providing & fitting fixing Shaft sleeve bush of approved quality.
3.11.1	**For HPLI**
3.11.1.1	**Cast Iron(CI)**

A)	**Material Cost**			
i)	Shaft sleeve bush= 1	No	1200.00	1200.00
B)	**Labour cost**			
i)	Mechanic= 1/8 No	Day	699.00	87.38
ii)	Helper= 1/8 No	Day	447.00	55.88
C)	**Carrying cost of the unit upto site.**			
	L.S			10.00
	Add for Sundries (L.S.)			10.00
				1363.25
	Add for Water charge @1%			13.63
				1376.88
	Add GST(Multipling factor) 0.2127			292.86
				1669.75
	Add for contractors profit @15% & over head			250.46
				1920.21
	Add cess @1%			19.20
	Rate per no			**Rs 1,939.41**

(Rupees one thousand nine hundred thirty nine & paisa forty one) only

3.11.1.2	**Stainless Steel (SS)**

A)	**Material Cost**			
i)	Shaft sleeve bush= 1	No	3000.00	3000.00
B)	**Labour cost**			
i)	Mechanic= 1/8 No	Day	699.00	87.38
ii)	Helper= 1/8 No	Day	447.00	55.88
C)	**Carrying cost of the unit upto site.**			
	L.S			10.00
	Add for Sundries (L.S.)			10.00
				3163.25
	Add for Water charge @1%			31.63
				3194.88
	Add GST(Multipling factor) 0.2127			679.55
				3874.43
	Add for contractors profit @15% & over head			581.17
				4455.60
	Add cess @1%			44.56
	Rate per no			**Rs 4,500.16**

(Rupees four thousand five hundred & paisa sixteen) only

3.11.2	**For LI**
3.11.2.1	**Cast Iron(CI)**

A)	**Material Cost**			
i)	Shaft sleeve bush= 1	No	450.00	450.00
B)	**Labour cost**			
i)	Mechanic= 1/8 No	Day	699.00	87.38
ii)	Helper= 1/8 No	Day	447.00	55.88
C)	**Carrying cost of the unit upto site.**			
	L.S			10.00
	Add for Sundries (L.S.)			10.00
				613.25
	Add for Water charge @1%			6.13
				619.38
	Add GST(Multipling factor) 0.2127			131.74
				751.13
	Add for contractors profit @15% & over head			112.67
				863.79
	Add cess @1%			8.64
	Rate per no			**Rs 872.43**

(Rupees eight hundred seventy two & paisa forty three) only

3.11.2.2	**Stainless Steel (SS)**			
A)	**Material Cost**			
i)	Shaft sleeve bush= 1	No	1450.00	1450.00
B)	**Labour cost**			
i)	Mechanic= 1/8 No	Day	699.00	87.38
ii)	Helper = 1/8 No	Day	447.00	55.88
C)	**Carrying cost of the unit upto site.**			
	L.S			10.00
	Add for Sundries (L.S.)			10.00
				1613.25
	Add for Water charge @1%			16.13
				1629.38
	Add GST(Multipling factor) 0.2127			346.57
				1975.95
	Add for contractors profit @15% & over head			296.39
				2272.34
	Add cess @1%			22.72
	Rate per no			**Rs 2,295.07**

(Rupees two thousand two hundred ninty five & paisa seven) only

3.12	**Providing & fitting fixing Shaft sleeve nut of approved quality.**			
3.12.1	**Cast Iron(CI)**			
a)	**Material Cost**			
	Shaft sleeve Nut= 1	No	300.00	300.00
b)	**Labour cost**			
i)	Mechanic = 1/16 No	Day	699.00	43.69
ii)	Helper = 1/16 No	Day	447.00	27.94
	Add for Sundries (L.S.)			5.00
				376.63
	Add for Water charge @1%			3.77
				380.39
	Add GST(Multipling factor) 0.2127			80.91
				461.30
	Add for contractors profit @15% & over head			69.20
				530.50
	Add cess @1%			5.30
	Rate per no			**Rs 535.80**

(Rupees Five hundred thirty five & paisa eighty) only

3.12.2	**Stainless Steel (SS)**			
a)	**Material Cost**			
	Shaft sleeve Nut= 1	No	600.00	600.00
b)	**Labour cost**			
i)	Mechanic = 1/16 No	Day	699.00	43.69
ii)	Helper= 1/16 No	Day	447.00	27.94
	Add for Sundries (L.S.)			5.00
				676.63
	Add for Water charge @1%			6.77
				683.39
	Add GST(Multipling factor) 0.2127			145.36
				828.75
	Add for contractors profit @15% & over head			124.31
				953.06
	Add cess @1%			9.53
	Rate per no			**Rs 962.59**

(Rupees Nine hundred sixty two & paisa fifty nine) only

3.13	Providing & fitting fixing coupling/ impeller Key of approved quality.			
	Stainless Steel			
a)	**Material Cost**			
i)	coupling/ impeller Key= 1	No	100.00	100.00
b)	**Labour cost**			
i)	Mechanic = 1/40 No	Day	699.00	17.48
ii)	Helper = 1/40 No	Day	447.00	11.18
	Add for Sundries (L.S.)			3.00
				131.65
	Add for Water charge @1%			1.32
				132.97
	Add GST(Multipling factor) 0.2127			28.28
				161.25
	Add for contractors profit @15% & over head			24.19
				185.44
	Add cess @1%			1.85
	Rate per no			**Rs 187.29**

(Rupees One hundred eighty seven & paisa twenty nine) only

3.14	Providing & fitting fixing Casing ring of approved quality.			
3.14.1	**150 mm dia**			
3.14.1.1	**8 mm thick**			
a)	**Material Cost**			
i)	Casing ring 150 mm dia 8mm thick= 1	No	950.00	950.00
b)	**Labour cost**			
i)	Mechanic= 1/20 No	Day	699.00	34.95
ii)	Helper = 1/20 No	Day	447.00	22.35
c)	**Carrying cost of the unit upto site.**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				1017.30
	Add for Water charge @1%			10.17
				1027.47
	Add GST(Multipling factor) 0.2127			218.54
				1246.02
	Add for contractors profit @15% & over head			186.90
				1432.92
	Add cess @1%			14.33
	Rate per no			**Rs 1,447.25**

(Rupees one thousand four hundred forty seven and paisa twenty five) only

3.14.1.2	10 mm thick			
a)	**Material Cost**			
i)	Casing ring 150 mm dia 10 mm thick= 1	No	1500.00	1500.00
b)	**Labour cost**			
i)	Mechanic= 1/20 No	Day	699.00	34.95
ii)	Helper= 1/20 No	Day	447.00	22.35
c)	**Carrying cost of the unit upto site.**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				1567.30
	Add for Water charge @1%			15.67
				1582.97
	Add GST(Multipling factor) 0.2127			336.70
				1919.67
	Add for contractors profit @15% & over head			287.95
				2207.62
	Add cess @1%			22.08
	Rate per no			**Rs 2,229.70**

(Rupees two thousand two hundred twenty nine and paisa seventy) only

3.14.2	200 mm dia			
3.14.2.1	8 mm thick			
a)	**Material Cost**			
i)	Casing ring 200 mm dia 8 mm thick= 1	No	2400.00	2400.00
b)	**Labour cost**			
i)	Mechanic = 1/20 No	Day	699.00	34.95
ii)	Helper= 1/20 No	Day	447.00	22.35
c)	**Carrying cost of the unit upto site.**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				2467.30
	Add for Water charge @1%			24.67
				2491.97
	Add GST(Multipling factor) 0.2127			530.04
				3022.02
	Add for contractors profit @15% & over head			453.30
				3475.32
	Add cess @1%			34.75
	Rate per no			**Rs 3,510.07**

(Rupees three thousand five hundred ten and paisa seven) only

3.14.2.2	**10 mm thick**			
a)	**Material Cost**			
i)	Casing ring 200 mm dia 10 mm thick= 1	No	2800.00	2800.00
b)	**Labour cost**			
i)	Mechanic = 1/20 No	Day	699.00	34.95
ii)	Helper = 1/20 No	Day	447.00	22.35
c)	**Carrying cost of the unit upto site.**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				2867.30
	Add for Water charge @1%			28.67
				2895.97
	Add GST(Multipling factor) 0.2127			615.97
				3511.95
	Add for contractors profit @15% & over head			526.79
				4038.74
	Add cess @1%			40.39
	Rate per no			**Rs 4,079.13**

(Rupees four thousand seventy nine and paisa thirteen) only

3.15	**Providing & fitting fixing C.I. gland of approved quality.**			
3.15.1	**For LI**			
A)	**Material Cost**			
i)	C.I. Gland= 1	No	500.00	500.00
B)	**Labour cost**			
i)	Mechanic= 1/20 No	Day	699.00	34.95
ii)	Helper= 1/20 No	Day	447.00	22.35
	Add for Sundries (L.S.)			5.00
				562.30
	Add for Water charge @1%			5.62
				567.92
	Add GST(Multipling factor) 0.2127			120.80
				688.72
	Add for contractors profit @15% & over head			103.31
				792.03
	Add cess @1%			7.92
	Rate per no			**Rs 799.95**

(Rupees Seven hundred ninety nine and paisa ninety five) only

3.15.2	For HPLI

A)	**Material Cost**			
i)	C.I. Gland= 1	No	1500.00	1500.00
B)	**Labour cost**			
i)	Mechanic = 1/15 No	Day	699.00	46.60
ii)	Helper= 1/15 No	Day	447.00	29.80
C)	**Carrying cost of the unit upto site)**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				1586.40
	Add for Water charge @1%			15.86
				1602.26
	Add GST(Multipling factor) 0.2127			340.80
				1943.07
	Add for contractors profit @15% & over head			291.46
				2234.53
	Add cess @1%			22.35
	Rate per no			**Rs 2,256.87**

(Rupees Two thousand two hundred fifty six and paisa eighty seven) only

3.16	Providing & fitting fixing Gland nut / Stag nut 100 mm long for gland of approved quality.
3.16.1	**For LI**

a)	**Material Cost**			
i)	Gland nut / Stag nut= 1	No	60.00	60.00
B)	**Labour cost**			
i)	Mechanic = 1/80 No	Day	699.00	8.74
ii)	Helper = 1/80 No	Day	447.00	5.59
	Add for Sundries (L.S.)			5.00
				79.33
	Add for Water charge @1%			0.79
				80.12
	Add GST(Multipling factor) 0.2127			17.04
				97.16
	Add for contractors profit @15% & over head			14.57
				111.73
	Add cess @1%			1.12
	Rate per no			**Rs 112.85**

(Rupees one hundred twelve and paisa eighty five) only

3.16.2	For HPLI				
	a)	**Material Cost**			
	i)	Gland nut / Stag nut= 1	No	115.00	115.00
	B)	**Labour cost**			
	i)	Mechanic = 1/60 No	Day	699.00	11.65
	ii)	Helper = 1/60 No	Day	447.00	7.45
		Add for Sundries (L.S.)			5.00
					139.10
		Add for Water charge @1%			1.39
					140.49
		Add GST(Multipling factor) 0.2127			29.88
					170.37
		Add for contractors profit @15% & over head			25.56
					195.93
		Add cess @1%			1.96
		Rate per no			**Rs 197.89**

(Rupees One hundred ninety seven and paisa eighty nine) only

3.17	**Providing & fitting fixing Lantern Ring of required size for pump of approved quality.**				
	a)	**Material Cost**			
	i)	Lantern Ring= 1	No	175.00	175.00
	b)	**Labour cost**			
	i)	Mechanic = 1/10 No	Day	699.00	69.90
	ii)	Helper = 1/10 No	Day	447.00	44.70
	c)	**Carrying cost of the unit upto site.**		L.S	5.00
		Add for Sundries (L.S.)			5.00
					299.60
		Add for Water charge @1%			3.00
					302.60
		Add GST(Multipling factor) 0.2127			64.36
					366.96
		Add for contractors profit @15% & over head			55.04
					422.00
		Add cess @1%			4.22
		Rate per no			**Rs 426.22**

(Rupees Four hundred twenty six and paisa twenty two) only

3.18	Supply & fitting fixing ball bearing of approved quality for pump required during overhauling.

3.18.1	6206 Ball bearing (TATA /SKF)

a)	Material Cost				
i)	bearing (TATA /SKF)= 1	No	500.00	500.00
b)	**Labour cost**			
i)	Mechanic = 1/10 No	Day	699.00	69.90
ii)	Helper = 1/10 No	Day	447.00	44.70
c)	Carrying cost of the unit upto site		L.S	5.00
	Add for Sundries (L.S.)			5.00
				624.60
	Add for Water charge @1%			6.25
				630.85
	Add GST(Multipling factor) 0.2127			134.18
				765.03
	Add for contractors profit @15% & over head			114.75
				879.78
	Add cess @1%			8.80
	Rate per no			**Rs 888.58**

(Rupees eight hundred eighty eight and paisa fifty eight) only

3.18.2	6305 Ball bearing (TATA /SKF)

a)	Material Cost			
i)	bearing (TATA /SKF)= 1	No	410.00	410.00
b)	**Labour cost**			
i)	Mechanic = 1/10 No	Day	699.00	69.90
ii)	Helper = 1/10 No	Day	447.00	44.70
c)	Carrying cost of the unit upto site		L.S	5.00
	Add for Sundries (L.S.)			5.00
				534.60
	Add for Water charge @1%			5.35
				539.95
	Add GST(Multipling factor) 0.2127			114.85
				654.79
	Add for contractors profit @15% & over head			98.22
				753.01
	Add cess @1%			7.53
	Rate per no			**Rs 760.54**

(Rupees seven hundred sixty and paisa fifty four) only

3.18.3	**6306 Ball bearing (TATA /SKF)**			
a)	Material Cost			
i)	bearing (TATA /SKF)= 1	No	480.00	480.00
b)	**Labour cost**			
i)	Mechanic = 1/10 No	Day	699.00	69.90
ii)	Helper = 1/10 No	Day	447.00	44.70
c)	Carrying cost of the unit upto site		L.S	5.00
	Add for Sundries (L.S.)			5.00
				604.60
	Add for Water charge @1%			6.05
				610.65
	Add GST(Multipling factor) 0.2127			129.88
				740.53
	Add for contractors profit @15% & over head			111.08
				851.61
	Add cess @1%			8.52
	Rate per no			**Rs 860.13**

(Rupees eight hundred sixty and paisa thirteen) only

3.18.4	**6308 Ball bearing (TATA /SKF)**			
a)	Material Cost			
i)	bearing (TATA /SKF)= 1	No	960.00	960.00
b)	**Labour cost**			
i)	Mechanic = 1/10 No	Day	699.00	69.90
ii)	Helper = 1/10 No	Day	447.00	44.70
c)	Carrying cost of the unit upto site		L.S	5.00
	Add for Sundries (L.S.)			5.00
				1084.60
	Add for Water charge @1%			10.85
				1095.45
	Add GST(Multipling factor) 0.2127			233.00
				1328.45
	Add for contractors profit @15% & over head			199.27
				1527.71
	Add cess @1%			15.28
	Rate per no			**Rs 1,542.99**

(Rupees One thousand five hundred forty two and paisa ninty nine) only

3.18.5	**6309 Ball bearing (TATA /SKF)**			
a)	Material Cost			
i)	bearing (TATA /SKF)= 1	No	1150.00	1150.00
b)	**Labour cost**			
i)	Mechanic = 1/10 No	Day	699.00	69.90
ii)	Helper = 1/10 No	Day	447.00	44.70
c)	Carrying cost of the unit upto site		L.S	5.00
	Add for Sundries (L.S.)			5.00
				1274.60
	Add for Water charge @1%			12.75
				1287.35
	Add GST(Multipling factor) 0.2127			273.82
				1561.16
	Add for contractors profit @15% & over head			234.17
				1795.34
	Add cess @1%			17.95
	Rate per no			**Rs 1,813.29**

(Rupees One thousand eight hundred thirteen and paisa twenty nine) only

3.18.6	**6310 Ball bearing (TATA /SKF)**			
a)	Material Cost			
i)	bearing (TATA /SKF)= 1	No	1300.00	1300.00
b)	**Labour cost**			
i)	Mechanic = 1/10 No	Day	699.00	69.90
ii)	Helper = 1/10 No	Day	447.00	44.70
c)	Carrying cost of the unit upto site		L.S	5.00
	Add for Sundries (L.S.)			5.00
				1424.60
	Add for Water charge @1%			14.25
				1438.85
	Add GST(Multipling factor) 0.2127			306.04
				1744.89
	Add for contractors profit @15% & over head			261.73
				2006.62
	Add cess @1%			20.07
	Rate per no			**Rs 2,026.69**

(Rupees Two thousand twenty six and paisa sixty nine) only

3.18.7	**6311 Ball bearing (TATA /SKF)**			
a)	Material Cost			
i)	bearing (TATA /SKF)= 1	No	2398.00	2398.00
b)	**Labour cost**			
i)	Mechanic = 1/6 No	Day	699.00	116.50
ii)	Helper = 1/6 No	Day	447.00	74.50
c)	Carrying cost of the unit upto site		L.S	5.00
	Add for Sundries (L.S.)			5.00
				2599.00
	Add for Water charge @1%			25.99
				2624.99
	Add GST(Multipling factor) 0.2127			558.34
				3183.33
	Add for contractors profit @15% & over head			477.50
				3660.82
	Add cess @1%			36.61
	Rate per no			**Rs 3,697.43**

(Rupees Three thousand six hundred ninty seven and paisa forty three) only

3.18.8	**6312 Ball bearing (TATA /SKF)**			
a)	Material Cost			
i)	bearing (TATA /SKF)= 1	No	3000.00	3000.00
b)	**Labour cost**			
i)	Mechanic = 1/4 No	Day	699.00	174.75
ii)	Helper = 1/4 No	Day	447.00	111.75
c)	Carrying cost of the unit upto site		L.S	5.00
	Add for Sundries (L.S.)			5.00
				3296.50
	Add for Water charge @1%			32.97
				3329.47
	Add GST(Multipling factor) 0.2127			708.18
				4037.64
	Add for contractors profit @15% & over head			605.65
				4643.29
	Add cess @1%			46.43
	Rate per no			**Rs 4,689.72**

(Rupees Four thousand six hundred eighty nine and paisa seventy two) only

3.19	**Supplying & fitting fixing of GI Pipe bend (medium class) of approved quality.**			
3.19.1	**200 mm dia**			
	a) Materials Cost			
	i) GI Pipe bend= 1	No	1,900.00	1,900.00
	ii) Welding by electric plant in/c wages for welder - Code No. 09022 of SOR-2023 (Building) - 125.66 cm	/cm	2.50	314.15
	b) Labour cost			
	i) Fitter (Grade-I) = 1/4 No	Day	512.00	128.00
	ii) Helper = 1/4 No	Day	447.00	111.75
	c) Carrying Cost of the unit upto site			
	L.S			20.00
	Add for Sundries (L.S.)			20.00
				2493.90
	Add for Water charge @1%			24.94
				2518.84
	Add GST(Multipling factor) 0.2127			535.76
				3054.60
	Add for contractors profit @15% & over head			458.19
				3512.79
	Add cess @1%			35.13
	Rate per no			**Rs 3,547.91**

(Rupees Three thousand five hundred forty seven and paisa ninty one) only

3.19.2	**250 mm dia**			
	a) Materials Cost			
	i) GI Pipe bend= 1	No	2,500.00	2,500.00
	ii) Welding by electric plant in/c wages for welder - Code No. 09022 of SOR-2023 (Building) - 157.08 cm	per cm	2.50	392.70
	b) Labour cost			
	i) Fitter (Grade-I) = 1/4 No	Day	512.00	128.00
	ii) Helper = 1/4 No	Day	447.00	111.75
	c) Carrying Cost of the unit upto site			
	L.S			20.00
	Add for Sundries (L.S.)			20.00
				3172.45
	Add for Water charge @1%			31.72
				3204.17
	Add GST(Multipling factor) 0.2127			681.53
				3885.70
	Add for contractors profit @15% & over head			582.86
				4468.56
	Add cess @1%			44.69
	Rate per no			**Rs 4,513.24**

(Rupees Four thousand five hundred thirteen and paisa twenty four) only

3.19.3	**300 mm dia**			
a)	**Materials Cost**			
i)	GI Pipe bend= 1	No	3,100.00	3,100.00
ii)	Welding by electric plant in/c wages for welder - Code No. 09022 of SOR-2023 (Building) - 188.50 cm	per cm	2.50	471.25
b)	**Labour cost**			
i)	Fitter (Grade-I) = 1/4 No	Day	512.00	128.00
ii)	Helper = 1/4 No	Day	447.00	111.75
c)	**Carrying Cost of the unit upto site**			
	L.S			20.00
	Add for Sundries (L.S.)			20.00
				3851.00
	Add for Water charge @1%			38.51
				3889.51
	Add GST(Multipling factor) 0.2127			827.30
				4716.81
	Add for contractors profit @15% & over head			707.52
				5424.33
	Add cess @1%			54.24
	Rate per no			**Rs 5,478.57**

(Rupees Five thousand four hundred seventy eight and paisa fifty seven) only

3.20	**Providing & fitting fixing M.S flange at site of work of approved quality.**			
3.20.1	**200 mm dia (12 mm thick)**			
a)	**Materials Cost**			
i)	M.S flange= 1	No	650.00	650.00
ii)	Welding by electric plant in/c wages for welder - Code No. 09022 of SOR-2023 (Building) - 62.83 cm	cm	2.50	157.08
b)	**Labour cost**			
i)	Fitter (Grade-I) = 1/20 No	Day	512.00	25.60
ii)	Helper = 1/20 No	Day	447.00	22.35
c)	**Carrying Cost of the unit upto site**			
	L.S			10.00
	Add for Sundries (L.S.)			10.00
				875.03
	Add for Water charge @1%			8.75
				883.78
	Add GST(Multipling factor) 0.2127			187.98
				1071.75
	Add for contractors profit @15% & over head			160.76
				1232.52
	Add cess @1%			12.33
	Rate per no			**Rs 1,244.84**

(Rupees One thousand two hundred forty four and paisa eighty four) only

3.20.2	250 mm dia (12 mm thick)			
a)	**Materials Cost**			
i)	M.S flange= 1	No	1,100.00	1,100.00
ii)	Welding by electric plant in/c wages for welder - Code No. 09022 of SOR-2023 (Building) - 78.54 cm	cm	2.50	196.35
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/20 No	Day	512.00	25.60
ii)	Helper= 1/20 No	Day	447.00	22.35
c)	**Carrying Cost of the unit upto site**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				1354.30
	Add for Water charge @1%			13.54
				1367.84
	Add GST(Multipling factor) 0.2127			290.94
				1658.78
	Add for contractors profit @15% & over head			248.82
				1907.60
	Add cess @1%			19.08
	Rate per no			**Rs 1,926.68**

(Rupees One thousand nine hundred twenty six and paisa sixty eight) only

3.20.3	300 mm dia (14 mm thick)			
a)	**Materials Cost**			
i)	M.S flange= 1	No	1,450.00	1,450.00
ii)	Welding by electric plant in/c wages for welder - Code No. 09022 of SOR-2023 (Building) - 94.25 cm	per cm	2.50	235.63
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/20 No	Day	512.00	25.60
ii)	Helper= 1/20 No	Day	447.00	22.35
c)	**Carrying Cost of the unit upto site**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				1743.58
	Add for Water charge @1%			17.44
				1761.01
	Add GST(Multipling factor) 0.2127			374.57
				2135.58
	Add for contractors profit @15% & over head			320.34
				2455.91
	Add cess @1%			24.56
	Rate per no			**Rs 2,480.47**

(Rupees Two thousand four hundred eighty and paisa forty seven) only

3.21	Providing & fitting fixing Rubber flange washer 6 mm thick at site of work of approved quality.
3.21.1	**300 mm dia**

a)	**Materials Cost**			
i)	M.S flange washer= 1	No	280.00	280.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/40 No	Day	512.00	12.80
ii)	Helper= 1/40 No	Day	447.00	11.18
c)	**Carrying Cost of the unit upto site**			
	L.S			3.00
	Add for Sundries (L.S.)			3.00
				309.98
	Add for Water charge @1%			3.10
				313.07
	Add GST(Multipling factor) 0.2127			66.59
				379.67
	Add for contractors profit @15% & over head			56.95
				436.62
	Add cess @1%			4.37
	Rate per no			**Rs 440.98**

(Rupees Four hundred forty and paisa ninty eight) only

3.21.2	250 mm dia

a)	**Materials Cost**			
i)	M.S flange washer= 1	No	230.00	230.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/40 No	Day	512.00	12.80
ii)	Helper= 1/40 No	Day	447.00	11.18
c)	**Carrying Cost of the unit upto site**			
	L.S			3.00
	Add for Sundries (L.S.)			3.00
				259.98
	Add for Water charge @1%			2.60
				262.57
	Add GST(Multipling factor) 0.2127			55.85
				318.42
	Add for contractors profit @15% & over head			47.76
				366.19
	Add cess @1%			3.66
	Rate per no			**Rs 369.85**

(Rupees Three hundred sixty nine and paisa eighty five) only

3.21.3	200 mm dia			
a)	**Materials Cost**			
i)	M.S flange washer= 1	No	140.00	140.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/40 No	Day	512.00	12.80
ii)	Helper= 1/40 No	Day	447.00	11.18
c)	**Carrying Cost of the unit upto site**			
	L.S			3.00
	Add for Sundries (L.S.)			3.00
				169.98
	Add for Water charge @1%			1.70
				171.67
	Add GST(Multipling factor) 0.2127			36.52
				208.19
	Add for contractors profit @15% & over head			31.23
				239.42
	Add cess @1%			2.39
	Rate per no			**Rs 241.81**

(Rupees Two hundred forty one and paisa eighty one) only

3.21.4	150 mm dia			
a)	**Materials Cost**			
i)	M.S flange washer= 1	No	70.00	70.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/40 No	Day	512.00	12.80
ii)	Helper= 1/40 No	Day	447.00	11.18
c)	**Carrying Cost of the unit upto site**			
	L.S			3.00
	Add for Sundries (L.S.)			3.00
				99.98
	Add for Water charge @1%			1.00
				100.97
	Add GST(Multipling factor) 0.2127			21.48
				122.45
	Add for contractors profit @15% & over head			18.37
				140.82
	Add cess @1%			1.41
	Rate per no			**Rs 142.23**

(Rupees One hundred forty two and paisa twenty three) only

3.21.5	125 mm dia			
a)	**Materials Cost**			
i)	M.S flange washer= 1	No	50.00	50.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/40 No	Day	512.00	12.80
ii)	Helper= 1/40 No	Day	447.00	11.18
c)	**Carrying Cost of the unit upto site**			
	L.S			3.00
	Add for Sundries (L.S.)			3.00
				79.98
	Add for Water charge @1%			0.80
				80.77
	Add GST(Multipling factor) 0.2127			17.18
				97.96
	Add for contractors profit @15% & over head			14.69
				112.65
	Add cess @1%			1.13
	Rate per no			**Rs 113.78**

(Rupees One hundred thirteen and paisa seventy eight) only

3.21.6	100 mm dia			
a)	**Materials Cost**			
i)	M.S flange washer= 1	No	45.00	45.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/40 No	Day	512.00	12.80
ii)	Helper= 1/40 No	Day	447.00	11.18
c)	**Carrying Cost of the unit upto site**			
	L.S			3.00
	Add for Sundries (L.S.)			3.00
				74.98
	Add for Water charge @1%			0.75
				75.72
	Add GST(Multipling factor) 0.2127			16.11
				91.83
	Add for contractors profit @15% & over head			13.77
				105.61
	Add cess @1%			1.06
	Rate per no			**Rs 106.66**

(Rupees One hundred six and paisa sixty six) only

3.21.7	80 mm dia

a)	**Materials Cost**			
i)	M.S flange washer= 1	No	40.00	40.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/40 No	Day	512.00	12.80
ii)	Helper= 1/40 No	Day	447.00	11.18
c)	**Carrying Cost of the unit upto site**			
	L.S			3.00
	Add for Sundries (L.S.)			3.00
				69.98
	Add for Water charge @1%			0.70
				70.67
	Add GST(Multipling factor) 0.2127			15.03
				85.71
	Add for contractors profit @15% & over head			12.86
				98.56
	Add cess @1%			0.99
	Rate per no			**Rs 99.55**

(Rupees Ninty nine and paisa fifty five) only

3.21.8	65 mm dia

a)	**Materials Cost**			
i)	M.S flange washer= 1	No	35.00	35.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/50 No	Day	512.00	10.24
ii)	Helper= 1/50 No	Day	447.00	8.94
c)	**Carrying Cost of the unit upto site**			
	L.S			3.00
	Add for Sundries (L.S.)			3.00
				60.18
	Add for Water charge @1%			0.60
				60.78
	Add GST(Multipling factor) 0.2127			12.93
				73.71
	Add for contractors profit @15% & over head			11.06
				84.77
	Add cess @1%			0.85
	Rate per no			**Rs 85.61**

(Rupees Eighty five and paisa sixty one) only

3.22	**Providing & fitting fixing C.I tail piece of approved quality at site of work.**			
3.22.1	**150 mm dia**			
	a) Materials Cost			
	i) C.I tail piece= 1	No	1000.00	1000.00
	b) Labour cost			
	i) Fitter (Grade-I)= 1/10 No	Day	512.00	51.20
	ii) Helper= 1/10 No	Day	447.00	44.70
	c) Carrying Cost of the unit upto site			
	L.S			10.00
	Add for Sundries (L.S.)			10.00
				1115.90
	Add for Water charge @1%			11.16
				1127.06
	Add GST(Multipling factor)0.2127			239.73
				1366.78
	Add for contractors profit @15% & over head			205.02
				1571.80
	Add cess @1%			15.72
	Rate per no			**Rs 1,587.52**

(Rupees One thousand five hundred eighty seven and paisa fifty two) only

3.22.2	**125 mm dia**			
	a) Materials Cost			
	i) C.I tail piece= 1	Each	775.00	775.00
	b) Labour cost			
	i) Fitter (Grade-I)= 1/10 No	Day	512.00	51.20
	ii) Helper= 1/10 No	Day	447.00	44.70
	c) Carrying Cost of the unit upto site			
	L.S			10.00
	Add for Sundries (L.S.)			10.00
				890.90
	Add for Water charge @1%			8.91
				899.81
	Add GST(Multipling factor)0.2127			191.39
				1091.20
	Add for contractors profit @15% & over head			163.68
				1254.88
	Add cess @1%			12.55
	Rate per no			**Rs 1,267.43**

(Rupees One thousand two hundred sixty seven and paisa forty three) only

3.23	Providing & fitting fixing foot valve leather washer (6 mm thick) of heavy duty at site of work of approved quality.

3.23.1	125 mm dia

a)	**Materials Cost**			
i)	foot valve leather washer=1	No	220.00	220.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/15 No	Day	512.00	34.13
ii)	Helper= 1/15 No	Day	447.00	29.80
c)	**Carrying Cost of the unit upto site**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				293.93
	Add for Water charge @1%			2.94
				296.87
	Add GST(Multipling factor)0.2127			63.14
				360.02
	Add for contractors profit @15% & over head			54.00
				414.02
	Add cess @1%			4.14
	Rate per no			**Rs 418.16**

(Rupees Four hundred eighteen and paisa sixteen) only

3.23.2	150 mm dia

a)	**Materials Cost**			
i)	foot valve leather washer=1	No	360.00	360.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/15 No	Day	512.00	34.13
ii)	Helper= 1/15 No	Day	447.00	29.80
c)	**Carrying Cost of the unit upto site**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				433.93
	Add for Water charge @1%			4.34
				438.27
	Add GST(Multipling factor)0.2127			93.22
				531.49
	Add for contractors profit @15% & over head			79.72
				611.22
	Add cess @1%			6.11
	Rate per no			**Rs 617.33**

(Rupees Six hundred seventeen and paisa thirty three) only

3.23.3	200 mm dia			
a)	**Materials Cost**			
i)	foot valve leather washer=1	No	600.00	600.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/12 No	Day	512.00	42.67
ii)	Helper= 1/12 No	Day	447.00	37.25
c)	**Carrying Cost of the unit upto site**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				689.92
	Add for Water charge @1%			6.90
				696.82
	Add GST(Multipling factor)0.2127			148.21
				845.03
	Add for contractors profit @15% & over head			126.75
				971.78
	Add cess @1%			9.72
	Rate per no			**Rs 981.50**

(Rupees Nine hundred eighty one and paisa fifty) only

3.23.4	250 mm dia			
a)	**Materials Cost**			
i)	foot valve leather washer=1	No	900.00	900.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/10 No	Day	512.00	51.20
ii)	Helper= 1/10 No	Day	447.00	44.70
c)	**Carrying Cost of the unit upto site**			
	L.S			5.00
	Add for Sundries (L.S.)			5.00
				1005.90
	Add for Water charge @1%			10.06
				1015.96
	Add GST(Multipling factor)0.2127			216.09
				1232.05
	Add for contractors profit @15% & over head			184.81
				1416.86
	Add cess @1%			14.17
	Rate per no			**Rs 1,431.03**

(Rupees One thousand four hundred thirty one and paisa three) only

3.24	**Providing & fitting fixing C.I foot valve spare parts of 125/150 mm dia at site of work of approved quality.**
3.24.1	**C.I foot valve weight**

a)	**Materials Cost**			
i)	C.I foot valve weight= 1	No	350.00	350.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/20 No	Day	512.00	25.60
ii)	Helper= 1/20 No	Day	447.00	22.35
c)	**Carrying Cost of the unit upto site**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				417.95
	Add for Water charge @1%			4.18
				422.13
	Add GST(Multipling factor) 0.2127			89.79
				511.92
	Add contractors profit & overheads @ 15%			76.79
				588.70
	Add Cess @1%			5.89
	Rate Per no			**594.59**

(Rupees Five hundred ninty four and paisa fifty nine) only

3.24.2	**C.I foot valve ring**

a)	**Materials Cost**			
i)	C.I foot valve ring=1 no	No	450.00	450.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/20 No	Day	512.00	25.60
ii)	Helper= 1/20 No	Day	447.00	22.35
c)	**Carrying Cost of the unit upto site**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				517.95
	Add for Water charge @1%			5.18
				523.13
	Add GST(Multipling factor) 0.2127			111.27
				634.40
	Add contractors profit & overheads @ 15%			95.16
				729.56
	Add Cess @1%			7.30
	Rate Per no			**736.85**

(Rupees Seven hundred thirty six and paisa eighty five) only

3.24.3	C.I foot valve net

a)	**Materials Cost**			
i)	C.I foot valve net= 1	Each	1180.00	1180.00
b)	**Labour cost**			
i)	Fitter (Grade-I)= 1/20 No	Day	512.00	25.60
ii)	Helper = 1/20 No	Day	447.00	22.35
c)	**Carrying Cost of the unit upto site**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				1247.95
	Add for Water charge @1%			12.48
				1260.43
	Add GST(Multipling factor) 0.2127			268.09
				1528.52
	Add contractors profit & overheads @ 15%			229.28
				1757.80
	Add Cess @1%			17.58
	Rate Per no			**1775.38**

(Rupees One thousand seven hundred seventy five and paisa thirty eight) only

3.25	Dismentaling of old pump/motor from base & stacking of materials & return the same to Sub-Divisional store as per direction of the Engineer-in-Charge.

a)	**Labour cost**			
i)	Mechanic = 1/2 No	Day	699.00	349.50
ii)	Helper= 1/2 No	Day	447.00	223.50
b)	**Carrying Charge (in/c loading unloading & carriage upto Sub-Divisional Store)**			
	L.S (Vehicle + Labour)			1000.00
	Add for Sundries(L.S)			30.00
				1603.00
	Add for Water charge @1%			16.03
				1619.03
	Add GST(Multipling factor) 0.2127			344.37
				1963.40
	Add contractors profit & overheads @ 15%			294.51
				2257.91
	Add Cess @1%			22.58
	Rate Per no			**2280.49**

(Rupees Two thousand two hundred eighty and paisa forty nine) only

3.26	**Dismentaling of G.I pipe including necessary earth cutting etc. & return the same to Sub-Divisional store as per direction of the Engineer-in-Charge.**

125/150 mm dia

A) i) Labour cost (earth cutting & filling complete)

Details of cost for 49.20 mtr. Length (considering 8 nos. pipe @ 6.15 mtr. Each) of a pipe of an average dia. Say 150 mm slope assumed 1 in 200.

Mimimum depth of trench =0.75 + 0.15 = 0.90 mtr.

Average depth =(1.50 + 0.90)/2=1.20 mtr.

Average width = 0.30 mtr.

49.20 X 0.30 X 1.20 = 17.712 Cum.

5% for Socket /flange = 0.886 Cum.

Total = 18.598 Cum.

	Item No. 2.31 - SOR 2023 (Building)	18.598	231.6	4307.30
	Item No. 2.16 - SOR 2023 (Building)	18.598	161.3	2999.86
	Total (A) =			**7307.15**
B)	**a) Labour cost (Dismentaling)**			
i)	Fitter (Grade-I)= 1 No	Day	512.00	512.00
ii)	Helper = 1 No	Day	447.00	447.00
b)	**Carrying Charge (in/c loading unloading & carriage upto Sub-Divisional Store from work site)**			
	L.S			800.00
c)	Add for Sundries(L.S)			40.00
			Total of e = (a+b+c)	1799.00
	Add for Water charge @1%			17.99
				1816.99
	Add GST(Multipling factor) 0.2127			386.47
				2203.46
	Add contractors profit & overheads @ 15%			330.52
				2533.98
	Add Cess @1%			25.34
	Total(B) =			**2559.32**
			Grand total=(A+B) =	**9866.48**
			Cost of 1.00 mtr. (9866.48/49.20) =	**Rs 200.54**

(Rupees Two hundred and paisa fifty four) only

3.27	**Dismentaling of G.I bend including necessary earth cutting etc. & return the same to Sub-Divisional store as per direction of the Engineer-in-Charge.**			
	125/150 mm dia			
A)	**i) Labour cost (earth cutting & filling complete)**			
	Details of cost for 1 no bend			
	Average depth = (1.5+ 0.90)/2 = 1.20 mtr.			
	Average width = 0.30mtr.			
	Average length = 0.90 mtr.			
	1.20 X 0.30 X 0.90 = 0.324 Cum.			
	Total = 0.324 Cum.			
	Item No. 2.31 - SOR 2023 (Building)	0.324	231.6	75.04
	Item No. 2.16 - SOR 2023 (Building)	0.324	161.3	52.26
	Total (A)			**127.30**
B)	**a) Labour cost (Dismentaling)**			
i)	Fitter (Grade-I)= 1/10 No	Day	512.00	51.20
ii)	Helper= 1/10 No	Day	447.00	44.70
b)	**Carrying Charge (in/c loading unloading & carriage upto Sub-Divisional Store from work site)**			
	L.S			50.00
c)	Add for Sundries(L.S)			40.00
			Total of e = (a+b+c)	185.90
	Add for Water charge @1%			1.86
				187.76
	Add GST(Multipling factor) 0.2127			39.94
				227.70
	Add contractors profit & overheads @ 15%			34.15
				261.85
	Add Cess @1%			2.62
	Total(B)			264.47
	Grand total=(A+B)			**391.77**

(Rupees Three hundred ninty one and paisa seventy seven) only

3.28	**Installation of pump motor set with all accessories including carriage of materials from Departmental store yard to site of work and making necessary electrical connection with main switch / starter with motor in/c commissioning & trial run for 10hrs. in two spell as per direction of the Engineer-in-charge.**			
a)	**Loading cost**	**L.S.**		500.00
b)	**Carrying Cost**	**L.S.**		500.00
c)	**Un-Loading cost**	**L.S.**		500.00
d)	**Installation Cost**			
i)	Mechanic= 1 No	Day	699.00	699.00
ii)	Helper= 1 No	Day	447.00	447.00
	Add for Sundries(L.S)			50.00
				2696.00
	Add for Water charge @1%			26.96
				2722.96
	Add GST(Multipling factor) 0.2127			579.17
				3302.13
	Add contractors profit & overheads @ 15%			495.32
				3797.45
	Add Cess @1%			37.97
	Rate Per no			**3835.43**

(Rupees Three thousand eight hundred thirty five and paisa forty three) only

3.29	Providing and Installation of Horizontal pump motor set (Centrifugal) with allied equipments by maintaining proper level/slope, alignment etc. in/c all necessary nuts & bolts, washers etc. at site of work and making necessary electrical connection with main switch / starter with motor in/c commissioning & trial run for 10hrs. in two spell as per direction of the Engineer-in-charge.

3.29.1	**20 HP mortar with 60 LPS 18 m head pump**					
	a)	**Cost of Materials**				
	1)	Pump Motor Set =1		No	156780.00	156780.00
	2)	MS Nuts & Bolts of all size = 2.0		Kg	110.00	220.00
	3)	Rubber Flange Washer 150 mm = 2		No	70.00	140.00
	4)	Rubber Flange Washer 125 mm =2		No	50.00	100.00
	b)	**Loading cost**	**L.S.**			500.00
	c)	**Carrying Cost**	**L.S.**			500.00
	d)	**Un-Loading cost**	**L.S.**			500.00
	e)	**Installation Cost**				
	i)	Mechanic= 1 No		Day	699.00	699.00
	ii)	Helper = 1 No		Day	447.00	447.00
		Add for Sundries(L.S)				50.00
						159936.00
		Add for Water charge @1%				1599.36
						161535.36
		Add GST(Multipling factor) 0.2127				34358.57
						195893.93
		Add contractors profit & overheads @ 15%				29384.09
						225278.02
		Add Cess @1%				2252.78
		Rate Per no				**227530.80**

(Rupees Two Lakh twenty seven thousand five hundred thirty and paisa eighty) only

3.29.2	**25 HP mortar with 60 LPS 22 m head pump**					
	a)	**Cost of Materials**				
	1)	Pump Motor Set =1		No	167800.00	167800.00
	2)	MS Nuts & Bolts of all size = 2.0		Kg	110.00	220.00
	3)	Rubber Flange Washer 150 mm = 2		No	70.00	140.00
	4)	Rubber Flange Washer 125 mm =2		No	50.00	100.00
	b)	**Loading cost**	**L.S.**			500.00
	c)	**Carrying Cost**	**L.S.**			500.00
	d)	**Un-Loading cost**	**L.S.**			500.00
	e)	**Installation Cost**				
	i)	Mechanic= 1 No		Day	699.00	699.00
	ii)	Helper = 1 No		Day	447.00	447.00
		Add for Sundries(L.S)				50.00
						170956.00
		Add for Water charge @1%				1709.56
						172665.56
		Add GST(Multipling factor) 0.2127				36725.96
						209391.52
		Add contractors profit & overheads @ 15%				31408.73
						240800.25
		Add Cess @1%				2408.00
		Rate Per no				**243208.26**

(Rupees Two Lakh forty three thousand two hundred eight and paisa twenty six) only

3.29.3	50 HP mortar with 125 LPS 22 m head pump				
a)	**Cost of Materials**				
1)	Pump Motor Set =1		No	402540.00	402540.00
2)	MS Nuts & Bolts of all size = 2.0		Kg	110.00	275.00
3)	Rubber Flange Washer 200 mm = 2		No	140.00	280.00
4)	Rubber Flange Washer 150 mm =2		No	70.00	140.00
b)	**Loading cost**	**L.S.**			650.00
c)	**Carrying Cost**	**L.S.**			650.00
d)	**Un-Loading cost**	**L.S.**			650.00
e)	**Installation Cost**				
i)	Mechanic = 1 No		Day	699.00	699.00
ii)	Helper = 1 No		Day	447.00	447.00
	Add for Sundries(L.S)				50.00
					406381.00
	Add for Water charge @1%				4063.81
					410444.81
	Add GST(Multipling factor) 0.2127				87301.61
					497746.42
	Add contractors profit & overheads @ 15%				74661.96
					572408.38
	Add Cess @1%				5724.08
	Rate Per no				**578132.47**

(Rupees Five Lakh seventy eight thousand one hundred thirty two and paisa fourty seven) only

3.29.4	60 HP mortar with 125 LPS 25 m head pump				
a)	**Cost of Materials**				
1)	Pump Motor Set =1		No	436440.00	436440.00
2)	MS Nuts & Bolts of all size = 2.0		Kg	110.00	302.50
3)	Rubber Flange Washer 200 mm = 2		No	140.00	280.00
4)	Rubber Flange Washer 150 mm =2		No	70.00	140.00
b)	**Loading cost**	**L.S.**			700.00
c)	**Carrying Cost**	**L.S.**			700.00
d)	**Un-Loading cost**	**L.S.**			700.00
e)	**Installation Cost**				
i)	Mechanic= 1 No		Day	699.00	699.00
ii)	Helper= 1 No		Day	447.00	447.00
	Add for Sundries(L.S)				50.00
					440458.50
	Add for Water charge @1%				4404.59
					444863.09
	Add GST(Multipling factor) 0.2127				94622.38
					539485.46
	Add contractors profit & overheads @ 15%				80922.82
					620408.28
	Add Cess @1%				6204.08
	Rate Per no				**626612.37**

(Rupees Six Lakh twenty six thousandsix hundred twelve and paisathirty seven) only

3.29.5	**75HP mortar with 150 LPS 25 m head pump**				
	a)	**Cost of Materials**			
	1)	Pump Motor Set =1	No	559320.00	559320.00
	2)	MS Nuts & Bolts of all size = 2.0	Kg	110.00	330.00
	3)	Rubber Flange Washer 250 mm = 2	No	230.00	460.00
	4)	Rubber Flange Washer 200 mm =2	No	140.00	280.00
	b)	**Loading cost** **L.S.**			800.00
	c)	**Carrying Cost** **L.S.**			800.00
	d)	**Un-Loading cost** **L.S.**			800.00
	e)	**Installation Cost**			
	i)	Mechanic= 1 No	Day	699.00	699.00
	ii)	Helper= 1 No	Day	447.00	447.00
		Add for Sundries(L.S)			50.00
					563986.00
		Add for Water charge @1%			5639.86
					569625.86
		Add GST(Multipling factor) 0.2127			121159.42
					690785.28
		Add contractors profit & overheads @ 15%			103617.79
					794403.07
		Add Cess @1%			7944.03
		Rate Per no			**802347.10**
		(Rupees Eight Lakh two thousand three hundred fourty seven and paisa ten) only			

3.30	**Providing and Installation of Submersible Pump Motor for DTW in/c all necessary nuts & bolts, washers, Safety Clamp etc. as per required size with heavy duty chain pulley and block and making necessary electrical connection with main switch / starter with motor in/c commissioning & trial run for 10hrs. in two spell at site of work as per direction of the Engineer-In-Charge.**

3.30.1	**12.50 LPS 50m head**				
	a)	**Cost of Materials**			
	1)	Pump Motor Set =1	No	54150.00	54150.00
	2)	MS Nuts & Bolts of all size = 2.0	Kg	110.00	220.00
	3)	Rubber Flange Washer 100 mm= 2	No	45.00	90.00
	4)	Safety Clamp with nuts & bolts 100 mm dia= 1	No	921.00	921.00
	b)	**Loading cost** **L.S.**			100.00
	c)	**Carrying Cost** **L.S.**			500.00
	d)	**Un-Loading cost** **L.S.**			100.00
	e)	**Installation Cost**			
	i)	Mechanic= 1 No	Day	699.00	699.00
	ii)	Helper = 1 No	Day	447.00	447.00
	f)	**Hiring of requied assembles complete**		LS	1500.00
		Add for Sundries(L.S)			50.00
					58777.00
		Add for Water charge @1%			587.77
					59364.77
		Add GST(Multipling factor) 0.2127			12626.89
					71991.66
		Add contractors profit & overheads @ 15%			10798.75
					82790.41
		Add Cess @1%			827.90
		Rate Per no			**83618.31**
		(Rupees Eighty three thousand six hundred eighteen and paisa thirty one) only			

3.30.2	15.00 LPS 50m head				
a)	**Cost of Materials**				
1)	Pump Motor Set =1		No	57030.00	57030.00
2)	MS Nuts & Bolts of all size = 2.0		Kg	110.00	220.00
3)	Rubber Flange Washer 100 mm= 2		No	45.00	90.00
4)	Safety Clamp with nuts & bolts 100 mm dia= 1		No	921.00	921.00
b)	**Loading cost**	**L.S.**			100.00
c)	**Carrying Cost**	**L.S.**			500.00
d)	**Un-Loading cost**	**L.S.**			100.00
e)	**Installation Cost**				
i)	Mechanic = 1 No		Day	699.00	699.00
ii)	Helper= 1 No		Day	447.00	447.00
f)	**Hiring of requied assembles complete**			LS	1500.00
	Add for Sundries(L.S)				50.00
					61657.00
	Add for Water charge @1%				616.57
					62273.57
	Add GST(Multipling factor) 0.2127				13245.59
					75519.16
	Add contractors profit & overheads @ 15%				11327.87
					86847.03
	Add Cess @1%				868.47
	Rate Per no				**87715.50**

(Rupees Eighty seven thousand seven hundred fifteen and paisa fifty) only

3.30.3	18.50 LPS 50m head				
a)	**Cost of Materials**				
1)	Pump Motor Set =1		No	59660.00	59660.00
2)	MS Nuts & Bolts of all size = 2.0		Kg	110.00	220.00
3)	Rubber Flange Washer 100 mm= 2		No	45.00	90.00
4)	Safety Clamp with nuts & bolts 100 mm dia= 1		No	921.00	921.00
b)	**Loading cost**	**L.S.**			120.00
c)	**Carrying Cost**	**L.S.**			500.00
d)	**Un-Loading cost**	**L.S.**			120.00
e)	**Installation Cost**				
i)	Mechanic = 1 No		Day	699.00	699.00
ii)	Helper= 1 No		Day	447.00	447.00
f)	**Hiring of requied assembles complete**			LS	1500.00
	Add for Sundries(L.S)				50.00
					64327.00
	Add for Water charge @1%				643.27
					64970.27
	Add GST(Multipling factor) 0.2127				13819.18
					78789.45
	Add contractors profit & overheads @ 15%				11818.42
					90607.86
	Add Cess @1%				906.08
	Rate Per no				**91513.94**

(Rupees Ninety one thousand five hundred thirteen and paisa ninety four) only

3.30.4	10.00 LPS 40m head			
a)	**Cost of Materials**			
1)	Pump Motor Set =1	No	45080.00	45080.00
2)	MS Nuts & Bolts of all size = 2.0	Kg	110.00	220.00
3)	Rubber Flange Washer 80 mm= 2	No	40.00	80.00
4)	Safety Clamp with nuts & bolts 80 mm dia= 1	No	850.00	850.00
b)	**Loading cost** **L.S.**			100.00
c)	**Carrying Cost** **L.S.**			500.00
d)	**Un-Loading cost** **L.S.**			100.00
e)	**Installation Cost**			
i)	Mechanic = 1 No	Day	699.00	699.00
ii)	Helper = 1 No	Day	447.00	447.00
f)	**Hiring of requied assembles complete**		LS	1500.00
	Add for Sundries(L.S)			50.00
				49626.00
	Add for Water charge @1%			496.26
				50122.26
	Add GST(Multipling factor) 0.2127			10661.00
				60783.26
	Add contractors profit & overheads @ 15%			9117.49
				69900.75
	Add Cess @1%			699.01
	Rate Per no			**70599.76**

(Rupees Seventy thousand five hundred ninety nine and paisa seventy six) only

3.30.5	12.50 LPS 40m head			
a)	**Cost of Materials**			
1)	Pump Motor Set =1	No	49150.00	49150.00
2)	MS Nuts & Bolts of all size = 2.0	Kg	110.00	220.00
3)	Rubber Flange Washer 100 mm= 2	No	45.00	90.00
4)	Safety Clamp with nuts & bolts 100 mm dia= 1	No	921.00	921.00
b)	**Loading cost** **L.S.**			100.00
c)	**Carrying Cost** **L.S.**			500.00
d)	**Un-Loading cost** **L.S.**			100.00
e)	**Installation Cost**			
i)	Mechanic = 1 No	Day	699.00	699.00
ii)	Helper = 1 No	Day	447.00	447.00
f)	**Hiring of requied assembles complete**		LS	1500.00
	Add for Sundries(L.S)			50.00
				53777.00
	Add for Water charge @1%			537.77
				54314.77
	Add GST(Multipling factor) 0.2127			11552.75
				65867.52
	Add contractors profit & overheads @ 15%			9880.13
				75747.65
	Add Cess @1%			757.48
	Rate Per no			**76505.13**

(Rupees Seventy six thousand five hundred five and paisa thirteen) only

3.30.6	15 LPS 40m head				
	a)	**Cost of Materials**			
	1)	Pump Motor Set =1	No	53640.00	53640.00
	2)	MS Nuts & Bolts of all size = 2.0	Kg	110.00	220.00
	3)	Rubber Flange Washer 100 mm= 2	No	45.00	90.00
	4)	Safety Clamp with nuts & bolts 100 mm dia= 1	No	921.00	921.00
	b)	**Loading cost** **L.S.**			100.00
	c)	**Carrying Cost** **L.S.**			500.00
	d)	**Un-Loading cost** **L.S.**			100.00
	e)	**Installation Cost**			
	i)	Mechanic = 1 No	Day	699.00	699.00
	ii)	Helper = 1 No	Day	447.00	447.00
	f)	**Hiring of requied assembles complete**		LS	1500.00
		Add for Sundries(L.S)			50.00
					58267.00
		Add for Water charge @1%			582.67
					58849.67
		Add GST(Multipling factor) 0.2127			12517.32
					71366.99
		Add contractors profit & overheads @ 15%			10705.05
					82072.04
		Add Cess @1%			820.72
		Rate Per no			**82892.76**

(Rupees Eighty two thousand eight hundred ninety two and paisa seventy six) only

3.30.7	18.50 LPS 40m head				
	a)	**Cost of Materials**			
	1)	Pump Motor Set =1	No	58050.00	58050.00
	2)	MS Nuts & Bolts of all size = 2.0	Kg	110.00	220.00
	3)	Rubber Flange Washer 100 mm= 2	No	45.00	90.00
	4)	Safety Clamp with nuts & bolts 100 mm dia= 1	No	921.00	921.00
	b)	**Loading cost** **L.S.**			120.00
	c)	**Carrying Cost** **L.S.**			500.00
	d)	**Un-Loading cost** **L.S.**			120.00
	e)	**Installation Cost**			
	i)	Mechanic = 1 No	Day	699.00	699.00
	ii)	Helper = 1 No	Day	447.00	447.00
	f)	**Hiring of requied assembles complete**		LS	1500.00
		Add for Sundries(L.S)			50.00
					62717.00
		Add for Water charge @1%			627.17
					63344.17
		Add GST(Multipling factor) 0.2127			13473.30
					76817.47
		Add contractors profit & overheads @ 15%			11522.62
					88340.10
		Add Cess @1%			883.40
		Rate Per no			**89223.50**

(Rupees Eighty nine thousand two hundred twenty three and paisa fifty) only

3.30.8	25.00 LPS 40m head				
a)	**Cost of Materials**				
1)	Pump Motor Set =1		No	65170.00	65170.00
2)	MS Nuts & Bolts of all size = 2.0		Kg	110.00	220.00
3)	Rubber Flange Washer 125 mm= 2		No	50.00	100.00
4)	Safety Clamp with nuts & bolts 125 mm dia= 1		No	998.00	998.00
b)	**Loading cost**	**L.S.**			150.00
c)	**Carrying Cost**	**L.S.**			500.00
d)	**Un-Loading cost**	**L.S.**			150.00
e)	**Installation Cost**				
i)	Mechanic = 1 No		Day	699.00	699.00
ii)	Helper = 1 No		Day	447.00	447.00
f)	**Hiring of requied assembles complete**			LS	1500.00
	Add for Sundries(L.S)				50.00
					69984.00
	Add for Water charge @1%				699.84
					70683.84
	Add GST(Multipling factor) 0.2127				15034.45
					85718.29
	Add contractors profit & overheads @ 15%				12857.74
					98576.04
	Add Cess @1%				985.76
	Rate Per no				**99561.80**

(Rupees Ninety nine thousand five hundred sixty one and paisa eighty) only

3.30.9	6.50 LPS 30m head				
a)	**Cost of Materials**				
1)	Pump Motor Set =1		No	40050.00	40050.00
2)	MS Nuts & Bolts of all size = 2.0		Kg	110.00	220.00
3)	Rubber Flange Washer 65 mm= 2		No	35.00	70.00
4)	Safety Clamp with nuts & bolts 65 mm dia= 1		No	750.00	750.00
b)	**Loading cost**	**L.S.**			100.00
c)	**Carrying Cost**	**L.S.**			400.00
d)	**Un-Loading cost**	**L.S.**			100.00
e)	**Installation Cost**				
i)	Mechanic = 1 No		Day	699.00	699.00
ii)	Helper = 1 No		Day	447.00	447.00
f)	**Hiring of requied assembles complete**			LS	1500.00
	Add for Sundries(L.S)				50.00
					44386.00
	Add for Water charge @1%				443.86
					44829.86
	Add GST(Multipling factor) 0.2127				9535.31
					54365.17
	Add contractors profit & overheads @ 15%				8154.78
					62519.95
	Add Cess @1%				625.20
	Rate Per no				**63145.15**

(Rupees Sixty three thousand one hundred forty five and paisa fifteen) only

3.31	**Dismentalling of motor for vernishing, heating etc. complete in/c reinstallation and making necessary electrical connection with main switch / starter with motor in/c trial run for 10 hrs in two spell complete as per direction of Engineer-in-charge.**

a)	**Materials Cost**			
i)	Motor Vernish= 0.50	ltr.	500.00	250.00
ii)	Petrol = 2.00	ltr	79.59	159.18
b)	**Labour cost**			
i)	Mechanic = 1/2 No	Day	699.00	349.50
ii)	Helper = 1/2 No	Day	447.00	223.50
	Add for Sundries(L.S)			30.00
				1012.18
	Add for Water charge @1%			10.12
				1022.30
	Add GST(Multipling factor) 0.2127			217.44
				1239.75
	Add contractors profit & overheads @ 15%			185.96
				1425.71
	Add Cess @1%			14.26
	Rate Per no			**1439.96**

(Rupees One thousand four hundred thirty nine and paisa ninty six) only

3.32	**Providing & fixing G.I. plug of approved quality.**

a)	**<u>125/150 mm dia</u>**			
A)	**<u>Material Cost</u>**			
	GI Plug (125 / 150 mm dia)= 1	No	300.00	300.00
B)	**<u>Labour cost</u>**			
i)	Fitter (Grade-I) = 1/20 No	Day	512.00	25.60
ii)	Helper = 1/20 No	Day	447.00	22.35
C)	**Carrying cost of the unit upto site)**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				367.95
	Add for Water charge @1%			3.68
				371.63
	Add GST(Multipling factor) 0.2127			79.05
				450.68
	Add contractors profit & overheads @ 15%			67.60
				518.28
	Add Cess @1%			5.18
	Rate Per no			**523.46**

(Rupees Five hundred twenty three and paisa forty six) only

3.33	Labour charge for laying of G.I pipe conforming IS 1161,3589 & 1239 including fitting fixing complete as per direction of Engineer-in-Charge.

3.33.1	150 mm dia nominal bore (medium)

Details of cost for 49.20 mtr. Length. (considering 8 nos. pipe @ 6.15 mtr. Each)

A)	**Labour cost for fitting fixing**			
i)	Fitter (Grade-I) = 1/2 No	Day	512.00	1024.00
ii)	Helper = 4 No	Day	447.00	1788.00
b)	**Carrying (in/c loading unloading upto work site from Sub-Divisional Store)**			
	L.S (Vehicle + Labour)			1000.00
	Add for Sundries(L.S)			30.00
				3842.00
	Add for Water charge @1%			38.42
				3880.42
	Add GST(Multipling factor) 0.2127			825.37
				4705.79
	Add contractors profit & overheads @ 15%			705.87
				5411.65
	Add Cess @1%			54.12
				5465.77
	Rate for 1.00 mtr. Length	5465.77/49.20 =		**Rs 111.09**

(Rupees One hundred eleven and paisa nine) only

3.33.2	125 mm dia nominal bore (medium)

Details of cost for 49.20 mtr. Length. (considering 8 nos. pipe @ 6.15 mtr. Each)

A)	**Labour cost for fitting fixing**			
i)	Fitter (Grade-I)= 2 No	Day	512.00	1024.00
ii)	Helper= 4 No	Day	447.00	1788.00
b)	**Carrying (in/c loading unloading upto work site from Sub-Divisional Store)**			
	L.S (Vehicle + Labour)			750.00
	Add for Sundries(L.S)			30.00
				3592.00
	Add for Water charge @1%			35.92
				3627.92
	Add GST(Multipling factor) 0.2127			771.66
				4399.58
	Add contractors profit & overheads @ 15%			659.94
				5059.52
	Add Cess @1%			50.60
				5110.11
	Rate for 1.00 mtr. Length	5110.11/49.20 =		**Rs 103.86**

(Rupees One hundred three and paisa eighty six) only

3.34	**Labour charge for fitting fixing of CI sluice valve class-I with cap complete by providing nuts and bolts, 3mm thick rubber insertion etc.(Tail piece if required will be paid separately) (only C.I sluice valve class-I with will be supplied by deptt. at free of cost)**
3.34.1	**300 mm dia.**

A)	**Material Cost**			
i)	Rubber Insersion (3 mm thick)= 1	pair	250.00	250.00
ii)	MS nuts & Bolts for all size= 4.00	kg	110.00	440.00
C)	**Labour cost**			
i)	Fitter (Grade-I)= 1/2 No	Day	512.00	256.00
ii)	Helper= 1/2 No	Day	447.00	223.50
b)	**Carrying (in/c loading unloading upto work site from Sub-Divisional Store)**			
	L.S (Vehicle + labour)			500.00
	Add for Sundries(L.S)			29.00
				1698.50
	Add for Water charge @1%			16.99
				1715.49
	Add GST(Multipling factor) 0.2127			364.88
				2080.37
	Add contractors profit & overheads @ 15%			312.06
				2392.42
	Add Cess @1%			23.92
	Rate Per no			**2416.35**

(Rupees Two thousand four hundred sixteen and paisa thirty five) only

3.34.2	**250 mm dia.**

A)	**Material Cost**			
i)	Rubber Insersion (3 mm thick) = 1	pair	200.00	200.00
ii)	MS nuts & Bolts for all size =4.00	kG	110.00	440.00
C)	**Labour cost**			
i)	Fitter (Grade-I)= 1/2 No	Day	512.00	256.00
ii)	Helper= 1/2 No	Day	447.00	223.50
b)	**Carrying (in/c loading unloading upto work site from Sub-Divisional Store)**			
	L.S (Vehicle + labour)			450.00
	Add for Sundries(L.S)			29.00
				1598.50
	Add for Water charge @1%			15.99
				1614.49
	Add GST(Multipling factor) 0.2127			343.40
				1957.89
	Add contractors profit & overheads @ 15%			293.68
				2251.57
	Add Cess @1%			22.52
	Rate Per no			**2274.08**

(Rupees Two thousand two hundred seventy four and paisa eight) only

3.34.3	200 mm dia.			
A)	**Material Cost**			
i)	Rubber Insersion (3 mm thick)= 1	pair	150.00	150.00
ii)	MS nuts & Bolts for all size= 3.00	kg	110.00	330.00
C)	**Labour cost**			
i)	Fitter (Grade-I)= 1/3 No	Day	512.00	170.67
ii)	Helper= 1/3 No	Day	447.00	149.00
b)	**Carrying (in/c loading unloading upto work site from Sub-Divisional Store)**			
	L.S (Vehicle + labour)			420.00
	Add for Sundries(L.S)			29.00
				1248.67
	Add for Water charge @1%			12.49
				1261.15
	Add GST(Multipling factor) 0.2127			268.25
				1529.40
	Add contractors profit & overheads @ 15%			229.41
				1758.81
	Add Cess @1%			17.59
	Rate Per no			**1776.40**

(Rupees One thousand seven hundred seventy six and paisa forty) only

3.34.4	150 mm dia.			
A)	**Material Cost**			
i)	Rubber Insersion (3 mm thick)= 1	pair	50.00	50.00
ii)	MS nuts & Bolts for all size=2.00	kG	110.00	220.00
C)	**Labour cost**			
i)	Fitter (Grade-I)= 1/4 No	Day	512.00	128.00
ii)	Helper= 1/4 No	Day	447.00	111.75
b)	**Carrying (in/c loading unloading upto work site from Sub-Divisional Store)**			
	L.S (Vehicle + labour)			420.00
	Add for Sundries(L.S)			29.00
				958.75
	Add for Water charge @1%			9.59
				968.34
	Add GST(Multipling factor) 0.2127			205.97
				1174.30
	Add contractors profit & overheads @ 15%			176.15
				1350.45
	Add Cess @1%			13.50
	Rate Per no			**1363.95**

(Rupees One thousand three hundred sixty three and paisa ninty five) only

3.34.5	125 mm dia.			
	A) Material Cost			
	i) Rubber Insersion (3 mm thick)= 1	pair	45.00	45.00
	ii) MS nuts & Bolts for all size= 1.50	kg	110.00	165.00
	C) Labour cost			
	i) Fitter (Grade-I)= 1/4 No	Day	512.00	128.00
	ii) Helper= 1/4 No	Day	447.00	111.75
	b) Carrying (in/c loading unloading upto work site from Sub-Divisional Store)			
	L.S (Vehicle + labour)			420.00
	Add for Sundries(L.S)			29.00
				898.75
	Add for Water charge @1%			8.99
				907.74
	Add GST(Multipling factor) 0.2127			193.08
				1100.81
	Add contractors profit & overheads @ 15%			165.12
				1265.94
	Add Cess @1%			12.66
	Rate Per no			**1278.59**

(Rupees One thousand two hundred seventy eight and paisa fifty nine) only

3.34.6	100 mm dia.			
	A) Material Cost			
	i) Rubber Insersion (3 mm thick)= 1	pair	40.00	40.00
	ii) MS nuts & Bolts for all size= 1.00	kG	110.00	110.00
	C) Labour cost			
	i) Fitter (Grade-I= 1/6 No	Day	512.00	85.33
	ii) Helper = 1/6 No	Day	447.00	74.50
	b) Carrying (in/c loading unloading upto work site from Sub-Divisional Store)			
	L.S (Vehicle + labour)			420.00
	Add for Sundries(L.S)			29.00
				758.83
	Add for Water charge @1%			7.59
				766.42
	Add GST(Multipling factor) 0.2127			163.02
				929.44
	Add contractors profit & overheads @ 15%			139.42
				1068.86
	Add Cess @1%			10.69
	Rate Per no			**1079.54**

(Rupees One thousand seventy nine and paisa fifty four) only

3.34.7	**80 mm dia.**			
	A) Material Cost			
	i) Rubber Insersion (3 mm thick)= 1	pair	30.00	30.00
	ii) MS nuts & Bolts for all size= 0.75	kG	110.00	82.50
	C) Labour cost			
	i) Fitter (Grade-I)= 1/8 No	Day	512.00	64.00
	ii) Helper = 1/8 No	Day	447.00	55.88
	b) Carrying (in/c loading unloading upto work site from Sub-Divisional Store)			
	L.S (Vehicle + labour)			420.00
	Add for Sundries(L.S)			29.00
				681.38
	Add for Water charge @1%			6.81
				688.19
	Add GST(Multipling factor) 0.2127			146.38
				834.57
	Add contractors profit & overheads @ 15%			125.18
				959.75
	Add Cess @1%			9.60
	Rate Per no			**969.35**

(Rupees Nine hundred sixty nine and paisa thirty five) only

3.35	**Supplying & fitting fixing of spare parts for 20/25 HP Horizontal motor.**			
3.35.1	**Motor Fan**			
	a) Material Cost			
	Motor Fan= 1	No	750.00	750.00
	B) Labour cost			
	i) Mechanic = 1/20 No	Day	699.00	34.95
	ii) Helper= 1/20 No	Day	447.00	22.35
	c) **Carrying cost of the unit upto site)**			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				817.30
	Add for Water charge @1%			8.17
				825.47
	Add GST(Multipling factor) 0.2127			175.58
				1001.05
	Add contractors profit & overheads @ 15%			150.16
				1151.21
	Add Cess @1%			11.51
	Rate Per no			**1162.72**

(Rupees One thousand one hundred sixty two and paisa seventy two) only

3.35.2	**Terminal plate**			
a)	**Material Cost**			
	Terminal plate for 20/25 HP horizontal	Each	700.00	700.00
B)	**Labour cost**			
i)	Mechanic= 1/20 No	Day	699.00	34.95
ii)	Helper= 1/20 No	Day	447.00	22.35
c)	**Carrying cost of the unit upto site)**			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				767.30
	Add for Water charge @1%			7.67
				774.97
	Add GST(Multipling factor) 0.2127			164.84
				939.81
	Add contractors profit & overheads @ 15%			140.97
				1080.78
	Add Cess @1%			10.81
	Rate Per no			**1091.59**

(Rupees One thousand ninty one and paisa fifty nine) only

3.36	**Labour charge of lifting of 5,000 to 20,000 GPH water lubricated vertical submersible pump with motor including column assembly upto 100 feet with heavy duty chain pulley and block as per direction of the Engineer-in-charge.**			
a)	**Labour cost**			
i)	Mechanic = 1/2 No	Day	699.00	349.50
ii)	Helper= 1/2 No	Day	447.00	447.00
b)	**Hiring of requied assembles complete**		LS	1500.00
c)	**carrying of assembles**		LS	600.00
	Add for Sundries(L.S)			30.00
				2926.50
	Add for Water charge @1%			29.27
				2955.77
	Add GST(Multipling factor) 0.2127			628.69
				3584.46
	Add contractors profit & overheads @ 15%			537.67
				4122.12
	Add Cess @1%			41.22
	Rate Per no			**4163.35**

(Rupees Four thousand one hundred sixty three & paisa thirty five) only

3.37	**Labour charge for lowering & fifting fixing of 5,000 to 20,000 GPH water lubricated vertical submersible pump with motor including column assembly upto 100 feet with heavy duty chain pulley and block and making necessary electrical connection with main switch / starter with motor in/c trial run for 10 hrs in two spell complete as per direction of the Engineer-in-charge.**

a)	**Labour cost**			
i)	Mechanic = 1/2 No	Day	699.00	349.50
ii)	Helper= 1/2 No	Day	447.00	447.00
b)	**Hiring of requied assembles complete**		LS	1500.00
c)	**carrying of assembles**		LS	600.00
	Add for Sundries(L.S)			30.00
				2926.50
	Add for Water charge @1%			29.27
				2955.77
	Add GST(Multipling factor) 0.2127			628.69
				3584.46
	Add contractors profit & overheads @ 15%			537.67
				4122.12
	Add Cess @1%			41.22
	Rate Per no			**4163.35**

(Rupees Four thousand one hundred sixty three & paisa thirty five) only

3.38	**Labour charge for dismentalling and overhauling of 5,000 to 20,000 GPH water lubricated vertical submesible pump after taking out shaft etc. including necessary fittings of new & existing submersible materials as per direction of the Engineer-in-charge.**

A)	**Labour Cost**			
i)	Mechanic = 1/2 No	Day	699.00	349.50
ii)	Helper= 1/2 No	Day	447.00	223.50
B)	**Carrying in/c loading unloading**			
	L.S			700.00
	Add for Sundries(L.S)			30.00
				1303.00
	Add for Water charge @1%			13.03
				1316.03
	Add GST(Multipling factor) 0.2127			279.92
				1595.95
	Add contractors profit & overheads @ 15%			239.39
				1835.34
	Add Cess @1%			18.35
	Rate Per no			**1853.70**

(Rupees One thousand eight hundred fifty three and paisa seventy) only

3.39	Supplying & fitting fixing of spare parts for submersible pump 5 HP to 25 HP of approved quality as per direction of Engineer-in-Charge.

3.39.1	Impeller (Brass made)

a)	**Material Cost**			
	Impeller (Brass made)= 1	No	3500.00	3500.00
B)	**Labour cost**			
i)	Mechanic = 1/5 No	Day	699.00	139.80
ii)	Helper = 1/5 No	Day	447.00	89.40
C)	**Carrying in/c loading unloading**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				3749.20
	Add for Water charge @1%			37.49
				3786.69
	Add GST(Multipling factor) 0.2127			805.43
				4592.12
	Add contractors profit & overheads @ 15%			688.82
				5280.94
	Add Cess @1%			52.81
	Rate Per no			**5333.75**

(Rupees Five thousand three hundred thirty three and paisa seventy five) only

3.39.2	Motor Bush(Brass make)

a)	**Material Cost**			
	Motor Bush(Brass make)=1	No	900.00	900.00
B)	**Labour cost**			
i)	Mechanic = 1/10 No	Day	699.00	69.90
ii)	Helper = 1/10 No	Day	447.00	44.70
C)	**Carrying in/c loading unloading**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
			0.00	1034.60
	Add for Water charge @1%			10.35
				1044.95
	Add GST(Multipling factor) 0.2127			222.26
				1267.21
	Add contractors profit & overheads @ 15%			190.08
				1457.29
	Add Cess @1%			14.57
	Rate Per no			**1471.86**

(Rupees One thousand four hundred seventy one and paisa eighty six) only

3.39.3	Sand Guard			
a)	**Material Cost**			
	Sand Guard= 1	No	1050.00	1050.00
B)	**Labour cost**			
i)	Mechanic = 1/10 No	Day	699.00	69.90
ii)	Helper= 1/10 No	Day	447.00	44.70
C)	**Carrying in/c loading unloading**			
	L.S			20.00
	Add for Sundries(L.S)			20.00
			0.00	1204.60
	Add for Water charge @1%			12.05
				1216.65
	Add GST(Multipling factor) 0.2127			258.78
				1475.43
	Add contractors profit & overheads @ 15%			221.31
				1696.74
	Add Cess @1%			16.97
	Rate Per no			**1713.71**

(Rupees One thousand seven hundred thirteen and paisa seventy one) only

3.39.4	Thrust Bearing with plate			
A)	**Material Cost**			
	Thrust Bearing with plate= 1	No	3000.00	3000.00
B)	**Labour cost**			
i)	Mechanic= 1/5 No	Day	699.00	139.80
ii)	Helper= 1/5 No	Day	447.00	89.40
C)	**Carrying in/c loading unloading**			
	L.S			10.00
	Add for Sundries(L.S)			30.00
				3269.20
	Add for Water charge @1%			32.69
				3301.89
	Add GST(Multipling factor) 0.2127			702.31
				4004.20
	Add contractors profit & overheads @ 15%			600.63
				4604.84
	Add Cess @1%			46.05
	Rate Per no			**4650.88**

(Rupees Four thousand six hundred fifty and paisa eighty eight) only

3.39.5	Pump Bush (brass make)			
a)	**Material Cost**			
	submersible Pump Bush (brass make)=1	No	450.00	450.00
B)	**Labour cost**			
i)	Mechanic= 1/20 No	Day	699.00	34.95
ii)	Helper = 1/20 No	Day	447.00	22.35
C)	**Carrying in/c loading unloading**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				527.30
	Add for Water charge @1%			5.27
				532.57
	Add GST(Multipling factor) 0.2127			113.28
				645.85
	Add contractors profit & overheads @ 15%			96.88
				742.73
	Add Cess @1%			7.43
	Rate Per no			**750.16**

(Rupees Seven hundred fifty and paisa sixteen) only

3.39.6	Safety clamp			
a)	**Material Cost**			
	submersible Safety clamp= 1	No	2200.00	2200.00
B)	**Labour cost**			
i)	Mechanic = 1/8 No	Day	699.00	87.38
ii)	Helper = 1/8 No	Day	447.00	55.88
C)	**Carrying in/c loading unloading**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				2363.25
	Add for Water charge @1%			23.63
				2386.88
	Add GST(Multipling factor) 0.2127			507.69
				2894.57
	Add contractors profit & overheads @ 15%			434.19
				3328.76
	Add Cess @1%			33.29
	Rate Per no			**3362.05**

(Rupees Three thousand three hundred sixty two and paisa five) only

3.39.7	Shaft			
a)	**Material Cost**			
	submersible Shaft= 1	No	3500.00	3500.00
B)	**Labour cost**			
i)	Mechanic = 1/2 No	Day	699.00	349.50
ii)	Helper = 1/2 No	Day	447.00	223.50
C)	**Carrying in/c loading unloading**			
	L.S			20.00
	Add for Sundries(L.S)			10.00
				4103.00
	Add for Water charge @1%			41.03
				4144.03
	Add GST(Multipling factor) 0.2127			881.44
				5025.47
	Add contractors profit & overheads @ 15%			753.82
				5779.28
	Add Cess @1%			57.79
	Rate Per no			**5837.08**

(Rupees Five thousand eight hundred thirty seven and paisa eight) only

3.39.8	Pump sleeve (steel)			
a)	**Material Cost**			
	submersible Pump sleeve (steel)= 1	No	600.00	600.00
B)	**Labour cost**			
i)	Mechanic = 1/10 No	Day	699.00	69.90
ii)	Helper = 1/10 No	Day	447.00	44.70
C)	**Carrying in/c loading unloading**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				734.60
	Add for Water charge @1%			7.35
				741.95
	Add GST(Multipling factor) 0.2127			157.81
				899.76
	Add contractors profit & overheads @ 15%			134.96
				1034.72
	Add Cess @1%			10.35
	Rate Per no			**1045.07**

(Rupees One thousand forty five and paisa seven) only

3.39.9	Coupling			
a)	**Material Cost**			
	Coupling= 1	pair	1450.00	1450.00
B)	**Labour cost**			
i)	Mechanic = 1/5 No	Day	699.00	139.80
ii)	Helper = 1/5No	Day	447.00	89.40
C)	**Carrying in/c loading unloading**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				1699.20
	Add for Water charge @1%			16.99
				1716.19
	Add GST(Multipling factor) 0.2127			365.03
				2081.23
	Add contractors profit & overheads @ 15%			312.18
				2393.41
	Add Cess @1%			23.93
	Rate Per pair			**2417.34**

(Rupees Two thousand four hundred seventeen and paisa thirty four) only

3.39.10	Neck ring			
a)	**Material Cost**			
	submersible pump Neck ring= 1	No	600.00	600.00
B)	**Labour cost**			
i)	Mechanic= 1/20No	Day	699.00	34.95
ii)	Helper= 1/20No	Day	447.00	22.35
C)	**Carrying in/c loading unloading**			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				677.30
	Add for Water charge @1%			6.77
				684.07
	Add GST(Multipling factor) 0.2127			145.50
				829.58
	Add contractors profit & overheads @ 15%			124.44
				954.01
	Add Cess @1%			9.54
	Rate Per no			**963.55**

(Rupees Nine hundred sixty three and paisa fifty five) only

3.39.11	Column Nut			
a)	**Material Cost**			
	Column Nut = 1	No	150.00	150.00
B)	**Labour cost**			
i)	Mechanic = 1/50No	Day	699.00	13.98
ii)	Helper = 1/50No	Day	447.00	8.94
C)	**Carrying in/c loading unloading**			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				182.92
	Add for Water charge @1%			1.83
				184.75
	Add GST(Multipling factor) 0.2127			39.30
				224.05
	Add contractors profit & overheads @ 15%			33.61
				257.65
	Add Cess @1%			2.58
	Rate Per no			**260.23**

(Rupees Two hundred sixty and paisa twenty three) only

3.39.12	Impeller key			
a)	**Material Cost**			
	submersible pump Impeller key = 1	No	60.00	60.00
B)	**Labour cost**			
i)	Mechanic= 1/20 No	Day	699.00	34.95
ii)	Helper= 1/20 No	Day	447.00	22.35
C)	**Carrying in/c loading unloading**			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				127.30
	Add for Water charge @1%			1.27
				128.57
	Add GST(Multipling factor) 0.2127			27.35
				155.92
	Add contractors profit & overheads @ 15%			23.39
				179.31
	Add Cess @1%			1.79
	Rate Per no			**181.10**

(Rupees One hundred eighty one and paisa ten) only

3.40	**Providing & fitting fixing of pannel board of local teak wood for fitting & fixing of electrical items including 2 nos. MS angle post (Size 50X50X6mm 2.80 Mtr. long) nuts& bolts etc. for errection of the same by 1 : 1.5 : 3 cement concreate casting (1feetX1feetX2feet) below the ground level and painting two or more coats of synthetic enamel paint on primer as per direction of Engineer-in-Charge.**
3.40.1	**Size 1.80 X 1.20 X 0.025 mtr.**

a)	**Materials Cost**				
i)	Cost of local teak Wood 1.80X1.20X0.025 mtr. (thickness)				
		0.05	cum	48455.00	2616.57
				(SOR 2023 BUILDING -13005)	
ii)	Cost of MS angle post (Size 50X50X6mm) i/c cutting in proper size & making necessary hole for nut & bolts in/c priming)				
	2 x 2.00 mtr. x 4.50 kg/mtr. =				
	18 kg = 18/100 quintal =				
		0.180	quintal	5953.00	1071.54
				(SOR 2023 BUILDING -05056)	
iii)	Cost of full threaded 2.5 inch.X12 mm Nuts & bolts with washer upto 300mm length				
		2.00	kg	110.00	220.00
				(As per Item No. 64))	
b)	**Carrying upto work site**	L.S.			200.00
				Sub Total,C=(a+b)=	**4108.11**
	Add for Sundries(L.S)				20.00
					4128.11
	Add for Water charge @1%				41.28
					4169.39
	Add GST(Multipling factor) 0.2127				886.83
					5056.22
	Add contractors profit & overheads @ 15%				758.43
					5814.65
	Add Cess @1%				58.15
					Rs 5,872.80
c)	**Cost of Primer & Paint**				
	Applying priming coat - With ready mixed Pink or Grey primer of approved brand and manufacture on wood work (hard & soft wood)				
		4.32	sqm	48.70	210.38
				(SOR 2023 BUILDING -12.45.1)	
	Painting with synthetic enamel paint - Two or more coats on new work				
		4.32	sqm	106.90	461.81
				(SOR 2023 BUILDING -12.59.1)	
d)	**Cost of Earth cutting (0.30 X0.30X0.60) for errection of MS Angle.**				
		0.108	cum	231.60	25.01
				(SOR 2023 BUILDING -2.13)	
e)	**Cost of 1:1:5:3 cement concreate casting (0.30 X0.30X0.60) for irrection of MS Angle.**				
		0.108	cum	11735.90	1267.48
				(SOR 2023 BUILDING -4.1.2)	
				Rate per No. =	**7837.48**

(Rupees Seven thousand eight hundred thirty seven and paisa forty eight) only

3.40.2	Size 1.20 X 1.20 X 0.025 mtr.				
a)	**Materials Cost**				
i)	Cost of local teak Wood 1.20X1.20X0.025 mtr. (thicknes)				
		0.036	cum	48455.00	1744.38
		(SOR 2023 BUILDING -13005)			
ii)	Cost of MS angle post (Size 50X50X6mm) i/c cutting in proper size & making necessary hole for nut & bolts in/c priming)				
	2 x 2.00 mtr. x 4.50 kg/mtr. =				
	18 kg = 18/100 quintal =				
		0.180	quintal	5953.00	1071.54
		(SOR 2023 BUILDING -05056)			
iii)	Cost of full threaded 2.5 inch.X12 mm Nuts & bolts with washer upto 300mm length				
		2.00	kg	110.00	220.00
		(As per Item No. 64))			
b)	Carrying upto work site				
	L.S				200.00
				Sub Total,C=(a+b)=	**3235.92**
	Add for Sundries(L.S)				20.00
					3255.92
	Add for Water charge @1%				32.56
					3288.48
	Add GST(Multipling factor) 0.2127				699.46
					3987.94
	Add contractors profit & overheads @ 15%				598.19
					4586.13
	Add Cess @1%				45.86
					Rs 4,631.99
c)	**Cost of Primer & Paint**				
	Applying priming coat - With ready mixed Pink or Grey primer of approved brand and manufacture on wood work (hard & soft wood)				
		2.88	sqm	48.70	140.26
		(SOR 2023 BUILDING -12.45.1)			
	Painting with synthetic enamel paint - Two or more coats on new work				
		2.88	sqm	106.90	307.87
		(SOR 2023 BUILDING -12.59.1)			
d)	**Cost of Earth cutting (0.30 X0.30X0.60) for errection of MS Angle.**				
		0.108	cum	231.60	25.01
		(SOR 2023 BUILDING -2.13)			
e)	**Cost of 1:1:5:3 cement concreate casting (0.30 X0.30X0.60) for irrection of MS Angle.**				
		0.108	cum	11735.90	1267.48
		(SOR 2023 BUILDING -4.1.2)			
				Rate per No. =	**6372.61**

(Rupees Six thousand three hundred seventy two and paisa sixty one) only

3.41	**Dismentling of pannel board by disconnection of all electrical equipments & stacking of materials & return the same to Sub-Divisional store as per direction of the Engineer-in-charge.**

a)	**Labour cost**			
i)	Electrician = 1/2 No	Day	475.00	237.50
ii)	Helper = 1/2 No	Day	447.00	223.50
	Add for Sundries(L.S)			20.00
				481.00
	Add for Water charge @1%			4.81
				485.81
	Add GST(Multipling factor) 0.2127			103.33
				589.14
	Add contractors profit & overheads @ 15%			88.37
				677.51
	Add Cess @1%			6.78
	Rate Per no			**684.29**

(Rupees Six hundred eighty four and paisa twenty nine) only

3.42	**Labour charge for reinstallation of all electrical equipments (dismentalled serviceable materials, if any additional/ replacement of electrical eqiupments required will be paid separtely) on the pannel board including trial run for 10 hrs in two spell complete as per direction of the Engineer-in Charge.**

a)	**Labour cost**			
i)	Electrician = 1 No	Day	475.00	475.00
ii)	Helper= 1 No	Day	447.00	447.00
	Add for Sundries(L.S)			30.00
				952.00
	Add for Water charge @1%			9.52
				961.52
	Add GST(Multipling factor) 0.2127			204.52
				1166.04
	Add contractors profit & overheads @ 15%			174.91
				1340.94
	Add Cess @1%			13.41
	Rate Per no			**1354.35**

(Rupees One thousand three hundred fifty four and paisa thirty five) only

3.43	**Supplying & fitting fixing manually operated oil immerged starter of approved quality.**			
	30HP Osco/BCH Make			
	a) Materials Cost			
	i) manually operated oil immerged starter= 1	No	10600.00	10600.00
	b) Labour cost			
	i) Electrician = 1/5 No	Day	475.00	95.00
	ii) Helper = 1/5 No	Day	447.00	89.40
	c) Carrying upto site			
	L.S			50.00
	Add for Sundries(L.S)			30.00
				10864.40
	Add for Water charge @1%			108.64
				10973.04
	Add GST(Multipling factor) 0.2127			2333.97
				13307.01
	Add contractors profit & overheads @ 15%			1996.05
				15303.06
	Add Cess @1%			153.03
	Rate Per no			**15456.09**

(Rupees Fifteen thousand four hundred fifty six and paisa nine) only

3.44	**Supplying & filling of Transformer Oil in the oil tank of manually operated oil immerged starter of approved quality.**			
	a) Materials Cost			
	i) Transformer Oil= 1.00	Ltr	120.00	120.00
	b) Labour cost			
	i) Helper = 1/25 No	Day	447.00	17.88
	Add for Sundries(L.S)			2.00
				139.88
	Add for Water charge @1%			1.40
				141.28
	Add GST(Multipling factor) 0.2127			30.05
				171.33
	Add contractors profit & overheads @ 15%			25.70
				197.03
	Add Cess @1%			1.97
	Rate Per ltr.			**199.00**

(Rupees One hundred ninety nine and paisa zero zero) only

3.45	**Repairing of OSCO starter including supplying & fixing of necessary spare parts as per direction of Engg.- In - Charge.**				
3.45.1	**Stand finger**				
	a)	**Materials Cost**			
	i)	Stand finger= 1	No	250.00	250.00
	b)	**Labour cost**			
	i)	Electrician= 1/40 No	Day	475.00	11.88
		Add for Sundries(L.S)			5.00
					266.88
		Add for Water charge @1%			2.67
					269.54
		Add GST(Multipling factor) 0.2127			57.33
					326.88
		Add contractors profit & overheads @ 15%			49.03
					375.91
		Add Cess @1%			3.76
		Rate Per no			**379.67**

(Rupees Three hundred seventy nine and paisa sixty seven) only

3.45.2	**Gola finger**				
	a)	**Materials Cost**			
	i)	Gola Finger= 1	No	250.00	250.00
	b)	**Labour cost**			
	i)	Electrician = 1/40 No	Day	475.00	11.88
		Add for Sundries(L.S)			5.00
					266.88
		Add for Water charge @1%			2.67
					269.54
		Add GST(Multipling factor) 0.2127			57.33
					326.88
		Add contractors profit & overheads @ 15%			49.03
					375.91
		Add Cess @1%			3.76
		Rate Per no			**379.67**

(Rupees Three hundred seventy nine and paisa sixty seven) only

3.45.3	**CT Coil**				
	a)	**Materials Cost**			
	i)	CT Coil= 1	No	1000.00	1000.00
	b)	**Labour cost**			
	i)	Electrician = 1/20 No	Day	475.00	23.75
		Add for Sundries(L.S)			5.00
					1028.75
		Add for Water charge @1%			10.29
					1039.04
		Add GST(Multipling factor) 0.2127			221.00
					1260.04
		Add contractors profit & overheads @ 15%			189.01
					1449.05
		Add Cess @1%			14.49
		Rate Per no			**1463.54**

(Rupees One thousand four hundred sixty three and paisa fifty four) only

3.45.4	Magnet Coil			
	a) Materials Cost			
	i) Magnet Coil= 1	No	600.00	600.00
	b) Labour cost			
	i) Electrician = 1/20 No	Day	475.00	23.75
	Add for Sundries(L.S)			5.00
				628.75
	Add for Water charge @1%			6.29
				635.04
	Add GST(Multipling factor) 0.2127			135.07
				770.11
	Add contractors profit & overheads @ 15%			115.52
				885.63
	Add Cess @1%			8.86
	Rate Per no			**894.48**

(Rupees Eight hundred Ninety four and paisa forty eight) only

3.45.5	Circuit board for Osco starter of Backelite make			
	a) Materials Cost			
	i) Circuit Board= 1	No	1400.00	1400.00
	b) Labour cost			
	i) Electrician = 1/10 No	Day	475.00	47.50
	Add for Sundries(L.S)			5.00
				1452.50
	Add for Water charge @1%			14.53
				1467.03
	Add GST(Multipling factor) 0.2127			312.04
				1779.06
	Add contractors profit & overheads @ 15%			266.86
				2045.92
	Add Cess @1%			20.46
	Rate Per no			**2066.38**

(Rupees Two thousand sixty six and paisa thirty eight) only

3.46	Supplying & fitting fixing power capacitor (ISI Marked) of approved quality.			
3.46.1	12.5 KVAr power capacitor			
	a) Materials Cost			
	i) Power capacitor= 1	No	4200.00	4200.00
	b) Labour cost			
	i) Electrician= 1/8 No	Day	475.00	59.38
	c) Carrying Cost upto work site			
	L.S			10.00
	Add for Sundries(L.S)			20.00
				4289.38
	Add for Water charge @1%			42.89
				4332.27
	Add GST(Multipling factor) 0.2127			921.47
				5253.74
	Add contractors profit & overheads @ 15%			788.06
				6041.80
	Add Cess @1%			60.42
	Rate Per no			**6102.22**

(Rupees Six thousand one hundred two and paisa twenty two) only

3.46.2	15 KVAr power capacitor			
a)	**Materials Cost**			
i)	Power capacitor= 1	No	5200.00	5200.00
b)	**Labour cost**			
i)	Electrician = 1/8 No	Day	475.00	59.38
c)	**Carrying Cost upto work site**			
	L.S			10.00
	Add for Sundries(L.S)			20.00
				5289.38
	Add for Water charge @1%			52.89
				5342.27
	Add GST(Multipling factor) 0.2127			1136.30
				6478.57
	Add contractors profit & overheads @ 15%			971.79
				7450.35
	Add Cess @1%			74.50
	Rate Per no			**7524.86**

(Rupees Seven thousand five hundred twenty four and paisa eighty six) only

3.46.3	20 KVAr power capacitor			
a)	**Materials Cost**			
i)	Power capacitor= 1	No	9000.00	9000.00
b)	**Labour cost**			
i)	Electrician = 1/6 No	Day	475.00	79.17
c)	**Carrying Cost upto work site** L.S.			10.00
	Add for Sundries(L.S)			20.00
				9109.17
	Add for Water charge @1%			91.09
				9200.26
	Add GST(Multipling factor) 0.2127			1956.89
				11157.15
	Add contractors profit & overheads @ 15%			1673.57
				12830.73
	Add Cess @1%			128.31
	Rate Per no			**12959.03**

(Rupees Twelve thousand nine hundred fifty nine and paisa three) only

3.46.4	25 KVAr power capacitor			
a)	**Materials Cost**			
i)	Power capacitor= 1	No	11250.00	11250.00
b)	**Labour cost**			
i)	Electrician = 1/5 No	Day	475.00	95.00
c)	**Carrying Cost upto work site** L.S.			10.00
	Add for Sundries(L.S)			20.00
				11375.00
	Add for Water charge @1%			113.75
				11488.75
	Add GST(Multipling factor) 0.2127			2443.66
				13932.41
	Add contractors profit & overheads @ 15%			2089.86
				16022.27
	Add Cess @1%			160.22
	Rate Per no			**16182.49**

(Rupees Sixteen thousand one hundred eighty two and paisa forty nine) only

3.46.5	30 KVAr power capacitor			
	a) Materials Cost			
	i) Power capacitor= 1	No	13500.00	13500.00
	b) Labour cost			
	i) Electrician = 1/4 No	Day	475.00	118.75
	c) Carrying Cost upto work site			
	L.S			10.00
	Add for Sundries(L.S)			20.00
				13648.75
	Add for Water charge @1%			136.49
				13785.24
	Add GST(Multipling factor) 0.2127			2932.12
				16717.36
	Add contractors profit & overheads @ 15%			2507.60
				19224.96
	Add Cess @1%			192.25
	Rate Per no			**19417.21**

(Rupees Nineteen thousand four hundred seventeen and paisa twenty one) only

3.47	Providing & fixing 200 Amps busbar of size 600X 450X100 mm with 4 nos. copper strip of size 450X40X4 mm of approved quality.			
	a) Material Cost			
	busbar of size 600X 450X100 mm= 1	No	4000.00	4000.00
	b) Labour cost			
	i) Electrician = 1/4 No	Day	475.00	118.75
	c) Carrying cost upto site			
	L.S			30.00
	Add for Sundries(L.S)			30.00
				4178.75
	Add for Water charge @1%			41.79
				4220.54
	Add GST(Multipling factor) 0.2127			897.71
				5118.25
	Add contractors profit & overheads @ 15%			767.74
				5885.98
	Add Cess @1%			58.86
	Rate Per no			**5944.84**

(Rupees Five thousand nine hundred forty four and paisa eighty four) only

3.48	Providing and installation of Copper Strips of 200 Amps busbar by replacing the damaged one with necessary nuts and bolts etc. as per direction of Engg.- In - Charge.

a)	**Materials Cost**			
i)	Copper Strip (500X50X5mm)= 1	No	650.00	650.00
ii)	Nuts & Bolts= 0.20	kg	110.00	22.00
b)	**Labour cost**			
i)	Electrician = 1/10 No	Day	475.00	47.50
c)	**Carrying upto site**			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				729.50
	Add for Water charge @1%			7.30
				736.80
	Add GST(Multipling factor) 0.2127			156.72
				893.51
	Add contractors profit & overheads @ 15%			134.03
				1027.54
	Add Cess @1%			10.28
	Rate Per no			**1037.81**

(Rupees One thousand thirty seven and paisa eighty one) only

3.49	Supplying & fitting fixing of PVC insulated Copper Wire with all electrical equipments including trial run etc. complete (ISI Marked) on the pannel board of approved quality.
3.49.1	7/16 Copper Wire

a)	**Materials Cost**			
i)	7/16 Copper Wire= 1.00	mtr	180.00	180.00
b)	**Labour cost**			
i)	Electrician = 1/45 No	Day	475.00	10.56
c)	**Carrying Cost upto site**			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				200.56
	Add for Water charge @1%			2.01
				202.56
	Add GST(Multipling factor) 0.2127			43.08
				245.65
	Add contractors profit & overheads @ 15%			36.85
				282.49
	Add Cess @1%			2.82
	Rate Per mtr			**285.32**

(Rupees Two hundred eighty five and paisa thirty two) only

3.49.2	1 sqmm Multistrand Wire			
a)	**Materials Cost**			
i)	1 sqmm Multistrand Wire= 1.00	mtr	13.50	13.50
b)	**Labour cost**			
i)	Electrician = 1/90 No	Day	475.00	5.28
	Add for Sundries(L.S)			3.00
				21.78
	Add for Water charge @1%			0.22
				22.00
	Add GST(Multipling factor) 0.2127			4.68
				26.67
	Add contractors profit & overheads @ 15%			4.00
				30.68
	Add Cess @1%			0.31
	Rate Per Mtr			**30.98**

(Rupees Thirty and paisa ninety eight) only

3.50	Supplying and fitting fixing of selector switch on the panel board of approved quality.			
a)	**Materials Cost**			
1)	Selector switch= 1	No.	350.00	350.00
b)	**Labour cost**			
i)	Electrician= 1/15 No	Day	475.00	31.67
c)	**Carrying up to the work site**			
	L.S			5.00
	Add for Sundries(L.S)			10.00
				396.67
	Add for Water charge @1%			3.97
				400.63
	Add GST(Multipling factor) 0.2127			85.21
				485.85
	Add contractors profit & overheads @ 15%			72.88
				558.73
	Add Cess @1%			5.59
	Rate Per no			**564.31**

(Rupees Five hundred sixty four and paisa thirty one) only

3.51	**Supplying & fitting fixing kit cut for main & sub-main swich (Male & female) as per direction of the Engineer in Charge.**
3.51.1	**63 Amps Kit cut**

a)	**Materials Cost**			
i)	63 Amps Kit cut= 1	No	350.00	350.00
b)	**Labour cost**			
i)	Electrician = 1/40 No	Day	475.00	11.88
c)	**Carrying Cost upto site**			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				371.88
	Add for Water charge @1%			3.72
				375.59
	Add GST(Multipling factor) 0.2127			79.89
				455.48
	Add contractors profit & overheads @ 15%			68.32
				523.80
	Add Cess @1%			5.24
	Rate Per no			**529.04**

(Rupees Five hundred twenty nine and paisa four) only

3.51.2	**100 Amps Kit cut**

a)	**Materials Cost**			
i)	100 Amps Kit cut= 1	No	750.00	750.00
b)	**Labour cost**			
i)	Electrician= 1/40 No	Day	475.00	11.88
c)	**Carrying Cost upto site**			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				771.88
	Add for Water charge @1%			7.72
				779.59
	Add GST(Multipling factor) 0.2127			165.82
				945.41
	Add contractors profit & overheads @ 15%			141.81
				1087.23
	Add Cess @1%			10.87
	Rate Per no			**1098.10**

(Rupees One thousand ninty eight and paisa ten) only

3.51.3	200 Amps Kit cut			
	a) Materials Cost			
	i) 200 Amps Kit cut= 1	No	1500.00	1500.00
	b) Labour cost			
	i) Electrician= 1/40 No	Day	475.00	11.88
	c) Carrying Cost upto site			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				1521.88
	Add for Water charge @1%			15.22
				1537.09
	Add GST(Multipling factor) 0.2127			326.94
				1864.03
	Add contractors profit & overheads @ 15%			279.61
				2143.64
	Add Cess @1%			21.44
	Rate Per no			**2165.08**

(Rupees Two thousand one hundred sixty five and paisa eight) only

3.52	Supplying and fitting fixing of 3 pole power conductors of different type, range from 25-300 AC-3 suitable for Fully Automatic Star Delta type Motor startar L&T , BCH, Havells make as per direction of Engineer-in-Charge.			
3.52.1	Type ML1.5			
	a) Material Cost			
	i) 3 pole power conductors= 1	No	3810.00	3810.00
	b) Labour Cost			
	i) Electrician= 1/4 No	Day	475.00	118.75
	c) Carrying Cost upto site			
	L.S			10.00
	Add for Sundries(L.S)			10.00
				3948.75
	Add for Water charge @1%			39.49
				3988.24
	Add GST(Multipling factor) 0.2127			848.30
				4836.54
	Add contractors profit & overheads @ 15%			725.48
				5562.02
	Add Cess @1%			55.62
	Rate Per no			**5617.64**

(Rupees Five thousand six hundred seventeen and paisa sixty four) only

3.52.2	Type ML2.0				
a)	**Material Cost**				
i)	3 pole power conductors= 1		No	5340.00	5340.00
b)	**Labour Cost**				
i)	Electrician= 1/4 No		Day	475.00	118.75
c)	**Carrying Cost upto site**				
	L.S				10.00
	Add for Sundries(L.S)				10.00
					5478.75
	Add for Water charge @1%				54.79
					5533.54
	Add GST(Multipling factor) 0.2127				1176.98
					6710.52
	Add contractors profit & overheads @ 15%				1006.58
					7717.10
	Add Cess @1%				77.17
	Rate Per no				**7794.27**

(Rupees Seven thousand seven hundred ninety four and paisa twenty seven) only

3.52.3	Type ML3.0				
a)	**Material Cost**				
i)	3 pole power conductors= 1		No	8425.00	8425.00
b)	**Labour Cost**				
i)	Electrician= 1/4 No		Day	475.00	118.75
c)	**Carrying Cost upto site**	L.S.			10.00
	Add for Sundries(L.S)				10.00
					8563.75
	Add for Water charge @1%				85.64
					8649.39
	Add GST(Multipling factor) 0.2127				1839.72
					10489.11
	Add contractors profit & overheads @ 15%				1573.37
					12062.48
	Add Cess @1%				120.62
	Rate Per no				**12183.10**

(Rupees Twelve thousand one hundred eighty three and paisa ten) only

3.52.4	Type ML4.0				
a)	**Material Cost**				
i)	3 pole power conductors= 1		No	13770.00	13770.00
b)	**Labour Cost**				
i)	Electrician= 1/4 No		Day	475.00	158.33
c)	**Carrying Cost upto site**	L.S.			10.00
	Add for Sundries(L.S)				10.00
					13948.33
	Add for Water charge @1%				139.48
					14087.82
	Add GST(Multipling factor) 0.2127				2996.48
					17084.30
	Add contractors profit & overheads @ 15%				2562.64
					19646.94
	Add Cess @1%				196.47
	Rate Per no				**19843.41**

(Rupees Nineteen thousand eight hundred forty three and paisa forty one) only

3.52.5	**Type ML6.0**			
	a) Material Cost			
	i) 3 pole power conductors= 1	No	21740.00	21740.00
	b) Labour Cost			
	i) Electrician= 1/3 No	Day	475.00	158.33
	c) Carrying Cost upto site			
	L.S			20.00
	Add for Sundries(L.S)			20.00
				21938.33
	Add for Water charge @1%			219.38
				22157.72
	Add GST(Multipling factor) 0.2127			4712.95
				26870.66
	Add contractors profit & overheads @ 15%			4030.60
				30901.26
	Add Cess @1%			309.01
	Rate Per no			**31210.28**

(Rupees Thirty one thousand two hundred ten and paisa twenty eight) only

3.53	**Supplying and fitting fixing of spare contact kit , type ML 1.5/2.0/3.0/4.0/6.0 suitable for Fully Automatic Star Delta type Motor startar L&T ,BCH, Havells make as per direction of Engineer-in-Charge.**			
3.53.1	**Type ML 1.5**			
	a) Material Cost			
	i) Spare contact kit= 1	No	1500.00	1500.00
	b) Labour Cost			
	i) Electrician = 1/4 No	Day	475.00	118.75
	c) Carrying Cost upto site			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				1628.75
	Add for Water charge @1%			16.29
				1645.04
	Add GST(Multipling factor) 0.2127			349.90
				1994.94
	Add contractors profit & overheads @ 15%			299.24
				2294.18
	Add Cess @1%			22.94
	Rate Per no			**2317.12**

(Rupees Two thousand three hundred seventeen and paisa twelve) only

3.53.2	Type ML 2.0				
a)	**Material Cost**				
i)	Spare contact kit= 1		No	2000.00	2000.00
b)	**Labour Cost**				
i)	Electrician = 1/4 No		Day	475.00	118.75
c)	**Carrying Cost upto site**	L.S.			5.00
	Add for Sundries(L.S)				5.00
					2128.75
	Add for Water charge @1%				21.29
					2150.04
	Add GST(Multipling factor) 0.2127				457.31
					2607.35
	Add contractors profit & overheads @ 15%				391.10
					2998.45
	Add Cess @1%				29.98
	Rate Per no				**3028.44**

(Rupees Three thousand twenty eight and paisa forty four) only

3.53.3	Type ML 3.0				
a)	**Material Cost**				
i)	Spare contact kit= 1		No	5750.00	5750.00
b)	**Labour Cost**				
i)	Electrician= 1/4 No		Day	475.00	118.75
c)	**Carrying Cost upto site**	L.S.			5.00
	Add for Sundries(L.S)				5.00
					5878.75
	Add for Water charge @1%				58.79
					5937.54
	Add GST(Multipling factor) 0.2127				1262.91
					7200.45
	Add contractors profit & overheads @ 15%				1080.07
					8280.52
	Add Cess @1%				82.81
	Rate Per no				**8363.32**

(Rupees Eight thousand three hundred sixty three and paisa thirty two) only

3.53.4	Type ML 4.0				
a)	**Material Cost**				
i)	Spare contact kit= 1		No	9000.00	9000.00
b)	**Labour Cost**				
i)	Electrician= 1/4 No		Day	475.00	118.75
c)	**Carrying Cost upto site**	L.S.			5.00
	Add for Sundries(L.S)				5.00
					9128.75
	Add for Water charge @1%				91.29
					9220.04
	Add GST(Multipling factor) 0.2127				1961.10
					11181.14
	Add contractors profit & overheads @ 15%				1677.17
					12858.31
	Add Cess @1%				128.58
	Rate Per no				**12986.89**

(Rupees Twelve thousand nine hundred eighty six and paisa eighty nine) only

3.53.5	**Type ML 6.0**			
	a) Material Cost			
	i) Spare contact kit= 1	No	15800.00	15800.00
	b) Labour Cost			
	i) Electrician= 1/3 No	Day	475.00	158.33
	c) Carrying Cost upto site			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				15968.33
	Add for Water charge @1%			159.68
				16128.02
	Add GST(Multipling factor) 0.2127			3430.43
				19558.45
	Add contractors profit & overheads @ 15%			2933.77
				22492.21
	Add Cess @1%			224.92
	Rate Per no			**22717.13**

(Rupees Twenty two thousand seven hundred seventeen and paisa thirteen) only

3.54	**Supplying and fitting fixing of spare coil, type ML 1.5/2.0/3.0/4.0/6.0 range suitable for Fully Automatic Star Delta type Motor startar L&T ,BCH, Havells make as per direction of Engineer-in-Charge.**			
3.54.1	**Type ML 1.5**			
	a) Material Cost			
	i) Spare coil= 1	No	600.00	600.00
	b) Labour Cost			
	i) Electrician = 1/4 No	Day	475.00	118.75
	c) Carrying Cost upto site			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				728.75
	Add for Water charge @1%			7.29
				736.04
	Add GST(Multipling factor) 0.2127			156.56
				892.59
	Add contractors profit & overheads @ 15%			133.89
				1026.48
	Add Cess @1%			10.26
	Rate Per no			**1036.75**

(Rupees One thousand thirty six and paisa seventy five) only

3.54.2	Type ML 2.0				
a)	**Material Cost**				
i)	Spare coil= 1		No	970.00	970.00
b)	**Labour Cost**				
i)	Electrician= 1/4 No		Day	475.00	118.75
c)	**Carrying Cost upto site**	L.S.			5.00
	Add for Sundries(L.S)				5.00
					1098.75
	Add for Water charge @1%				10.99
					1109.74
	Add GST(Multipling factor) 0.2127				236.04
					1345.78
	Add contractors profit & overheads @ 15%				201.87
					1547.65
	Add Cess @1%				15.48
	Rate Per no				**1563.12**

(Rupees One thousand five hundred sixty three and paisa twelve) only

3.54.3	Type ML 3.0				
a)	**Material Cost**				
i)	Spare coil= 1		No	1350.00	1350.00
b)	**Labour Cost**				
i)	Electrician= 1/4 No		Day	475.00	118.75
c)	**Carrying Cost upto site**	L.S.			5.00
	Add for Sundries(L.S)				5.00
					1478.75
	Add for Water charge @1%				14.79
					1493.54
	Add GST(Multipling factor) 0.2127				317.68
					1811.21
	Add contractors profit & overheads @ 15%				271.68
					2082.89
	Add Cess @1%				20.83
	Rate Per no				**2103.72**

(Rupees Two thousand one hundred three and paisa seventy two) only

3.54.4	Type ML 4.0 & ML 6.0				
a)	**Material Cost**				
i)	Spare coil= 1		No	2600.00	2600.00
b)	**Labour Cost**				
i)	Electrician= 1/3 No		Day	475.00	158.33
c)	**Carrying Cost upto site**	L.S.			5.00
	Add for Sundries(L.S)				5.00
					2768.33
	Add for Water charge @1%				27.68
					2796.02
	Add GST(Multipling factor) 0.2127				594.71
					3390.73
	Add contractors profit & overheads @ 15%				508.61
					3899.34
	Add Cess @1%				38.99
	Rate Per no				**3938.33**

(Rupees Three thousand nine hundred thirty eight and paisa thirty three) only

3.55	**Supplying and fitting fixing of Thermal overload Relay, relay range 20-32, & 28-42, directly operated suitable for Fully Automatic Star Delta type Motor startar of L&T ,BCH, Havells make as per direction of Engineer-in-Charge.**			
a)	**Material Cost**			
i)	Thermal overload Relay= 1	No	1800.00	1800.00
b)	**Labour Cost**			
i)	Electrician= 1/4 No	Day	475.00	118.75
c)	**Carrying Cost upto site**			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				1928.75
	Add for Water charge @1%			19.29
				1948.04
	Add GST(Multipling factor) 0.2127			414.35
				2362.39
	Add contractors profit & overheads @ 15%			354.36
				2716.74
	Add Cess @1%			27.17
	Rate Per no			**2743.91**

(Rupees Two thousand seven hundred forty three and paisa ninty one) only

3.56	**Supplying and fitting fixing of thermal timer type GT 200 (230/250 V, 360 V, 400/440 V, 500 V, 50 Hz for 5-18 secs range) suitable for Fully Automatic Star Delta type Motor startar L&T ,BCH, Havells make as per direction of Engineer-in-Charge.**			
a)	**Material Cost**			
i)	Thermal timer type GT 200= 1	No	2800.00	2800.00
b)	**Labour Cost**			
i)	Electrician= 1/4 No	Day	475.00	118.75
c)	**Carrying Cost upto site**			
	L.S			5.00
	Add for Sundries(L.S)			5.00
				2928.75
	Add for Water charge @1%			29.29
				2958.04
	Add GST(Multipling factor) 0.2127			629.17
				3587.21
	Add contractors profit & overheads @ 15%			538.08
				4125.29
	Add Cess @1%			41.25
	Rate Per no			**4166.55**

(Rupees Four thousand one hundred sixty six and paisa fifty five) only

3.57	Providing and fitting fixing control relay type MXO-13E cat No.94043 of approved quality as per direction of the Engineer-in-charge.				
	a)	**Material Cost**			
	i)	Control relay type MXO-13E= 1	No	1620.00	1620.00
	b)	**Labour Cost**			
	i)	Electrician= 1/5 No	Day	475.00	95.00
	ii)	Helper= 1/5 No	Day	447.00	89.40
	c)	**Carrying Cost upto site**			
		L.S			5.00
		Add for Sundries(L.S)			5.00
					1814.40
		Add for Water charge @1%			18.14
					1832.54
		Add GST(Multipling factor) 0.2127			389.78
					2222.33
		Add contractors profit & overheads @ 15%			333.35
					2555.68
		Add Cess @1%			25.56
		Rate Per no			**2581.23**

(Rupees Two thousand five hundred eighty one and paisa twenty three) only

3.58	Providing and fitting fixing electronic timer type ET 100 of approved quality as per direction of the Engineer-in-charge.				
	a)	**Material Cost**			
	i)	Cost of Electronic Timer= 1	No	1600.00	1600.00
	b)	**Labour Cost**			
	i)	Electrician= 1/5 No	Day	475.00	95.00
	ii)	Helper= 1/5 No	Day	447.00	89.40
	c)	**Carrying Cost upto site**			
		L.S			5.00
		Add for Sundries(L.S)			10.00
					1799.40
		Add for Water charge @1%			17.99
					1817.39
		Add GST(Multipling factor) 0.2127			386.56
					2203.95
		Add contractors profit & overheads @ 15%			330.59
					2534.55
		Add Cess @1%			25.35
		Rate Per no			**2559.89**

(Rupees Two thousand five hundred fifty nine and paisa eighty nine) only

3.59	**Providing and fitting fixing DIN type fuse links HM 200 volts cat No.94332 Suitable for Type FN 400/ FNX 400 S-D-F & for HB 800 Fuse base (Cat. No. SF94332) of approved quality as per direction of the Engineer-in-charge.**			
a)	**Material Cost**			
i)	Cost of DIN type fuse link= 1	No	925.00	925.00
b)	**Labour Cost**			
i)	Electrician= 1/5 No	Day	475.00	95.00
ii)	Helper= 1/5 No	Day	447.00	89.40
c)	**Carrying Cost upto site**			
	L.S			5.00
	Add for Sundries(L.S)			10.00
				1124.40
	Add for Water charge @1%			11.24
				1135.64
	Add GST(Multipling factor) 0.2127			241.55
				1377.20
	Add contractors profit & overheads @ 15%			206.58
				1583.77
	Add Cess @1%			15.84
	Rate Per Unit			**1599.61**

(Rupees One thousand five hundred ninety nine and paisa sixty one) only

SCHEDULE OF RATES, 2023

CHAPTER – 4
DIVERSION, BARRAGE & M.I. STORAGE
(ANALYSIS)

PUBLIC WORKS DEPARTMENT
(WATER RESOURCES)

ANALYSIS OF RATE
CHAPTER-4
DIVERSION, BARRAGE & MI STORAGE

4.1	**Construction of earthen embankment/ dam of MI Storage with semi-pervious material as directed by the authority obtained from borrow pit transporting to site, speading, grading, breaking clods, spraying of water to obtain maximum dry density (corresponding to OMC) to required slope and compacting to meet required OMC (Optimum Moisture Content) by rolling every layer of 20 cm with sheep foot roller having vibrator of minimum 8 tonne with a lift upto 1.5 m and lead upto 1000 m as per direction of Engineer-in-Charge.**

4.1.1 **By Mechanical Means**

Unit = Cum
Taking output = 100 Cum

a) Labour				
Mate	Day	0.04	391	15.64
Mazdoor(Unskilled)	Day	1	391	391
b) Machinery				
Hydraulic excavator 0.9 cum bucket capacity @ 100 cum/hour	Hour	1.67	1344	2244.48
Tripper 5.5 cum with 10 t capacity	Hour	4.5	374	1683
Loading of earth as per item 1.1 (ii) SOR(R&B), 2023	cum	100	52.8	5280
Unoading of earth as per item 1.1 (iv) SOR(R&B),2023	cum	100	30.8	3080
Dozer D-50 for spreading @ 200 cum/hour	Hour	0.5	2654	1327
Tractor with attachment for grading @ 25cum/hour	Hour	4	358	1432
Water tanker 6 KL capacity	Hour	2	224	448
3 wheel 80-100 KN sheep foot vibratory roller @ 80 cum/hour (LS)	Hour	1.25	450	562.5
c) Material				
Water	KL	12	133	1596
Capensation for impervious earth of required permeability taken from private land (LS)	Cum	100	18	1800
			Total(a+b+c)=	**19859.62**
d) Add GST (multiplying factor) @ 0.2127 on a+b+c				4224.14
e) Contractor's profit @ 15% on (a+b+c+d)				3612.56
f) Add cess @ 1% on (a+b+c+d+e)				276.96
Cost for 100 cum = (a+b+c+d+e+f)				27973.28
Rate per cum= (a+b+c+d+e+f)/100				**279.73**

(Rupees two hundred seventy nine and paisa seventy three) only.

4.1.2	**Mechanical transport upto a distance of 5.00 Km**

	Carraige for 5.00 Km lead by mechanical transport including loading unloading and stacking (Basic rate, SOR(Bldg) 2023 SL No. 429)			Rs. 184.00
		Total =	**A**	Rs. 184.00
	Deduction for :-			
i)	50 m lead	SOR(Bldg) 2023 SL No.1.2.2		Rs. 157.40
		Total =	**B**	Rs. 157.40
		Total	**(A-B)**	**Rs. 26.60**
			Add for sundries[L.S.]=	Rs. 20.00
				Rs. 46.60
			Add 1% water charges=	Rs. 0.47
				Rs. 47.07
			Add GST (MF= 0.2127)=	Rs. 10.01
				Rs. 57.08
		Add 15% Contractor profit & overheads =		**Rs. 8.56**
				Rs. 65.64
			Add 1% cess =	**Rs. 0.66**
				Rs. 66.29

(Rupees sixty six and paisa twenty nine) only.

4.2	**Construction of earthen core wall for embankment/dam of MI Storage with impervious material of permeability 1X10^(-6) or as directed by the authority obtained from borrow pit transporting to site, speading, grading, breaking clods, spraying of water to obtain maximum dry density (corresponding to OMC) to required slope and compacting to meet required OMC (Optimum Moisture Content) by rolling every layer of 20 cm with sheep foot roller having vibrator of minimum 8 tonne with a lift upto 1.5 m and lead upto 1000 m as per direction of Engineer-in-Charge.**

Unit = Cum

Taking output = 100 Cum

a) Labour				
Mate	Day	0.04	391.00	15.64
Mazdoor(Unskilled)	Day	1	391.00	391.00
b) Machinery				
Hydraulic excavator 0.9 cum bucket capacity @ 100 cum/hour	Hour	1.67	1344.00	2244.48
Tripper 5.5 cum with 10 t capacity	Hour	4.50	374.00	1683.00
Loading of earth as per item 1.1 (ii) SOR(R&B),2023	cum	100	52.80	5280.00
Unoading of earth as per item 1.1 (iv) SOR(R&B),2023	cum	100	30.80	3080.00
Dozer D-50 for spreading @ 200 cum/hour	Hour	0.50	2654.00	1327.00
Tractor with attachment for grading @ 25cum/hour	Hour	4	358.00	1432.00
Water tanker 6 KL capacity	Hour	2	224.00	448.00
3 wheel 80-100 KN sheep foot vibratory roller @ 80 cum/hour (LS)	Hour	1.25	450.00	562.50
c) Material				
Water	KL	12	133.00	1596.00
Capensation for impervious earth of required permeability taken from private land (LS)	Cum	100	25.00	2500.00
			Total(a+b+c)=	**20559.62**
d) Add GST (multiplying factor) @ 0.2127 on a+b+c				4373.03
e) Contractor's profit @ 15% on (a+b+c+d)				3739.90
f) Add cess @ 1% on (a+b+c+d+e)				286.73
Cost for 100 cum = (a+b+c+d+e+f)				28959.28
Rate per cum= (a+b+c+d+e+f)/100				**289.59**

(Rupees two hundred eighty nine and paisa fifty nine) only.

4.3	**Providing & laying 200 mm thick coarse filter (well graded stone aggregate) including supply of materials complete as per direction of the Engineer - in- Charge.**
4.3.1	**(Stone aggregate of size-12.00 mm)**

Taking quantity -10.00 cum (net volume excluding voids)

1	Cost of materials							
(i)	Stone aggregate	10.00	cum	@	Rs. 4,389.30	/cum	=	Rs. 43,893.00
					SOR-2023,(R&B),(M 186)			
2	Labour							
i)	Mistry(2nd class)	1.5	Nos	@	Rs. 450.00	/day	=	Rs. 675.00
iii)	Ordinary coolie	10.5	Nos	@	Rs. 375.00	/day	=	Rs. 3,937.50
					Total		=	Rs. 48,505.50
					Add for Sundries [L.S.]		=	Rs. 20.00
								Rs. 48,525.50
					Add 1 % Water Chages		=	Rs. 485.26
								Rs. 49,010.76
					Add GST (MF= 0.2127)		=	Rs. 10,424.59
								Rs. 59,435.34
					Add 15% Contractor profit & overheads		=	Rs. 8,915.30
								Rs. 68,350.64
					Add 1% cess		=	Rs. 683.51
								Rs. 69,034.15
					Rate per cum= (69034.15/10)		=	**Rs. 6,903.42**
3	Add for loading unloading & haulage							
i)	loading & unloading (by mechanical means)	1		cum @	Rs. 121.10	/cum	=	Rs. 121.10
					SOR,2023,R&B,1.1			
iii)	Haulage for stone aggtt. 1 cum @ 2.25 t/cum							
	Surfaced road	2.25	t @	Rs. 4.20	1.00	km	=	Rs. 9.45
	Unsurfaced road	2.25	t @	Rs. 5.30	1.00	km	=	Rs. 11.93
	Kachha road	2.25	t @	Rs. 8.80	1.00	km	=	Rs. 19.80
				SOR,2023,R&B,1.4				
					Rate per cum			**Rs. 7,065.69**

(Rupees seven thousand sixty five and paisa sixty nine) only.

4.3.2	(Stone aggregate of size-20 mm)

Taking quantity -10.00 cum (net volume excluding voids)

1	Cost of materials							
(i)	Stone aggregate	10.00	cum	@	Rs. 4,374.0	/cum	=	Rs. 43,740.00
					SOR-2023,(Code No.4006)			
2	Labour							
i)	Mistry(2nd class)	1.5	Nos	@	Rs. 450.00	/day	=	Rs. 675.00
iii)	Ordinary coolie	10.5	Nos	@	Rs. 375.00	/day	=	Rs. 3,937.50
					Total		=	Rs. 48,352.50
					Add for Sundries [L.S.]		=	Rs. 20.00
								Rs. 48,372.50
					Add 1 % Water Chages		=	Rs. 483.73
								Rs. 48,856.23
					Add GST (MF= 0.2127)		=	Rs. 10,391.72
								Rs. 59,247.94
					Add 15% Contractor profit & overheads		=	Rs. 8,887.19
								Rs. 68,135.14
					Add 1% cess		=	Rs. 681.35
								Rs. 68,816.49
					Rate per cum= (68816.49/10)		**=**	**Rs. 6,881.65**
3	Add for loading unloading & haulage							
i)	loading & unloading (by mechanical means)	1	cum @		Rs. 121.10	/cum	=	Rs. 121.10
					SOR,2023,R&B,1.1			
iii)	Haulage for stone aggtt. 1 cum @ 2.25 t/cum							
	Surfaced road	2.25	t @	Rs. 4.20	1.00	km	=	Rs. 9.45
	Unsurfaced road	2.25	t @	Rs. 5.30	1.00	km	=	Rs. 11.93
	Kachha road	2.25	t @	Rs. 8.80	1.00	km	=	Rs. 19.80
				SOR,2023,R&B,1.4				
					Rate per cum		=	**Rs. 7,043.92**

(Rupees seven thousands fourty three and paisa ninety two) only

4.4	**Providing & laying filter media with jhama brick aggregate of 40 mm down (well graded) as per direction of the Engineer - in- Charge.**

	Taking quantity -10.00 cum (net volume excluding voids)						
1	Cost of materials						
	Filter Media with Jhama brick aggregate						
		10	cum	Rs. 3,369.30	/cum	=	Rs. 33,693.0
				SOR-2023,(R&B),M-215			
2	Labour						
i)	Mistry(2nd class)	1.5	nos @	Rs. 450.00	/no.	=	Rs. 675.00
ii)	Ordinary Coolie	10.5	nos @	Rs. 375.00	/no.	=	Rs. 3,937.50
				Total			Rs. 38,305.50
3				Add for Sundries [L.S.]		=	Rs. 50.00
							Rs. 38,355.50
4				Add 1 % Water Chages		=	Rs. 383.56
							Rs. 38,739.06
5				Add GST (MF= 0.2127)		=	Rs. 8,239.80
							Rs. 46,978.85
6				Add 15% Contractor profit & overheads		=	Rs. 7,046.83
							Rs. 54,025.68
7				Add 1% cess		=	Rs. 540.26
							Rs. 54,565.94
				Cost for 1 cum (54565.94/10)		=	**Rs. 5,456.59**

8	Add for loading unloading & haulage							
i)	loading & unloading (by mechanical means)	1	cum @		Rs. 121.10	/cum	=	Rs. 121.10
				(TSR,2023,R&B,1.1)				
iii)	Haulage for brick aggtt. 1 cum @ 1.85t/cum							
	Surface road	1.85	t @	Rs. 4.20	1.00	km	=	Rs. 7.77
	Unsurface road	1.85	t @	Rs. 5.30	1.00	km	=	Rs. 9.81
	Kaccha road	1.85	t @	Rs. 8.80	1.00	km	=	Rs. 16.28
				(TSR,2023,R&B,1.4)				
					Rate per cum=			**Rs. 5,611.55**

(Rupees five thousand six hundred eleven and paisa fifty five) only.

4.5	**Providing & laying of stone boulder of 200mm & above in different places including compaction as per direction of the Engineer - in- Charge.**

Analysis for 1.00 cum stone boulder

Taking quantity -10.00 cum (net volume excluding voids)

1	Cost of materials							
	Stone boulder (basic rate) (200 mm and above)	10.00	cum	Rs. 3,000.9	/cum	=	Rs. 30,009.00
		TSR-2023,(R&B) M-182					
2	Labour						
i)	Mistry(2nd class)	1.5	nos @	Rs. 450.00	/no.	=	Rs. 675.00
ii)	Ordinary Coolie	8	nos @	Rs. 375.00	/no.	=	Rs. 3,000.00
				Total		=	Rs. 33,684.00
3				Add for Sundries [L.S.]		=	Rs. 20.00
							Rs. 33,704.00
4				Add 1 % Water Chages		=	Rs. 337.04
							Rs. 34,041.04
5				Add GST (MF= 0.2127)		=	Rs. 7,240.53
							Rs. 41,281.57
6				Add 15% Contractor profit & overheads		=	Rs. 6,192.24
							Rs. 47,473.80
7				Add 1% cess		=	Rs. 474.74
							Rs. 47,948.54
				Cost for 1 cum (47948.54/10)		**=**	**Rs. 4,794.85**
8	Add for loading unloading & hauage						
i)	loading & unloading (by mechanical means)	1	cum @	Rs. 121.10	/cum	=	Rs. 101.70
				(TSR,2023,R&B,1.1)			
iii)	Haulage for stone boulder 1 cum @ 2.25 t/cum						
	Surfaced road	2.25	t @	Rs. 4.20	1.00 km	=	Rs. 9.45
	Unsurfaced road	2.25	t @	Rs. 5.30	1.00 km	=	Rs. 11.93
	Kachha road	2.25	t @	Rs. 8.80	1.00 km	=	Rs. 19.80
				(SOR,2023,R&B,1.4)			
						Rate per cum=	**Rs. 4,937.73**

(Rupees four thousand nine hundred thirty seven and paisa seventy three) only.

4.6	**Providing & laying of 1st class brick bats in different places including compaction as per direction of the Engineer - in- Charge.**

Analysis for 1cum brick bats work.

Taking quantity -10.00 cum (net volume excluding voids)

1	Cost of materials						
	Well burnt brick bats						
		10	cum	Rs. 3,191.60	/cum	=	Rs. 31,916.00
			SOR-2023,(R&B) M-261				
2	Labour						
i)	Mistry(2nd class)	1.5	nos @	Rs. 450.00	/no.	=	Rs. 675.00
ii)	Ordinary Coolie	8	nos @	Rs. 375.00	/no.	=	Rs. 3,000.00
				Total			Rs. 35,591.00
3				Add for Sundries [L.S.]		=	Rs. 20.00
							Rs. 35,611.00
4				Add 1 % Water Chages		=	Rs. 356.11
							Rs. 35,967.11
5				Add GST (MF= 0.2127)		=	Rs. 7,650.20
							Rs. 43,617.31
6				Add 15% Contractor profit & overheads		=	Rs. 6,542.60
							Rs. 50,159.91
7				Add 1% cess		=	Rs. 501.60
							Rs. 50,661.51
				Rate for 1 cum =(50661.51/10)		**=**	**Rs. 5,066.15**
8	Add for loading unloading & haulage						
i)	loading & unloading (by mechanical means)	1	cum @	Rs. 121.10	/cum	=	Rs. 121.10
				SOR,2023,R&B,1.1			
iii)	Haulage for brick aggtt. 1 cum @ 1.85t/cum						
	Surfaced road	1.85	t @	Rs. 4.20	1.00 km	=	Rs. 7.77
	Unsurfaced road	1.85	t @	Rs. 5.30	1.00 km	=	Rs. 9.81
	Kachha road	1.85	t @	Rs. 8.80	1.00 km	=	Rs. 16.28
			SOR,2023,R&B,1.4				
					Rate per cum=		**Rs. 5,221.11**

(Rupees Five thousand two hundred twenty one and paisa eleven) only.

4.7	**Labour charge for fitting & placing thermo-mechanically treated bar /cold twisted deformed steel bar reinforcement in substructure complete as per drawing & MoRT&H technical specification clauses 1600 & 2200.**

Analysis for 1 Ton.

1 Supplying, fitting, & placing Thermo-Mechanically treated bar/ Cold twisted deformed steel bar reinforcement in superstructure complete as per drawing & MoRD technical specifications Clauses 1002, 1010 & 1202.

Ref. SoR R&B'2023 item no 13.2	1.00 t		**(A) =**	Rs. 93,234.90
Less:				
i) Basic rate of TMT bars	1.00 t	Ref. SoR R&B'2023 item no M-181		Rs. 58,000.00
		Add for Sundries [L.S.]		Rs. 20.00
				Rs. 58,020.00
		Add 1 % Water Chages		Rs. 580.20
				Rs. 58,600.20
		Add GST (MF= 0.2127)		Rs. 12,464.26
				Rs. 71,064.46
		Add 15% Contractors pofit & overheads		Rs. 10,659.67
				Rs. 81,724.13
		Add 1% cess		Rs. 817.24
			(B) =	Rs. 82,541.37
		Rate per Tone	**[A-B] =**	**Rs. 10,693.53**

(Rupees ten thousand six hundred ninety three and paisa fifty three) only

4.8	**Supplying carrying and driving ISPS1021 BZ type sheet piles below foundation in all kinds of soil including sand , silt, stiff clay dry or moist by method of direct driving in original strata including landing , cutting to proper size as per direction including fabricating of junction piles , later piles, corner piles etc as required also including scrapping , painting with one coat of primer and two coats of anti corrosive paints etc. complete as per design drawing specification and direction of the Engineer - in- Charge.**

Analysis Unit =1(one) sqm.

1)	Cost of sheet pile per sqm			=	Rs. 15,625.00
2)	Labour charge for carrying and driving ISPS1021 BZ type sheet piles below				
i)	Welder	0.10	nos @	Rs. 512.0 /no.	Rs. 51.20
ii)	Fitter(2nd class)	0.40	nos @	Rs. 447.0 /no.	Rs. 178.80
iii)	Helper	1.00	nos @	Rs. 447.0 /no.	Rs. 447.00
				Total=	Rs. 16,302.00
			Add for Sundries [L.S.]		Rs. 80.00
					Rs. 16,382.00
			Add 1 % Water Chages		Rs. 163.82
					Rs. 16,545.82
			Add GST (MF= 0.2127)		Rs. 3,519.30
					Rs. 20,065.12
			Add 15% Contractor profit & overheads		Rs. 3,009.77
					Rs. 23,074.88
			Add 1% cess		Rs. 230.75
					Rs. 23,305.63

(Rupees Twenty Three Thousand Three Hundred Five and Paisa Sixty Three)only

4.9	**Providing gate made of steel for under sluice / conduits spillway including hoisting arrangement with hoist bridge , platform & supporting system stop log as per direction of Engineer-in - charge.**

Analysis of rate for 1 (one) no gate of size 2.00X2.25 m high = 4.50 sqm

1 **<u>Fabrication of gate :-</u>**

A. **Material :**

i)	Mild steel plate					
	a) For gate body	800	kg @	Rs. 62.37	=	Rs. 49,896.00
	b) For embedded part	20	kg @	Rs. 62.37	=	Rs. 1,247.40
	(SOR'2023, BLDG Code No. 05036)					
ii)	Structural steel such as tee, angles, channels and R.S. Joists					
	a) For gate body	320	kg @	Rs. 59.53	=	Rs. 19,049.60
	b) For embedded part	160	kg @	Rs. 59.53	=	Rs. 9,524.80
	(SOR'2023, BLDG Code No.05056)					
iii)	Providing and fixing MS bolts i/c nuts and washes complete as per standard design					
	i) Upto 300 mm length	500	kg @	Rs. 139.50	=	Rs. 69,750.00
	(SOR'2023 BLDG item No.9.18.1)					
			Total	**F = (i+ii)**	=	Rs. 79,717.80

B.	Welding by gas or electric plant i/c transportation of plant at site etc. complete as standard design	10000	cm @	Rs. 4.80	=	Rs. 48,000.00
	(SOR'2023, BLDG item no. 9.20)					
C.	Applying priming coat [Payment shall be made after submission of Test Certificate issued by the Manufacturer]: i) With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works.					
	In gate & embedded parts	30	sqm @	Rs. 42.40	=	Rs. 1,272.00
	(SOR'2023,item no. 12.45.3)					
D.	Finishing with epoxy paint (two or more coats) of approved brand and manufacture at all location prepared and applied as per manufacture's specification in/c appropritate priming coat, preparation of surface etc.complete. [Payment shall be made after submission of Test Certificate issued by the Manufacturer]					
	On steel work. i) In gate & embedded parts	30	sqm @	Rs. 164.90	=	Rs. 4,947.00
	(SOR'2023, item No.12.48.1)					

2 **<u>For Hoist Bridge:-</u>**

A. Steel work in built up section / framed work i/c cutting , hoisting , fixing in position and applying a priming coat as approved steel primer using steel etc complete as required.

i) In stringers , treads , landing etc. as stair cases i/c use of chequrred plate whereever required all complete.

a) For hoist bridge complete as per design

and direction of Engineer-in Charge	950	kg @	Rs. 121.80	=	Rs. 1,15,710.00
(SOR'2023, item no 9.15.1)					
	"E"		**Total (B+C+D+2a)**	=	**Rs. 1,69,929.00**
3 Cost of 4 nos steel roller required for operation of gate i/c bearing etc. complete as per direction and satisfaction of Engineer-in Charge	L.S				Rs. 30,000.00
4 Providing and fixing of Rubber seal as required as per design.	16	mtr @	Rs. 3,500.00 (market rate)	=	Rs. 56,000.00
5 Gear box with hoist mechanism including sprocket pinion gear chain, handle clutch set, operating lever , gear rod, providing & as per direction of Engineer-in Charge installation of 2 HP Motor in/c panel box etc. and with all other necessary materials required for hoist mechanism as per direction of Engineer-in Charge	L.S			=	Rs. 2,00,000.00
6 Cost of erection of gate	L.S			=	Rs. 50,000.00
7 Supplying design and drawing of steel gate.	L.S			=	Rs. 40,000.00
	Total		**G = {3+4+5+6+7}**	=	Rs. 3,76,000.00
			Total [F+G]	=	Rs. 4,55,717.80
			Add for Sundries [L.S.]	=	Rs. 29.00
					Rs. 4,55,746.80
			Add 1 % Water Chages	=	Rs. 4,557.47
					Rs. 4,60,304.27
			Add GST (MF= 0.2127)	=	Rs. 97,906.72
				=	Rs. 5,58,210.99
			Add 15% Contractors pofit & overheads	=	Rs. 83,731.65
					Rs. 6,41,942.63
			Add 1% cess	=	Rs. 6,419.43
			Total "I"	=	Rs. 6,48,362.06
			Grand Total [A(iii)+E+I]	=	**Rs. 8,88,041.06**
			Rate per square meter= (Rs.7,65,776.12/4.50)	=	**Rs. 1,97,342.46**

(Rupees One lakh ninety seven thousand three hundred fourty two and paisa forty six) only

4.10	**Design, fabrication (including shop & field painting) & supply of fixed wheel gate , guides , wheels, seals , tracks & other embedded parts including hand operated rope drum hoist of suitable capacity and hosit bridge and its supporting structure (including R.S.Joist, Chequred plate for hoist platform etc) and all other materials complete in accordance with the specification as well as relevant I.S. specification and delivery at scheme site as per direction of Engineer-in-charge.**

1	<u>**Considering gate size of 6.00m (long) X3.00m (height)=18.00 Sqm.**</u>					
	<u>**Materials for gate**</u>					
1	Skin plate (10mm thick)					
	6mX3m=18.00 Sqm @ 78.50 kg/m2	1413.00	Kg	49.50	per Kg	69943.50
2	ISMB 250X125 4 Nos. @6m each = 24m @ 37.30 kg/m =	895.20	Kg	42.67	per Kg	38198.18
3	ISMC 250X80 -1 No-6 m @ 30.60 kg/m	183.60	Kg	42.67	per Kg	7834.21
4	End vertical stiffner =2 Nos				-	
	(12mm thick MS plate) 3.00 m long X0.25 mm dia= 1.50 sqm @ 94Kg/m2	141.00	Kg	51.41	per Kg	7248.81
5	Bottom seat beam ISMB 250X125(1/2 Cat) -6.40 m @ 18.65 kg/m- kg	119.36	Kg	42.67		5093.0912
6	Roller track ISMB 250 X125(1/2 cut)- 2Nos. - 5.00 m each=10m @ 18.65 Kg/m	186.50	Kg	42.67	per Kg	7957.955
7	Hold fast for seal beam, roller track					
	MS Flat 50mm (width) X 10 mm(thick) X 200mm long					
	Spacing @ 500mm c/c	-				
	13 (seal beam +2X11(rollar track) =35 Nos@ 200 mm long = 7.00 mx 0.05m=0.35 sqm @ 78.5 kg./sqm	27.48	Kg	51.41	per Kg	1412.7468
8	Roller (250 mm dia)					
	(with double bearing , 80mmdia pin with thread & nut, stiffener , Patch palt at both side.)					
	4 nos. for each gate. @ Rs. 20,000/each Rs. 80,000.00	4	Nos	20,000	each	80000.00
9	Rubber seal (with MS flat & nut bolt)					
i)	Flat rubber 60mm X12mm- 6m @ Rs. 3500/m Rs. 21,000.00	6.00	Mtr	3,500	Mtr	21000.00
ii)	Angle rubber 65mm X65mmX10mm- 2X3m=6m @ Rs. 3500/m Rs. 21,000.00	6.00	Mtr	3,500	Mtr	21000.00
iii)	MS Flat 50mX8mm 6m(botton) + 2X3m/side)=12m @ 3.14 kg/m= 37.68kg.	37.68	Kg	51.41		1937.13
iv)	Nut & bolt with washer LS= 15kg for each gate @ Rs. 200/Kg Rs. 3000.00	15.00	Kg	200	Kg	3000.00
10	Share pulley frame					
	MS plate 12.50 mm thick 250mmX150mm					
	2 nos in each pulley for 4 pully in each gate					
	8 nos in each gate					
	8 X0.25mX0.15m=0.30 sqm @ Rs. 98.10 kg/m = 29.43 kg.	29.43	Kg	51.41	per Kg	1513.00

11	Pulley 250mmdia with pin & brash bush 4 nos. for each gate @ 2500/each Rs. 10,000.00	4	No	2,500	Each	10000.00
	<u>Hoist Bridge:</u>					
12	ISMB-300mmX140mm-3 Nos. 7m for each gate= 21m @ 46.00 kg/m= 966 Kg.	966.00	Kg	42.67	per Kg	41219.22
13	Cross member = 8nos in each gate MS Angle 65mm X65mmX 8mm-2m each (logs)= 16m @ 7.70 kg/m=123.20 kg.	123.20	Kg	42.67	per Kg	5256.94
14	25mm dia nut & bolt (200mm long) 12 No. in each gate =2.40m @ 3.85kg/m= 9.24 kg @ Rs. 200/kg - Rs. 1848.00	9.24	Kg	200	Kg	1848.00
15	Ending plate X300mm X 10mm - 2m long= 0.60m2 @ 78.50 kg 47.10kg	47.10	Kg	51.41		2421.41
16	Chequred plate (7mm thick) 7mX2m= 14m2 @ 61.10kg/m2= 855.40. kg. Rs. 150.00 /kg Rs. 1,28,310.00	855.40	Kg	150	Kg	128310.00
17	Sub frame of hosit machine ISMC 150X75- 7m in each gate 16.80 kg/m 117.60 kg.	117.60	Kg	42.67	per Kg	5017.99
18	Hosit Machine with wire rope drum complete set (16mm dia wire rope) 1 st for each gate =Rs.300,000.00	1	Set	3,00,000	Set	300000.00
19	Side railing Post @ 65mmX65mmX8mm angle (1.20m high) 6 nos. for each gate = 6X1.20X2(for box side) = 14.40m @ 9.40kg/m 135.36kg.	135.36	Kg	42.67	per Kg	5775.8112
	Horizonal GI pipe 50mmdia-2 nos in each side 4 nos having 7 m long. i.e 4X 7=28m	28.00	Mtr	290		8120.00
	<u>Ladder</u>					
20	ISMC 100mm X50m - 2X3m=6m @ 9.60kg/m=57.60kg	57.60	Kg	42.67	per Kg	2457.79
21	Angle 75mmX75mmX8mm- 0.75m long =20nos. 0.75X20=15.00m @ 8.9 kg/m= 133.50kg	133.5	Kg	42.67	per Kg	5696.45
22	Railing 2 nos. in each side 4nos for both side 50 mm dia GI pipe 3mX4=12m	12.00	Mtr	390	Mtr	4680.00
	Post-Angle 65 mm X65mm X8 mm (0.9m hight) 4 nos. in each side 8 nos. for bolts 8X0.9=7.20m @9.40kg/m	67.68	Mtr	42.67	Mtr	2887.91
	<u>Fabrication:-</u>					
23	Gas cutting (Oxigen ,LPG, Labour etc.) (5 nos. oxigen cylinder, 1 no. LPG cylender Skilled labour - Rs.7000.00)	1	Set	15,000	each	15000.00
					(A) =	804830.14

	Colour						
24	Bituminus black paint for gate	45	Sqm	86.30	**(B)**	=	3883.50
	3.00m x6.00m x2.50 Co-efficient	(Refer Item 12.64.1 of SoR-2023(Building),PWD, Tripura)					
25	Other paint for hoist arrangement railing etc.	53.506	Sqm	46.086	/Sqm**(C**		2465.88
	Sub total			**A+C**		=	**807296.02**

Add for Sundries [L.S.]	20.00
	807316.02
Add 1 % Water Chages	8073.16
	815389.18
Add GST (MF= 0.2127)	173433.28
	988822.46
Add 15% Contractor profit & overheads	148323.37
	1137145.83
Add 1% cess	11371.46
Total **D** =	1148517.29
Grand Total B+D	**1152400.79**
Cost per Sqm.=	**64022.27**

(Rupees sixty four thousand twenty two and paisa twenty seven) only

4.11	**Erection of steel gate for diversion scheme including all mechanical and other arrangement etc. complete as per direction of the Engineer-in-Charge.**

For steel gate of size 6.00m X 3.00m=18.00 sqm

Machinary:				
Hiring charge of Chain pulley - 2 nos.				
@ Rs. 3000.00 per day		considering 3 days	L.S	Rs. 18,500.00
Carriage of materials:				
i) Loading & unloading -				Rs. 4,800.00
ii) Hiring charge of diesel truck with POL				Rs. 3,350.00
(SOR'2023,Code No.0116)				
iii) Carrying of gate upto work site -				Rs. 12,000.00
Labour cost:				
i) Labour charge for erection of Gate:				
Technician= 4 Nos	per day	850.00		Rs. 3,400.00
Fitter(Gr-I)= 4 Nos	per day	512.00		Rs. 2,048.00
Helper(Technician)=8 Nos	per day	447.00		Rs. 3,576.00
ii) Fitting, fixing of hoist machinary:				
Fitter(Gr-I)=6 Nos	per day	512.00		Rs. 3,072.00
Helper(Technician)=12 Nos	per day	447.00		Rs. 5,364.00
	Add for Sundries [L.S.]			Rs. 29.00
				Rs. 56,139.00
	Add 1 % Water Chages			Rs. 561.39
				Rs. 56,700.39
	Add GST (MF= 0.2127)			Rs. 12,060.17
				Rs. 68,760.56
	Add 15% Contractor profit & overheads			Rs. 10,314.08
				Rs. 79,074.65
	Add 1% cess			Rs. 790.75
				Rs. 79,865.39
	Rate per square meter= 79865.39/18		=	**Rs. 4,436.97**

(Rupees Four thousand four hundred thirty six and paisa ninety seven) only

4.12	**Providing and fixing 10 mm thick MS sheet flap shutter gate with frame of 50x50x5mm MS angles & vertical brace 25x6mm MS flat and all necessary coat of approved steel primer complete as directed by Engineer-in-charge (Cost of MS angles, MS flat will be paid separately)**

Considering 1.00 sqm

a) Weight of 10 mm thick MS sheet of 1.00 sqm=				78.50	kg		
		@	Rs. 59.53	/Kg		=	Rs. 4,673.11
		(SOR2023 Code No.05036)					
b) Welding charge			Rs. 20.00			=	Rs. 1,570.00
c) Labour for fitting							
i)Fitter(Gr-I)	2	No	per day	Rs. 512.00	/day	=	Rs. 1,024.00
ii) Helper	2.5	No	per day	Rs. 447.00	/day	=	Rs. 1,117.50
d) Carrying, loading and unloading upto the site							
L.S						=	Rs. 1,000.00
			Add for Sundries [L.S.]			=	Rs. 30.00
						=	Rs. 9,414.61
			Add 1 % Water Chages				Rs. 94.15
							Rs. 9,508.75
			Add GST (MF= 0.2127)				Rs. 2,022.51
							Rs. 11,531.26
			Add 15% Contractor profit & overheads			=	Rs. 1,729.69
							Rs. 13,260.95
			Add 1% cess			=	Rs. 132.61
							Rs. 13,393.56 /sqm
			Rate of per kg = Rs.13393.56/78.50			=	**Rs. 170.62**

(Rupees One hundred seventy and paisa sixty two)only

4.13	**Providing cork mastic filter of approved quality of size 400 mm x 100 mm on the top of sheet pile as per approved drawing and direction of the Engineer-in-charge.**

Considering 1.00(One) Sqm

a) Material				
Cost of Cork Mastic Paper	Sqm	Rs. 1.00	1615.00	Rs. 1,615.00
b) Labour				
Mate	Day	0.2	391.00	Rs. 78.20
Mazdoor(Unskilled)	Day	0.25	391.00	Rs. 97.75
	Add for Sundries [L.S.]			Rs. 50.00
				Rs. 1,840.95
	Add 1 % Water Chages			Rs. 18.41
				Rs. 1,859.36
	Add GST (MF= 0.2127)			Rs. 261.24
				Rs. 2,120.60
	Add 15% Contractor profit & overheads			Rs. 318.09
				Rs. 2,438.69
	Add 1% cess			Rs. 24.39
				Rs. 2,463.08

(Rupees two thousand four hundred sixty three and paisa eight) only

4.14	**Drilling grout hole by rotary type drilling machine of 76mm. to 98mm. bit diameter in foundation of earthen dam for a length below ground level up to 12 meters and starting from the level of 2 meter below ground level and washing/flushing hole with water to remove cutting sludge, clay, mud etc, as per standard specification and as per direction and satisfaction of the Engineer-in-charge.**

Analysys for 20.00 mtr. depth grout hole; 2 grout holes @ ave.10.00 mtr. drill depth of each hole.

(A)	Hiring Charge of drilling machine including fuels, GI pipes along with all accesories for grouting etc. For 1(one) day				
		L.S	per day	Rs. 3,000.0	Rs. 3,000.00
(B)	**Labour charges for operating grouting machine**				
i)	Special machine operator	1	per day	Rs. 512.00	Rs. 512.00
ii)	Bhisti	2	per day	Rs. 391.00	Rs. 782.00
iii)	Helper	2	per day	Rs. 447.00	Rs. 894.00
iv)	Technician	1	per day	Rs. 850.0	Rs. 850.00
			C	(A+B)	Rs. 6,038.00
	Add for Sundries [L.S.]				Rs. 29.00
					Rs. 6,067.00
	Add 1 % Water Chages				Rs. 60.67
					Rs. 6,127.67
	Add GST (MF= 0.2127)				Rs. 1,303.36
					Rs. 7,431.03
	Add 15% Contractor profit & overheads				Rs. 1,114.65
					Rs. 8,545.68
	Add 1% cess				Rs. 85.46
					8631.14
	Therefore, Rate per mtr= 8631.14/20				**Rs. 431.56**

(Rupees Four hundred thirty one and paisa fifty six) only

4.15	**Curtain grouting with cement slurry in grout hole of 76mm. dia to 98mm. dia under foundation of earthen dam for a depth below ground level up to 12 meters and starting from the level of 2 meter below ground level as per standard specification and as per direction and satisfaction of the Engineer-in-charge.**

Analysis for 10 bags of cement, taking ave. 5 bags of cement for each hole.

(A)	Hiring Charge of grouting machine including fuels, GI pipes along with all accesories for						
		L.S		per day	Rs. 2,000.0		Rs. 2,000.00
(B)	Cost of cement (Rs.339.85 per bag) SOR-2023 Code No.03001					=	Rs. 6,797.00
(C)							
i)	Special machine operator	1	nos	Rs. 512.00			Rs. 512.00
iii)	Bhisti	1	nos	Rs. 391.0			Rs. 391.00
iii)	Helper	2	nos	Rs. 447.0			Rs. 894.00
				D=(A+B+C)		Total=	Rs. 10,594.00
		Add for Sundries [L.S.]					Rs. 29.00
							Rs. 10,623.00
		Add 1 % Water Chages					Rs. 106.23
							Rs. 10,729.23
		Add GST (MF= 0.2127)					Rs. 2,282.11
							Rs. 13,011.34
		Add 15% Contractor profit & overheads					**Rs. 1,951.70**
							Rs. 14,963.04
		Add 1% cess					**Rs. 149.63**
							Rs. 15,112.67
					Rate per bag= 15112.67/10		**Rs. 1,511.27**

(Rupees One thousand five hundred elevan and paisa twenty seven) only

4.16	**Supplying and fitting fixing tar paper of approved quality on surrounding of sheet pile as per approved drawing and direction of the Engineer-in-charge.**				
	Considering 1 Roll = 20 X 1= 20 Sqm				
	a) Material				
	Cost of Tar Paper	Sqm	1.00	Rs. 215.00	Rs. 215.00
	b) Labour				
	Mate	Day	0.1	Rs. 391.00	Rs. 39.10
	Mazdoor(Unskilled)	Day	0.1	Rs. 391.00	Rs. 39.10
				Total=	Rs. 293.20
		Add for Sundries [L.S.]			Rs. 10.00
					Rs. 303.20
		Add 1 % Water Chages			Rs. 3.03
					Rs. 306.23
		Add GST (MF= 0.2127)			Rs. 65.14
					Rs. 371.37
		Add 15% Contractor profit & overheads			Rs. 55.71
					Rs. 427.07
		Add 1% cess			Rs. 4.27
				Total =	**Rs. 431.34**

(Rupees Four Hundred Thirty One and paisa Thirty Four) only

4.17	**Labour charge for watch on ward for operation of barrage gate oe smooth supply of irrigation water at canal at day or night including removal of all kinds of floating garbage from pond and canals as per direction of the Engineer-in-charge.**

Unit = Nos				
a) Labour				
Helper	Day	1	447.00	447.00
b) Add Sundries (LS)				**50.00**
			Total=	**497.00**
c) Add 1% Water Charges				**4.97**
			Total=	**501.97**
d) Add GST (multiplying factor) @ 0.2127				106.77
				608.74
e) Contractor's profit @ 15%				91.31
				700.05
f) Add cess @ 1%				7.00
			Total Cost =	**707.05**

(Rupees Seven Hundred Seven and paisa five)only

4.18	**Renovation and Over houling of old roller of steel sluice gate which are rusted and make them working properly by greasing and oiling with tools and tackles as per direction of Engineer-in-Charge.**
4.18.1	**For Barrage**

Unit = Nos					
a) Material					
1 Grease		kg	2.00	250.00	500.00
		(As per SOR(WR),23)			
2 Nuts & bolts		Quital	0.04	6350.00	254.00
		(As per SOR(Bldg,05017),23)			
3 Hiring charge of Welding Machine		Day	1	1000.00	1000.00
		Total material cost=			1754.00
b) Labour					
1.For Welding					
i)Mechanics	1 no	699.00	per day		Rs. 699.00
ii)Helper	1 no	447.00	per day		Rs. 447.00
		Add 1/6th day off=			Rs. 191.00
2.For Overhouling					
i)Mechanic		Day	4	690	2760.00
ii)Helper		Day	10	447	4470.00
		Total Labour cost=			8567.00
c) Add Sundries (LS)					**50.00**
				Total=	**10371.00**
d) Add 1% Water Charges					**103.71**
				Total=	**10474.71**
e) Add GST (multiplying factor) @ 0.2127					2227.97
					12702.68
f) Contractor's profit @ 15%					1905.40
					14608.08
g) Add cess @ 1%					146.08
				Total Cost =	**14754.16**

(Rupees Fourteen thousandseven hundred fifty four and paisa sixteen) only

4.18.2	For Diversion

Unit = Nos

a) Material

1	Grease	kg	2	250	500.00
			(As per SOR(WR),23)		
2	Nuts & bolts	Quital	0.04	6350	254.00
		(As per SOR(Bldg,05017),23)			
3	Hiring charge of Welding Machine	Day	1	1000	1000.00
			Total material cost=		1754.00

b) Labour

1.For Welding

i)Mechanics	1 no	699.00	per day			Rs. 699.00
ii)Helper	1 no	447.00	per day			Rs. 447.00
			Add 1/6th day off=			Rs. 191.00
2.For Overhouling						
iii)Mechanic			Day	3	690.00	2070.00
iv)Helper			Day	4	447.00	1788.00
			Total Labour cost=			Rs. 5,195.00

c) Add Sundries (LS)		**50**
	Total=	**6,999.00**
d) Add 1% Water Charges		**69.99**
	Total=	**7068.99**
e) Add GST (multiplying factor) @ 0.2127		1503.57
		8572.56
f) Contractor's profit @ 15%		1285.88
		9858.44
g) Add cess @ 1%		98.58
	Total Cost =	**9957.02**

(Rupees Nine thousand nine Hundred fifty seven and paisa two)only

4.19	**Fabrication, supply and fitting fixing of gate roller with pin housing in proper position at suitable interval and also make the roller hole in position of gate by gas cutting and fitting additional plate as required including necessary scaffolding, consumables, labour etc for barrage gate as per the direction of Engineer-in-Charge.**

Unit = Nos

a) Labour				
i)Mechanics	Day	1	699.00	699.00
ii) Helper	Day	2	447.00	894.00
b) Machinary				
Gate Roller with pin housing	No	1	15000.00	15000.00
Welding Charge	cm	120	2.50	300.00
	(SOR, Bldg 2023)			
d) Scaffolding , Tools and Plants		5% of Total =		844.65
e) Add Sundries (LS)				**200.00**
			Total=	**17937.65**
f) Add 1% Water Charges				**179.3765**
			Total=	**18117.0265**
g) Add GST (multiplying factor) @ 0.2127				3853.49
				21970.5165
h) Contractor's profit @ 15%				3295.58
				25266.10
i) Add cess @ 1%				252.66
			Total Cost =	**25518.76**

(Rupees Twenty five thousand five Hundred eighteen and paisa seventy six)only

4.20	**Supplying fitting fixing of thrust bearing (SKF 222/9C) including bearing cover, oil seal of gate roller as per sample including necessary scaffolding, consumables, labour etc for barrage gate as per direction of the Engineer-in-charge.**

Unit = Nos

a) Material				
Thrust bearing(222/9C)	Nos	1	9500	9500.00
Oil Seal	Nos	1	610	610.00
b) Labour				
Mechanic	Day	0.5	699	349.50
Helper	Day	1	447	447.00
c) Scaffolding , Tools and Plants		5% of Total =		545.33
d) Add Sundries (LS)				50.00
			Total=	**11501.83**
e) Add 1% Water Charges				115.02
			Total=	**11616.84**
f) Add GST (multiplying factor) @ 0.2127				2470.90
				14087.74
g) Contractor's profit @ 15%				2113.16
				16200.90
h) Add cess @ 1%				162.01
			Total Cost =	16362.91

(Rupees Sixteen thousand three Hundred sixty two and ninety one paisa)only

4.21	To open out existing old rubber seals and covering plate from barrage gate by cutting bolts and nuts where necessary as per direction of the Engineer-in-Charge.

Unit = Mtr				
For Open out of (3.00+3.00+3.00)=9.00 Mtr Rubber seal				
a) Labour				
Fitter(Gr-I)	Day	2	512	1024.00
Helper	Day	4	447	1788.00
b) Add Sundries (LS)				200.00
			Total=	**3012.00**
c) Add 1% Water Charges				30.12
			Total=	**3042.12**
d) Add GST (multiplying factor) @ 0.2127				647.06
				3689.18
e) Contractor's profit @ 15%				553.38
				4242.56
f) Add cess @ 1%				42.43
			Total Cost =	4284.99
			Cost per Mtr=	**476.11**

(Rupees Four Hundred seventy six and paisa elevan)only

4.22	Supplying, fitting fixing at site new rubber seals for barrage gate and fixing them with new bolts, nuts and washer and punching necessary tubes in rubber seals with new covering plate. The new rubber seals are to be proper shape and size, hardwires, staging and scaffolding where necessary as per direction of Engineer-in-charge.
4.22.1	For Flat Shaped of (3.00+3.00+3.00)=9.00 Mtr

Unit = Mtr				
a) Material				
Rubber seal	Mtr	9.00	3100	27900.00
b) Labour				
Fitter(Gr-I)	Day	3	512	1536.00
Helper	Day	4	447	1788.00
c) Scaffolding , Tools and Plants		5% of Total =		1561.20
d) Add Sundries (LS)				50.00
			Total=	**32835.20**
e) Add 1% Water Charges				**328.35**
			Total=	**33163.55**
f) Add GST (multiplying factor) @ 0.2127				7053.89
				40217.44
g) Contractor's profit @ 15%				6032.62
				46250.06
h) Add cess @ 1%				462.50
			Total Cost =	46712.56
			Cost per metre=	**5190.28**

(Rupees Five thousand one Hundred ninety and paisa twenty eight)only

4.22.2	For 'L' Shaped of (3.00+3.00+3.00)=9.00 Mtr

Unit = Mtr				
a) Material				
Rubber seal	Mtr	9	3500	31500.00
b) Labour				
Fitter(Gr-I)	Day	3	512	1536.00
Helper	Day	4	447	1788.00
c) Scaffolding , Tools and Plants		5% of Total =		1741.20
d) Add Sundries (LS)				**50.00**
			Total=	**36615.20**
e) Add 1% Water Charges				**366.15**
			Total=	**36981.35**
f) Add GST (multiplying factor) @ 0.2127				7865.93
				44847.28
g) Contractor's profit @ 15%				6727.09
				51574.37
h) Add cess @ 1%				515.74
			Total Cost =	52090.11
			Cost per metre=	**5787.79**

(Rupees Five thousand seven Hundred eighty seven and paisa seventy nine)only

4.23	Maintainance of gear boxes and overhauling of them ie. Dismantling of gear, pinion etc. and again fitting fixing the same in position after necessary maintenance as required including change of oil seal if necessary and greasing and mobiling by the contractor's own labour, tools and plants as required as per direction of the Engineer-in-Charge.

a) Material				
Grease	kg	3	250.00	750.00
a) Labour				
Mechanic	Day	2	699.00	1398.00
Helper	Day	2	447.00	894.00
b) Add Sundries (LS)				50.00
			Total=	**3092.00**
c) Add 1% Water Charges				30.92
			Total=	**3122.92**
d) Add GST (multiplying factor) @ 0.2127				664.25
				3787.17
e) Contractor's profit @ 15%				568.08
				4355.25
f) Add cess @ 1%				43.55
			Total Cost =	**4398.80**

(Rupees Four thousand three Hundred ninety eight and paisa Eighty)only

4.24	**Repairing and replacement of damaged/ defective parts of guide shoes as required by cutting bolts nuts with special tools and tackles after proper realignment as per direction of the Engineer-in-charge.**

Unit= Per Job					
a) Material					
	Hiring Charge of Welding Machine	Day	1	1000.00	1000.00
	Grease	kg	1	250.00	250.00
	Nuts and Bolts	kg	1	110.00	110.00
a) Labour					
	Mechanic	Day	2	699.00	1398.00
	Helper	Day	4	447.00	1788.00
					3186.00
b) Add Sundries (LS)					100.00
				Total=	**7832.00**
c) Add 1% Water Charges					78.32
				Total=	**7910.32**
d) Add GST (multiplying factor) @ 0.2127					1682.53
					9592.85
e) Contractor's profit @ 15%					1438.93
					11031.78
f) Add cess @ 1%					110.32
				Total Cost =	**11142.10**

(Rupees Elevan thousand one Hundred forty two and paisa ten) only

4.25	**Realignment of sluice gates with wire rope by adjusting the rope with hoisting machinery and alignment of the gates in the proper line with side seal and gate roller path and fitted the lower position of the rope with the gate hinge and make them working properly neccesary tools and plants and scaffolding etc. complete.**

a) Material					
	Grease	kg	3.00	250.00	750.00
b) Labour					
	Mechanic	Day	2	699.00	1398.00
	Helper	Day	4	447.00	1788.00
c) Scaffolding , Tools and Plants				5% of Total =	196.80
d) Add Sundries (LS)					100.00
				Total=	**4232.80**
e) Add 1% Water Charges					42.33
				Total=	**4275.13**
f) Add GST (multiplying factor) @ 0.2127					909.32
					5184.45
g) Contractor's profit @ 15%					777.67
					5962.12
h) Add cess @ 1%					59.62
				Total Cost =	**6021.74**

(Rupees Six thousand Twenty one and paisa seventy four)only

4.26	**Supplying and fitting fixing wire rope of required dia steel coir including 'U' bolts as per direction of the Engineer-in-Charge.**

Unit= Per Mtr

Considering weir rope required for 1 gate= 20 mtr

a) Material				
"U" bolts(12mm/16mm/20mm)	No	8	233.00	1864.00
Wire rope(10mm/12mm/16mm/20mm)	mtr	30.00	338.00	10140.00
b) Labour				
Mechanic	Day	2	699	1398.00
Helper	Day	6	447	2682.00
c) Add Sundries (LS)				**100.00**
			Total=	**16184.00**
d) Add 1% Water Charges				**161.84**
				16345.84
e) Add GST (multiplying factor) @ 0.2127				3476.76
				19822.60
f) Contractor's profit @ 15%				2973.39
				22795.99
g) Add cess @ 1%				227.96
			Total Cost =	23023.95
		Cost per Mtr =		**1151.20**

(Rupees One thousand one Hundred fifty one and paisa twenty)only

4.27	**Supplying and fitting fixing rope drum and pinion assembly as per direction of the Engineer-in-Charge.**

a) Material				
Rope Drum & pinion assembly	Each	1	180000.00	180000.00
b) Labour				
Mechanic	Day	2	699.00	1398.00
Helper	Day	6	447.00	2682.00
c) Add Sundries (LS)				100.00
			Total=	**184180.00**
d) Add 1% Water Charges				1841.80
			Total=	**186021.80**
e) Add GST (multiplying factor) @ 0.2127				39566.84
				225588.64
f) Contractor's profit @ 15%				33838.30
				259426.94
g) Add cess @ 1%				2594.27
			Total Cost =	262021.21

(Rupees Two Lac sixty two thousand Twenty one and paisa Twenty one)only

4.28	Supplying and fitting fixing Coupling with G.M Bush, flange etc. as per direction of the Engineer-in-Charge.

a) Material				
coupling	Each	1	12000.00	12000.00
G.M bush	Each	2	3000.00	6000.00
				18000.00
b) Labour				
Mechanic	Day	2	699.00	1398.00
Helper	Day	4	447.00	1788.00
				3186.00
c) Add Sundries (LS)				**100.00**
			Total=	**21286.00**
d) Add 1% Water Charges				**212.86**
			Total=	**21498.86**
e) Add GST (multiplying factor) @ 0.2127				4572.81
				26071.67
f) Contractor's profit @ 15%				3910.75
				29982.42
h) Add cess @ 1%				299.82
			Total Cost =	**30282.24**

(Rupees Thirty thousand two Hundred eighty two and paisa Twenty four)only

4.29	Intake gate service and stop log, should be checked in both left and right bank repeating over howling of hoist machine, its accessories, old rubber seal will be dismantaled and will be fitted with new rubber seal with new bolts and nuts, washer only manual operation system will be restored.

a) Material				
Rubber seal	mtr	3	3500.00	10500.00
Nut & Bolts	kg	2	110.00	220.00
a) Labour				
Mechanic	Day	2	699.00	1398.00
Helper	Day	4	447.00	1788.00
b) Add Sundries (LS)				100.00
			Total=	**14006.00**
c) Add 1% Water Charges				140.06
			Total=	**14146.06**
d) Add GST (multiplying factor) @ 0.2127				3008.87
				17154.93
e) Contractor's profit @ 15%				2573.24
				19728.17
f) Add cess @ 1%				197.28
			Total Cost =	**19925.45**

(Rupees Nineteen thousand nine Hundred Twenty five and paisa forty five)only

4.30	**Supplying and fitting fixing MS fabricated hoist supporting structure by fixing, welding, scaffolding etc as per direction of the Engineer-in-Charge.**

Unit= Sqm					
Considering 12mX0.50m= 6 sqm					
a) Material					
MS Flat(50X6 mm)					
	(2X2X12.00X2.398 kg/Mtr)	Quintal	1.151	5954.00	6853.29
MS sheet(3mm)					
	(2X12X0.50X48kg/sqm)	Quintal	3.000	5950.00	17850.00
MS angle(50X50X8 mm)					
	(22NosX2mtrX5.82kg/mtr)	Quintal	2.561	5953.00	15244.44
Welding		cm	500	2.50	1250.00
Primer		Ltr	2	85.00	170.00
b) Labour					
Mechanic		Day	1	699.00	699.00
Helper		Day	2	447.00	894.00
c) Add Sundries (LS)					100.00
				Total=	**43060.73**
d) Add 1% Water Charges					430.61
				Total=	**43491.34**
e) Add GST (multiplying factor) @ 0.2127					9250.61
					52741.95
f) Contractor's profit @ 15%					7911.29
					60653.24
g) Add cess @ 1%					606.53
				Total Cost =	61259.77
				Cost per sqm=	**10209.96**

(Rupees Ten thousand two Hundred nine and paisa ninety six)only

SCHEDULE OF RATES, 2023

CHAPTER – 5
FLOOD PROTECTION WORKS (ANALYSIS)

PUBLIC WORKS DEPARTMENT
(WATER RESOURCES)

ANALYSIS OF RATE

CHAPTER-5

FLOOD PROTECTION WORKS

5.1	**Supplying carrying and laying of inverted filter in slope of river banks below C.C . Blocks including preparation of subgrade etc.(Jhama aggregate of different sizes upto 40mm) as per drawing and direction of Engineer -in- charge.**

Considering 1.00 cum of inverted filter.

Cost of Jhama aggregate SOR-2023 basic rate code- 04001,04002 & 04003

Description	Unit	quantity	Rate		Amount
1/3 volume of 40mm nominal	cum	Rs. 0.333	Rs. 3,417.00	/cum	Rs. 1,139.00
1/3 volume of 20mm nominal	cum	Rs. 0.333	Rs. 3,917.00	/cum	Rs. 1,305.67
1/3 volume of 12mm nominal	cum	Rs. 0.333	Rs. 3,841.00	/cum	Rs. 1,280.33
A) Hence Basic Cost of 1.0 cum jhama aggregate					Rs. 3,725.00
B) Add 10% carrying to the site = 10% of A					Rs. 372.50
C)Labour TSR (Building) 2023 Basic rate					
i) Mason	nos	0.30	Rs. 512.00	/nos/day	Rs. 153.60
ii) Helper	nos	0.30	Rs. 447.00	/nos/day	Rs. 134.10
D) Add for sundries (L.S)					Rs. 25.00
		Total of (A+B+C+D)			Rs. 4,410.20
Add for Water charges	@	1%			Rs. 44.10
					4454.30
Add GST (multiplying factor)		0.2127			947.43
					Rs. 5,401.73
Add for contractor profit and overheads	@	15%			Rs. 810.26
		=			Rs. 6,211.99
Add cess	@	1%			Rs. 62.12
Cost of Supplying carrying and laying of Jhama aggregate					Rs. 6,274.11
Rate per cum	say				**Rs. 6,274.11**

(Rupees Six thousand Two hundred Seventy Four & paisa Eleven) only.

5.2	**Placing of porcupine in the river bed wherever required including carrying of post from site of manufacture (6 Nos. RCC posts 2mtr /3mtr each for one set) tying with 4 mm G.I wire minimum two knots through end hole of three posts as per drawing and direction of Engg-in-charge.**
5.2.1	**For 2.0 mtr post in length**

06 (Six) Nos. RCC post 2 mtr each for 1 (one) unit

Description				Unit	quantity	Rate		Amount
A)Material		(Basic rate (sl No. 36(b))						
ii) Cost of G.I wire	6 mtr	(Wt @ 0.167 kg/mtr)	1.00 kg	kg	1.00	Rs. 120.00	/kg	Rs. 120.00
B)Labour	As per TSR (Building) 2023 Basic rate Labour							
i) Helper				day	0.40	Rs. 447.00	/day/no	Rs. 178.80
iii) Mason 2nd class				day	0.75	Rs. 475.00	/day/no	Rs. 356.25
C) Sundries (L.S)								Rs. 25.00
						Total (A+B+C)		Rs. 680.05
	Add for Water charges			@	1%			Rs. 6.80
								686.85
	Add GST (multiplying factor)				0.2127			146.09
								Rs. 832.94
Add for contractor profit and overheads				@	15%			Rs. 124.94
					=			Rs. 957.89
	Add cess			@	1%			Rs. 9.58
								Rs. 967.46
	Rate per unit		say					**Rs. 987.95**

(Rupees Nine Hundred Eighty Seven & paisa Ninety Five) only.

5.2.2	**For 3.0 mtr post in length**

06 (Six) Nos. RCC post 2 mtr each for 1 (one) unit

Description				Unit	quantity	Rate		Amount
A)Material		(Basic rate (sl No. 36(b))						
ii) Cost of G.I wire	6 mtr	(Wt @ 0.167 kg/mtr)	1.00 kg	kg	1.00	Rs. 120.00	/kg	Rs. 120.00
B)Labour	As per TSR (Building) 2023 Basic rate Labour							
i) Helper				day	0.50	Rs. 447.00	/day/no	Rs. 223.50
iii) Mason 2nd class				day	1	Rs. 475.00	/day/no	Rs. 475.00
C) Sundries (L.S)								Rs. 25.00
						Total (A+B+C)		Rs. 843.50
	Add for Water charges			@	1%			Rs. 8.44
								851.94
	Add GST (multiplying factor)				0.2127			181.21
								Rs. 1,033.14
Add for contractor profit and overheads				@	15%			Rs. 154.97
					=			Rs. 1,188.11
	Add cess			@	1%			Rs. 11.88
								Rs. 1,199.99
	Rate per unit			say				**Rs. 1,220.48**

(Rupees One Thousand Two Hundred Twenty & paisa Forty Eight) only.

5.3	**Manufacturing of Cement concrete Block with mix 1:4: 8(1 Cement : 4 River sand : 8 Jhama brick agreegate of 40 mm nominal size) including centering & shuttering of size 0.45 m X 0.45 m X 0.30 m and engraving the serial number of each block as per direction of the Engineer - in- Charge.**

Considering 60.00 nos. of cement concrete block.

Size of block 0.45mX0.45mX0.30m

Volume of each cement concrete block =

0.45 X 0.45 X 0.30 = 0.06075 cum

Therefore total volume of 60 nos cement Concrete block =

1 X 60.0 X 0.06075 = 3.645 cum

Cost of 3.645 cum of cement concrete block Rs. 8,980.0 per cum Rs. 32,732.10

(Reference SoR'2023, code- 4.1.15)

B.Centering and Shuttering in/c strutting propping etc.:-

a) Shuttering area for 60 no. block =

60 X 4 x 0.45 x 0.3 = 32.40 sqm

For this particular job one steel shutter can be used for approximately 40 times.

Hence shuttering area for 60 no block=

32.40 / 40 = 0.8100 sqm

Cost of Shuttering @ Rs. 333.90 /sqm = Rs. 270.46

Reference SoR'2023, code- 5.8.1.1

C. polythene, shutter oil and sundries

a) Polythene :-

Quantity of Polythene required =

60.00 x 0.5 x 0.5 = 15.00 sqm

Deduct 1.0 sqm being considered with original item of centering and shuttering

Hence Polythen reqd= 15.00 - 1.00 = 14.000 sqm

Cost of ploythene @ Rs. 37.00 /sqm	SOR-2023, (Ref. M-147)		Rs. 518.00
b) Shutter oil	L.S		Rs. 260.00
c) Sundries	L.S		Rs. 20.00
		Total (a+b+c)	Rs. 798.00
Add for Water charges	@	1%	7.98
			Rs. 805.98
Add GST (multiplying factor)		0.2127	171.43
			Rs. 977.41
Add for contractor profit and overheads	@	15%	146.61
	=		Rs. 1,124.02
Add cess	@	1%	11.24
		Total C	Rs. 1,135.26
		Grand Total (A+B+C)	Rs. 34,137.82

Rate per cum = (34137.82/3.645) = Rs. 9,365.66

(Rupees Nine Thousand Three hundred Sixty Five and paisa Sixty Six) only

5.4	**Manufacturing of Sand Cement Block with mix 1:8(1 Cement : 8 River Sand) of Size 0.45 m X0.45 m X 0.3 m including the cost of centering and shuttering and placing of polythene sheet at bottom of the block with engraving the serial number of each block as per direction of the Engineer - in- Charge.**

Size 0.45 m X0.45 m X 0.30 m   Nos. of block per cum=16.46

Considering 1.00(one) cum 1:8(1 cement: 8 river sand) cement mortar

i) Cement : *(Dry Volume (assuming 7% void)=1.07 cum).*

Volume of cement required= 1.07 cum/9=

1.07 cum   9   =   0.1189 cum =   4.161 cft

Considering volume of 1 bag cement =1.170 cft

Total no. of cement reqd. for 1 cum(in/c wastage)=3.80 bags   0.19 ton.

a)	Cost of cement	@	Rs. 6,797.00	/ton	=	Rs. 1,291.43
		SOR- 2023, code-03001				
b)	Carriage of cement					
		@	Rs. 130.80	/ton	=	Rs. 24.85
		SOR- 2023, code-0421				

ii) Sand :

Volume of sand required=

1.07	x	8/9	=	0.951	cum
Considering 20% bulking of sand =			=	0.190	cum
Total quantity of sand required =			=	**1.141**	cum

a)	Cost of sand	@	Rs. 740.00	/cum	=	Rs. 844.59
		SOR- 2023, code-02003				
b)	Carriage of sand from local quary to site of work					
		@	Rs. 147.00	/cum	=	Rs. 167.78
		SOR- 2023, code-0425				

iii) Centering and Shuttering :-

a) Shuttering area for 1 (one) no. block =

4 x   0.45   x   0.3   =   0.54   sqm

Shuttering area for 1cum block =

1 x   16.46   x   0.54   =   8.89   sqm

For this particular job one steel shutter can be used for approximately 50 times.

Hence shuttering area for 1 cum block=

8.89   /   50   =   0.1778 sqm

Cost of Shuttering   @   Rs. 333.9   /sqm   =   Rs. 59.36

Reference SoR'2023, code- 5.8.1.1

b) Polythene :-

Quantity of Polythene required =

16.46   x   0.5   x   0.5   =   4.115   sqm

Deduct 1.0 sqm being considered with original item of centering and shuttering

Hence Polythene reqd=   4.115 -   1.00   =   3.115   sqm

Cost of ploythene   @   Rs. 37.00 /   sqm   =   (Ref. M-147)   Rs. 115.26

c) Shutter oil   L.S   Rs. 70.00

iv) Cost of labour =

i)	Mason	0.75	@	Rs. 512.00	/no/day	=	Rs. 384.00
ii)	Helper	0.75	@	Rs. 447.00	/no/day	=	Rs. 335.25
		Add 1/6th day off				=	Rs. 119.88
		Hence total cost of labour				=	**Rs. 839.13**

v) **Sundries (L.S)**				Rs. 100.00
Total cost = i(a)+i(b)+ii(a)+ii(b)+iii(b)+iii(c)+iv+v =				Rs. 3,453.02
Add for Water charges	@	1%		Rs. 34.53
				Rs. 3,487.55
Add GST (multiplying factor)		0.2127		Rs. 741.80
				Rs. 4,229.36
Add for contractor profit and overheads	@	15%		Rs. 634.40
=				Rs. 4,863.76
Add cess	@	1%		Rs. 48.64
			Total A	Rs. 4,912.40
Rate per cum			Total (A+iii(a))	**Rs. 4,971.76**

(Rupees Four Thousand Nine Hundred Seventy One and paisa Seventy Six) only

5.5	Placing of sand cement/cement concrete blocks of size 0.45m X 0.45m X 0.30m in slope of river bnak and in river bed including preperation of bed or launching apron as per direction of the Engineer - in- Charge.

5.5.1	Cement Concrete block

		quantity	unit	rate		amount
Considering 60 nos. of cement cement concrete block.						
	Size of block 0.45mX0.45mX0.30m					
A.Labour						
	i) Mistry					
		1 nos	@	Rs. 475.00	/nos	Rs. 475.00
	ii) Coolie					
		2 nos	@	Rs. 391.00	/nos	Rs. 782.00
						Rs. 1,257.00
				Add 1/6th day off=		Rs. 209.50
				Total (A)		Rs. 1,466.50
B.	Sundries (L.S)			Total (B)		Rs. 30.00
				Total (A+B)		Rs. 1,496.50
	Add for Water charges		@	1%		Rs. 14.97
						Rs. 1,511.47
	Add GST (multiplying factor)			0.2127		Rs. 321.49
						Rs. 1,832.95
Add for contractor profit and overheads			@	15%		Rs. 274.94
				=		Rs. 2,107.90
	Add cess		@	1%		Rs. 21.08
						Rs. 2,128.98
	Rate per unit		say	(Rs. 2128.98/60)		**Rs. 35.48**

(Rupees Thirty Five and paisa Forty Eight)

5.5.2	Sand Cement block

		quantity	unit	rate		amount
Considering 60 nos. of cement cement concrete block.						
	Size of block 0.45mX0.45mX0.30m					
A.Labour						
	i) Mistry					
		0.8 nos	@	Rs. 475.00	/nos	Rs. 380.00
	ii) Coolie					
		1.8 nos	@	Rs. 391.00	/nos	Rs. 703.80
						Rs. 1,083.80
				Add 1/6th day off=		Rs. 180.63
				Total (A)		Rs. 1,264.43
B.	Sundries (L.S)			Total (B)		Rs. 30.00
				Total (A+B)		Rs. 1,294.43
	Add for Water charges		@	1%		Rs. 12.94
						Rs. 1,307.38
	Add GST (multiplying factor)			0.2127		Rs. 278.08
						Rs. 1,585.46
Add for contractor profit and overheads			@	15%		Rs. 237.82
				=		Rs. 1,823.28
	Add cess		@	1%		Rs. 18.23
						Rs. 1,841.51
	Rate per unit		say	(Rs. 1841.51/60)		**Rs. 30.69**

(Rupees Thirty and paisa sixty nine)

5.6	**Joining of CC Blocks of size 0.45mx 0.45mx 0.30m with 12 mm thick cement mortar 1:6 (1 cement : 6 river sand) to make panels as per drawing and direction of Engineer- in- Charge. in slopes of embankments and River banks etc.**

a) Materials :-

	Let the volume of each panel =	1.8 x		1.8 x	0.6		=	1.944	cum
	Volume of mortar required for joining blocks. [(1.80 X 1.80) + (2 X 3 X 1.80 X 0.60)] X 0.012							0.11664	cum
	Total volume of pannel including mortar volume				=			2.06064	cum
	Volume of cement mortar for each pannel		=	0.05660 cum					
	Cost of 1 cum of cement mortar (1:6) mix (1 cement : 6 fine sand)		=	Rs. 2,957.30	per cum			Rs. 167.39	
	(SH -03 page 2 no:3:1:6 of SOR-2023)								
	Cost of cement mortars per cum			Total (a)			=	Rs. 167.39	

b) Labour:- ***for 10 cum.***

i)	Mason (1st class)	8	nos @	Rs. 475.00	/No.	=	Rs. 3,800.00
ii)	Helper	16	nos @	Rs. 391.00	/No.	=	Rs. 6,256.00
iii)	Bhisti	3	nos @	Rs. 391.00	/No.	=	Rs. 1,173.00
				Add 1/6th day off		=	Rs. 1,871.50
							Rs. 13,100.50
	Cost of labour per cum			Total (b)		=	Rs. 1,310.05
C)	Sundries			Total (c)			Rs. 25.00
	Total cosr of material, labour and sundries (a+b+c)					=	Rs. 1,502.44
	Add for Water charges		@	1%			Rs. 15.02
							Rs. 1,517.47
	Add GST (multiplying factor)			0.2127			Rs. 322.77
							Rs. 1,840.23
	Add for contractor profit and overheads		@	15%			Rs. 276.04
							Rs. 2,116.27
	Add cess		@	1%			Rs. 21.16
							Rs. 2,137.43
	Rate per cum panel			say			**Rs. 2,137.00**

(Rupees Two Thousand One Hundred and Thirty Seven and paisa zero zero) only

5.7	**Providing & fitting fixing 80 mm dia G.I pipes as weep holes including cutting as per required length etc in the centre portion of each panel of blocks as per direction of Engineer-in-charge.**

Considering 10.00 mtr. Length

1	Materials							
	80 mm dia G.I. pipes medium class as per IS:1239							
		10	mtr	@	Rs. 596.00	per meter	=	Rs. 5,960.00
				SOR(Building) 2023, code No-19035				
2	Labour							
	i)Mistry	0.10	no	@	Rs. 475.00	per meter	=	Rs. 47.50
	ii)Helper	0.20	no	@	Rs. 391.00	per meter	=	Rs. 78.20
						Add 1/6th day off	=	Rs. 20.95
3	Sundries							Rs. 20.00
						Total (1+2+3) =		Rs. 6,126.65
	Add for Water charges			@	1%			Rs. 61.27
								Rs. 6,187.92
	Add GST (multiplying factor)				0.2127			Rs. 1,316.17
								Rs. 7,504.09
	Add for contractor profit and overheads			@	15%			Rs. 1,125.61
								Rs. 8,629.70
	Add cess			@	1%			Rs. 86.30
								Rs. 8,716.00
	Rate per meter				(8716/10)			**Rs. 871.60**

(Rupees Eight hundred Seventy One and paisa sixty) only

5.8	**Supplying testing and installation of Woven jute Geotextile (JGT) by special water repellant treatment having pore size (O_{90}) 300 to 400 micron & untreated weight of 760 gsm thickness 2 mm width 1000 mm tensile strength 21 KN/mtr(in wrap direction)X21 KN/mtr(in weft direction) strain at breeak 10%(both in wrap and weft directions) over a prepared bed and providing side lapping of 150mm and horizontal lapping of 250mm duly secured to slope of embankment by U-shaped M.S staples(11gauge) at an interval of 750 mm as per direction of Engineer - in- Charge. The rate is including of preparation of bed and inclusive of all Govt taxes duties cess as leviable transportation from a reputed jute mill at/near Agartala to the work site upto 100km loading & unloading and storage of the material at site etc complete(Payment to be made on the basis of measurement on finished surface)**

Analysis of Rate per Square Metre

i)	Cost of woven JGT treated other than bittumen as per specification (exfactory rate near Agartala)			=		Rs. 85.00
ii)	Extra for tapping @ 10%				=	Rs. 8.50
iii)	Cost of nails LS				=	Rs. 5.00
iv)	Testing charge of JGT for every 16000 sqm =				Rs. 6,000.00	
	Hence cost per sqm			6000/16000 = 0.38		
					Say	Rs. 0.40
v)	Carriage of JGT including loading and unloading from factory near Agartala to the site of work.					Rs. 0.25
vi)	Labour for laying JGT including preparation of bed and fixing JGT in position with nails etc.					
	Rate per 100 sq metre.					
a)	Mason	0.3	Rs. 475.00	/No.	Rs. 142.5	
b)	Helper	2	Rs. 391.00	/No.	Rs. 782.00	
			Add 1/6th day off=		Rs. 154.08	
					Rs. 1,078.58	
		Cost per Sqm (1078.58/100)=				Rs. 10.79
vii)	Sundries (L.S)					Rs. 0.20
					Total =	Rs. 110.14
	Add for Water charges			@	1%	Rs. 1.10
						Rs. 111.24
	Add GST (multiplying factor)				0.2127	Rs. 23.66
						Rs. 134.90
	Add for contractor profit and overheads			@	15%	Rs. 20.23
				=		Rs. 155.13
	Add cess			@	1%	Rs. 1.55
						Rs. 156.68
	Rate per sqm				say	**Rs. 157.00**

(Rupees One Hundred fifty seven and paisa zero zero) only.

5.9	**Manufacturing & supplying of machine made PVC wire crates chain link type made by S.W.G PVC wire bearing 12/10 SW. GI wire inside the PVC wire, size of cage 1500 mm. X 600 mm. X 450 mm. having square mesh of 80mm. X 80mm. including carrying to the work site as per direction of the Engineer-in charge (Weight of each cage shall not be less than 7.80 kg)**

Considering for 100 nos SWG PVC Wire Crates

a) Material cost:

Surface Area of the cage =2[(1.5x0.6)+(0.6x0.45)+(1.5x0.45)] = 3.69 Sqm

Legth of 12/10 SWG weir= 1.00m x 47 + 3.69m x 13 = 94.97m.

Add. 30% for chain link, lapping at joint & tie in in/c wastage = 123.461 m

= 12346.10 cm

Cross sectional area of wire [11 SWG(2.946mm.dia)- the average of 12/10SWG]- 6.8183mm^2=0.068183cm^2.

Therefore volume of the wire-12346.1cm x 0.068183cm2=841.794cm^3.

Weight @7.8g/cm3 = 841.794 x7.8=6565.993g.

Add 20% for weight of PVC insulation= 7879.192 g

= 7.87919 Kg

Hence weight for 100 nos SWG PVC Wire Crates= 787.919 Kg

As per estimate slip of Satyananda Sharma, Govt. Civil and Electrical Contractor and Supplier.

	787.919	Kg	Rs. 140.00	per Kg	Rs. 1,10,308.68
		basic rate of material PWD (WR)			
b) Labour cost for making case:					
i)Mistry	1	Day	Rs. 475.00		Rs. 475.00
ii)Bandhani/Helper	1.6	Day	Rs. 391.00		Rs. 625.60
				Add 1/6th day off=	Rs. 183.43
				Total (b) =	Rs. 1,284.03
c) Carriage					
	0.787919	tonne	130.80		Rs. 103.06
[code 0468 of SOR,2023 PWD(Building)]					
				Total (c) =	Rs. 103.06
c)Sundries (L.S)				Total (d) =	Rs. 28.00
				Total (a+b+c+d) =	Rs. 1,11,723.78
Add for Water charges	@		1%		1117.24
					112841.01
Add GST (multiplying factor)			0.2127		24001.28
					136842.30
Add for contractor profit and overheads			15%		Rs. 20,526.34
					157368.64
Add cess	@		1%		1573.69
	Grand total				158942.33
				Rate per kg (Rs. 158942.33/787.919)=	Rs. 201.72
				say	**Rs. 202.00**

(Rupees Two hundred two) only

5.10	**Supplying and stacking mixed class brick bats (50% first class & 50% mix class) including carriage loading & unloading at the site of work complete as per direction of the Engineer-in-charge**

Considering for 100 nos SWG PVC Wire Crates

a) Cost of materials				
i)Mix class brick bats 1.50 x 0.60 x 0.45 x 50 = 40.50 cum [Code 20039, SOR 2023, PWD(Building)	40.50	cum	Rs. 2,200.00	Rs. 89,100.00
b) Carriage to work site				
brick aggregate 40 mm nominal size and above	40.5	cum	Rs. 159.10	Rs. 8,259.57
[Code 0404, SOR 2023, PWD(Building)]				
c)Sundries (L.S)				28.00
			Total (a+b+c) =	Rs. 97,387.57
Add for Water charges	@	1%		973.88
				98361.45
Add GST (multiplying factor)		0.2127		20921.48
				119282.93
Add for contractor profit and overheads		15%		Rs. 17,892.44
				137175.36
Add cess	@	1%		1371.75
				138547.12
			Rate per cum (Rs.138547.12/40.5) =	**3420.92**

(Rupees Three thousand Four hundred Twenty and paisa Ninety Two) only

5.11	**Labour charge for filling/packing of mixed class brick bats in S.W.G PVC wire crates of size of 1500 mm. X 600 mm. X 450 mm. fastening with SWG GI wire and placing in river bed/slope properly as per direction of the Engg-in-Charge.**

Considering for 12 nos.SWG PVC wire crates

a) Labour cost:				
i. Mistry	1 no	Day	447	447.00
ii. Helper	2 no	Day	391	782.00
			Add 1/6th day off=	204.83
			Total (a) =	1433.83
b)Sundries (L.S)				28.00
			Total (a+b) =	1461.83
Add for Water charges	@	1%		14.62
				1476.45
Add GST (multiplying factor)		0.2127		314.04
				1790.49
Add for contractor profit and overheads		15%		Rs. 268.57
				2059.07
Add cess	@	1%		20.59
				2079.66
			Rate per no=(Rs.2079.66/12)=	**173.30**

(Rupees one hundred seventy three and paisa thirty) only

5.12	**Manufacturing & supplying of machine made 4 mm G.I. wire crates chain link type size of cage 1500 mm. X 600 mm. X 450 mm. having square mesh of 80mm. X 80mm. including carrying to the work site as per direction of the Engineer-in charge (Weight of each cage shall not be less than 7.80 kg)**

Considering for 100 nos G.I. Wire Crates

a) Material cost:

Surface Area of the cage =2[(1.5x0.6)+(0.6x0.45)+(1.5x0.45)] = 3.69 Sqm

Legth of 12/10 SWG weir= 1.00m x 47 + 3.69m x 13 = 94.97m.

Add. 30% for chain link, lapping at joint & tie in in/c wastage = 123.461 m

= 12346.1 cm

Cross sectional area of wire [11 SWG(2.946mm.dia)- the avg of 12/10SWG]-6.8183mm2=0.068183cm2.

Therefore volume of the wire-12346.1cm x 0.068183cm2=841.794cm3.

Weight @7.8g/cm3 = 841.794 x7.8=6565.993g.

Add 20% for weight of G.I insulation=	7879.1916	**g**		
=	7.8791916	**Kg**		
Hence weight for 100 nos G.I. Wire Crates=	787.9192	**Kg**		
@	120	per Kg		94550.299
(Basic Rates)				
b) Labour cost for making case:				
i)Mistry	1	Day	447.00	447.00
ii)Bandhani/Helper	1.6	Day	391.00	625.60
Add 1/6th day off=				178.77
c) Carriage				
i) Mechanical (For lead of 10.00km)	0.787919	tonne	256.1	136.57
[Refer 1.1.11 of SOR,PWD(Building)]				
ii) Manual:(For lead of -300m	0.787919	tonne	199.4	98.37
(Refer 1.2.11 of SOR,PWD(Building)				
			Total (A) =	96036.606
Add cess @ 1% Total (A) =				960.36606
Add water charges and sundries @ 1% Total (A) =				960.36606
Add 15% contractors profit				14405.491
Grand total				112362.83
Rate per kg (Rs. 1,12362.83/787.919)=				**142.61**

(Rupees one hundred forty two and paisa Sixty One) only

SCHEDULE OF RATES, 2023

CHAPTER – 6
MISCELLANEOUS
(ANALYSIS)

PUBLIC WORKS DEPARTMENT
(WATER RESOURCES)

ANALYSIS OF RATE
CHAPTER-6
MISCELLANEOUS

6.1	**Desilting of Lake/river etc. by using contractor's Amphibian dredger machine, having capacity of the dredger of minimum 67.2 cum per hour in solid state excluding isolated bolder and hard rock for distance of 600.0 mtr. from lake/river bank and de-silted soil to be dumped at suitable place for making road, Islands etc. as per direction of the Engineer-in-charge.**

1) Machineries.

a	Cost of machine in/c transportation & other accessories & fitting.		900.00	Rs. Lakh
b	Deduct salvage value 15% of 'a'		135.00	Rs. Lakh
c	Total value to be depriciated (a-b)		765.00	Rs. Lakh
d	Economic life of the machine.		25000.00	Hours
e	Depreciation per hour (c/d)		3060.00	Rs./hr
f	Storage per hour i.e 1% of 'e'		30.60	Rs./hr
g	Repair charge per hour in/c mtc, replacement of spare parts (150% of 'e')		4590.00	Rs./hr
h	Interest of capital cost per hour (considering 10% per anum of ('a')		1027.40	Rs./hr
		Total	8708.00	Rs./hr

2) Running Charges:-

a) Operational staff/labour wages-

Sl No.	Particulars	Number	Rate	Wages/month (Rs.)	
1	Operator	1	37000.00	37000.00	Rs.
2	Dredger Assistant	1	18000.00	18000.00	Rs.
3	Labour for fitting / dismentaling and refitting of pipe during operation of dredger.	5	7500.00	37500.00	Rs.
4	Pipeman required in 10 numbers 3 times in a month during changing of bucket, cutter crown, dismentaling of pipe in/c refitting fixing.	3x10=30 nos	350/day	10500.00	Rs.
			Total	103000.00	

Running charges per hour (Rs./Hr) (Assuming 21 working days/month and 8 working hrs.)	613.10	Rs./Hr

b) Service Charges:-

Sl No.	*Particulars*	*Number*	*Rate*	*Wages/month (Rs.)*	
1	Mechanic	1	20100.00	20100.00	Rs.
2	handyman	1	7500.00	7500.00	Rs.
			Total	27600.00	

Wages per hour (Rs./Hr) (Assuming 21 working days/month and 8 working hrs.)	164.29	Rs./Hr

3) Cost of POL:-

POL for every 250 hrs. servicing-

Sl No.	Particulars	Number	Rate	Wages/month (Rs.)	
1	Hydaulic oil (in lts)**(M.R.)**	100	177.8	17780.00	Rs.

2	Lubricant oil (in lts)**(M.R.)**	140	277.00	38780.00	Rs.
3	Grease (in kg)**(M.R.)**	40	268.5	10740.00	Rs.
4	Waste Cotton (in kg)**(M.R.)**	40	50	2000.00	Rs.
			Total	69300.00	
	h			277.20	Rs./Hr

Sl No.	Particulars	Unit	Rate	Amount (Rs)	
4)	Gypsum as coagulant 8.44Kg/hr @ Rs.**(M.R.)**	per Kg	12.5	105.5	Rs./hr
5)	Fuel (HSD)				
	Consumption of fuel 45 lts/hr @ Rs.	per ltr	88.44	3979.8	Rs/hr
6)	Safety boat for carrying operational	per day	480	60.00	Rs/hr
7)	Total running charges (2a + 2b + 3 + 4+5+6)			5199.88	Rs/hr
8)	Total Cost/Hr. i.e (1 + 7)			13907.88	Rs/hr
	Dredging Capacity/hr (As per manual)= 420.0 cum/hr				
9)	Dredging Capacity/hr (Assuming 80% efficiency/hr)			336.00	cum/hr
10)	Assuming 20 % solid in sludge silt removed			67.20	cum/hr
11)	Cost of dredging/cum i.e (8/10)			206.96	Per cum
12)	Add water charges & sundries: @ 1%			2.07	Per cum
				209.03	
13)	Add GST (multiplying factor) 0.2127			44.46	Per cum
				253.49	
14)	Add 15 % Contractor profit with overhead			38.02	Per cum
				291.52	
15)	Add cess: @ 1%			2.92	Per cum
			Rate per cum	**294.43**	

(Rupees Two Hundred ninety four and paisa forty Three) only.

6.2	**Desilting of Lake/river etc. by departmental dredger machine, Amphibian dredger Water Master Classic-IV having capacity of the dredger 67.2 cum of solids per hour for distance of 600.0 mtr. (as per Water Master operational manual) in/c operation and running maintainance of the dredger and de-silted soil to be dumped at suitable place for making road, Islands etc. as per direction of the Engineer-in-charge. (volume of dumped soil to be determined by pre-measurement at dumping place.)**

1) Machineries.

a	Cost of machine in/c transportation & other accessories & fitting.		900.00	Rs. Lakh
b	Deduct salvage value 15% of 'a'		135.00	Rs. Lakh
c	Total value to be depriciated (a-b)		765.00	Rs. Lakh
d	Economic life of the machine.		25000.00	Hours
e	Depreciation per hour (c/d)		3060.00	Rs./hr
f	Storage per hour i.e 1% of 'e'		30.60	Rs./hr
g	Repair charge per hour in/c mtc, replacement of spare parts (150% of 'e')		4590.00	Rs./hr
h	Interest of capital cost per hour (considering 10% per anum of ('a')		1027.40	Rs./hr
		Total	35508.00	Rs./hr

2) Running Charges:-

a) Operational staff/labour wages-

Sl No.	Particulars	Number	Rate	Wages/month (Rs.)	
1	Operator	1	37000.00	37000.00	Rs.
2	Dredger Assistant	1	18000.00	18000.00	Rs.

3	Labour for fitting/dismentaling and refitting of pipe during operation of dredger.	5	7500.00	37500.00	Rs.
4	Pipeman required in 10 numbers 3 times in a month during changing of bucket, cutter crown, dismentaling of pipe in/c refitting fixing.	3x10=30 nos	350/day	10500.00	Rs.
			Total	103000.00	

Running charges per hour (Rs./Hr) (Assuming 21 working days/month and 8 working hrs.)	613.10	Rs./Hr

b) Service Charges:-

Sl No.	*Particulars*	*Number*	*Rate*	*Wages/month (Rs.)*	
1	Mechanic	1	20100.00	20100.00	Rs.
2	handyman	1	7500.00	7500.00	Rs.
			Total	27600.00	

Wages per hour (Rs./Hr) (Assuming 21 working days/month and 8 working hrs.)	164.29	Rs./Hr

3) Cost of POL:-

POL for every 250 hrs. servicing-

Sl No.	Particulars	Number	Rate	Wages/month (Rs.)	
1	Hydaulic oil (in lts)**(M.R.)**	100	177.8	17780.00	Rs.
2	Mobile oil (in lts)**(M.R.)**	140	277.00	38780.00	Rs.
3	Grease (in kg)**(M.R.)**	40	268.5	10740.00	Rs.
4	Waste Cotton (in kg)**(M.R.)**	40	50	2000.00	Rs.
			Total	69300.00	
	Cost of POL Rs./hr (for every 250 hrs servicing)			277.20	Rs./Hr

Sl No.	Particulars	Unit	Rate	Amount (Rs)	
4)	Gypsum as coagulant 8.44Kg/hr @ Rs.**(M.R.)**	per Kg	12.5	105.5	Rs./hr
5)	Fuel (HSD)				
	Consumption of fuel 45 lts/hr @ Rs.	per ltr	88.44	3979.8	Rs/hr
6)	Safety boat for carrying operational	per day	480	60	Rs/hr
7)	Total running charges (2a + 2b + 3 + 4+5+6)			5199.88	Rs/hr
8)	Total Cost/Hr. i.e (1(g) + 7)			9789.88	Rs/hr
	Dredging Capacity/hr (As per manual)= 420.0 cum/hr				
9)	Dredging Capacity/hr (Assuming 80% efficiency/hr)			336.00	cum/hr
10)	Assuming 20 % solid in sludge silt removed			67.20	cum/hr
11)	Cost of dredging/cum i.e (8/10)			145.68	Per cum
12)	Add water charges & sundries: @ 1%			1.46	Per cum
				147.14	
13)	Add GST (multiplying factor) 0.2127			31.30	Per cum
				178.44	
14)	Add 15 % Contractor profit with overhead			26.77	Per cum
				205.20	
15)	Add cess: @ 1%			2.05	Per cum
			Rate per cum	**207.25**	

(Rupees Two Hundred Seven and paisa twenty five) only.

6.3	**Supplying and spreading of coagulant including formulation of lime, gypsum, potash alum, bentonite clay, polyalumunium chloride during dredging operation at Lake/river etc. as per direction of the Engineer-in-charge.**

i) Materials:-

a) Quick lime CaO or $Ca(OH)_2$ =	55%	Rs. 60.0	/Kg =	Rs. 33.00
b) Gypsum =	15%	Rs. 12.5	/Kg =	Rs. 1.88
c) Potash alum =	5%	Rs. 60.0	/Kg =	Rs. 3.00
d) Bentonite clay =	15%	Rs. 3.2	/Kg =	Rs. 0.48
SOR(DWS),2023 SL No.28 of Basic Rate				
e) Poly ammonium chloride =	10%	Rs. 700.0	/Kg =	Rs. 70.00
Sub-total=	100%			Rs. 108.36

ii) Formulation, preparation charge in/c labour & electric energy charge = Rs. 1.08

iii) Sundries LS. = Rs. 20.00

Sub-total	=	Rs. 129.44
Add water charges : @ 1%	=	Rs. 1.29
		Rs. 130.74
Add GST (multiplying factor) 0.2127	=	Rs. 27.81
		Rs. 158.54
Add 15 % contractor's profit	=	Rs. 23.78
		Rs. 182.33
Add cess 1%	=	Rs. 1.82
Rate per Kg=		**Rs. 184.15**

(Rupees One hundred Eighty four and paisa Fifteen) only

6.4	**Filling of priming tank by water from naighbouring river/cherra or from any orher source by diesel operated pump set including the cost of service of operating staff and supply of lubricant oil, pipe assemble etc. complete as per direction of the Engineer-in-charge.**

Considering 2 hours of operation for filling of a priming tank

a) Basic rate of hiring charge of pump set

1/4 day 875.00 Rs. 218.75

As per SOR'23 PWD (Building works), Basic Rate-0117

b) Cost of operating staffs

1/4 no 512.00 Rs. 128.00

As per SOR'23 PWD (Building works), Basic Rate-0226

c) Cost of fuel(diesel) for 2 hrs operating 2.00 lts. @ Rs. 88.44 = Rs. 176.88

As per SOR'23 PWD (Building works), Basic Rate-3,01001

d) Carrying charge of pump set up to the work site. L.S = Rs. 50.00

Total	=	Rs. 573.63
Add sundries: L.S		Rs. 10.00
		Rs. 583.63
Add water charges : @ 1%		Rs. 5.74
		Rs. 589.37
Add GST (multiplying factor) 0.2127=		Rs. 125.36
		Rs. 714.72
Adding 15% on contractor's profit	=	Rs. 107.21
		Rs. 821.93
Add 1% cess		8.22
		Rs. 830.15
Rate per hour=(830.15/2)=		**Rs. 415.08**

(Rupees four hundred fifteen and paisa eight only

6.5	**Hiring charge of welding set of single phase with operating staff and carrying upto the site of work including loading and unloading (both way) complete as per direction of Engineer-in-charge.**

Considering for one day				
a) Material Cost:				
Hiring charge of welding set	1 day	Rs. 1,000.00	per day	Rs. 1,000.00
b)Labour cost				
Mechanics	1 no	699.00	per day	Rs. 699.00
Helper (Technician)	1 no	447.00	per day	Rs. 447.00
			Add 1/6th day off=	Rs. 191.00
c)carrying of welding set upto work site.			**L.S.**	Rs. 200.00
				Rs. 2,537.00
			Add sundries: L.S	20.00
				2557.00
			Add water charges & sundries: @ 1%	25.57
				2582.57
			Add GST (multiplying factor) 0.2127	Rs. 549.31
				Rs. 3,131.88
			Add 15% contractor's profit	Rs. 469.78
				Rs. 3,601.67
			Add 1% cess	36.02
			Rate per day	**Rs. 3,637.68**

(Rupees Three thousand six hundred thirty seven and paisa sixty eight) only

6.6	**Preparation of sub-grade & side slope for canal lining section with compaction of bed & side slope by wooden or steel rammers of minimum 10kg weight in/c making profile as per approved drawing & lining the same with first class bricks of flat with cement mortar 1:3 (1 cement : 3 river sand) with joint finished smooth an under layer of 6 mm thick cement mortar 1:5 (1 cement: 5 river sand) as per approved drawing & curing the same in/c balling out water when ever required with all lead & lift complete.**

The analysis has been done for 100 sq.ft= 9.295 sqm of a work materials.

A)Cement mortar 1:5 1X9.295X0.01 =	0.09295	cum	@	Rs. 3,372.90	Rs. 313.51	SOR, Bldg 23, SH: 3, 3.1.5
B)Cement mortar 1:3 1X9.295X0.006 =	0.056	cum	@	Rs. 4,758.50	Rs. 266.48	SOR, Bldg 23, SH: 3, 3.1.3
C)1st class bricks= 290 nos		Nos	@	Rs. 12.20	Rs. 3,538.00	SOR, Bldg 23, P-6, Basic rate materials

D)Carriage of bricks 290 nos considering within 5.50 km

i)Loading, Unloading & stacking= 290 nos	(mechanical)	@	Rs. 0.293	Rs. 84.97	SOR, Bldg 23, Carriage p-2

ii)Loading, Unloading & stacking=290 nos		(manual)	@	Rs. 0.190	Rs. 55.10	SOR, Bldg 23, P-6, Carriage p-3
E)Cement mortar 1:3 (1 cement: 3 Fine sand) =	0.1682	cum	@	Rs. 4,758.50	Rs. 800.38	SOR, Bldg 23, SH:3, 3.1.3, p-2
F)Loading, unloading and stacking of cement & Fine sand =						
Surface road=	5.00 km					
Katcha road=	0.50 km					
Quantity of cement required						
For (A)= (0.0045/0.12)X0.0930=	0.03488 ton					
For (B)= (0.0037/0.006)X0.0560=	0.03453 ton					
For (E)= (0.0037/0.006)X0.1682=	0.103728 ton					
Total=	0.17313 ton					
Quantity of cement required						
For (A)=	0.0930 cum					
For (B)=	).0560 cum					
For (E)=	0.1682 cum					
Total=	0.3172 cum					
a) Loading, unloading and stacking of cement						
i) Cement (Mechanical) =	0.1731	ton	@	Rs. 183.10	Rs. 31.69	SOR, Bldg 23, P-6, Carriage p-2
ii) Cement (Manual) =	0.1731	ton	@	Rs. 91.20	Rs. 15.79	SOR, Bldg 23, P-6, Carriage p-3
b) Loading, unloading and stacking of fine sand						
i)Fine sand(Mechanical) =	0.3172	cum	@	Rs. 206.00	Rs. 65.34	SOR, Bldg 23, P-6, Carriage p-2
ii) Fine sand (Manual) =	0.3172	cum	@	Rs. 157.40	Rs. 49.93	SOR, Bldg 23, P-6, Carriage p-3
G)Labour required:-(add 20%)						

i) For preparation of sub-grade= 9.295 sqm

ii) For 10 mm thick cement mortar

a) Mason first class=	1	No	@	Rs. 512.00	per day	Rs. 512.00	SOR, Bldg 23, P-6, labour p-3
b) Collie=	1	No	@	Rs. 391.00	per day	Rs. 391.00	SOR, Bldg 23, P-6, labour p-3
c)Bhisti=	1	No	@	Rs. 391.00	per day	Rs. 391.00	SOR, Bldg 23, P-6, labour p-3
d) Scafolding & Sundries (L.S)=						Rs. 20.00	
iii) Cement mortar							
a) Foreman=	1/2	No	@	Rs. 512.00	per day	Rs. 256.00	SOR, Bldg 23, P-6, labour p-3
b) Collie(male)=	3/4	No	@	Rs. 391.00	per day	Rs. 293.25	SOR, Bldg 23, P-6, labour p-3
c) Collie(Female)=	1	No	@	Rs. 391.00	per day	Rs. 391.00	SOR, Bldg 23, P-6, labour p-3
d)Bhisti=	1/6	No	@	Rs. 391.00	per day	Rs. 65.17	SOR, Bldg 23, P-6, labour p-3

H) Add 1/6 of Rs. 1832.50 as paid off day in a weak	Rs. 305.42
	Rs. 7,846.03
I)Add for sundries: L.S	Rs. 50.00
	Rs. 7,896.03
I)Add for water charge @ 1 %	Rs. 78.46
	Rs. 7,974.49
J) Add GST (multiplying factor) 0.2127	Rs. 1,696.17
	Rs. 9,670.66
J) Add 15% Contractor Profit	Rs. 1,450.60
	Rs. 11,121.26
L) Add 1% Cess	Rs. 111.21
	Rs. 11,232.47
So, Rate per sqm= Rs. 11232.42/9.295 per sqm	Rs. 1,208.44

(Rupees One Thousand Two Hundred Eight and paisa Forty Four) only

6.7	**Desilting of earth, silt, garbage, slush and other solid deposits etc. from the existing canal mannually to bring it to the required section for smooth flow in the canal including disposal of excavated material outside of the canal with a lead of 50 m. and all lifts including execution of work in or under water, liquid mud and under foul conditions including the cost of taking care of canal section. Dewatering of stagnent or flowing or seepage water/sludge/liquid marsy entering into the canal from any sources as required for satisfactory execution of work including taking out the excavated material outside the canal as per directions of Engineer-in-charge. Disposal of excavated materials, such as earth, silt, garbage, slush and other solid deposits etc. to be deposited & properly levelled over the canal embankment.**

The analysis has been done for 10 cum.

a)Labour cost (add 20%)

i) Mate	1.2	No	@	Rs. 391.00	per day	Rs. 469.20	SOR, (R&B)23, L- 01
ii) Majdoor (Unskilled)	3.54	No	@	Rs. 391.00	per day	Rs. 1,384.14	SOR, (R&B)23, L- 01

b) Total=		Rs. 1,853.34
c) Dewatering 10% of (b)		Rs. 185.33
(d) Total of (b+c)		Rs. 2,038.67
Add Sundries: L.S		Rs. 20.00
		Rs. 2,058.67
Add 1% Water charges		Rs. 20.39
		Rs. 2,079.06
Add GST (multiplying factor) 0.2127		Rs. 442.22
		Rs. 2,521.28
Add 15% Contractor's profit		Rs. 378.19
		Rs. 2,899.47
Add 1% Cess		Rs. 28.99
	Total(e)	Rs. 2,928.46
(f)Extra for additional lift beyond 1.5 m upto 3.00 m		
Considering 50% quantity i.e for 5.00 cum @ 66.10 (SOR-BLD,2023,2.18)		Rs. 330.50
	Total(e+f)=	Rs. 3,258.96
Rate per cum= Rs. 3258.96/10		Rs. 325.90

(Rupees Three hundred Twenty five and paisa ninety) only

6.8	**Labour charge for lifting of Submersible pump motor set (2HP/3HP) of 70 ft to 100 ft column pipe complete as per direction of the Engineer-in-charge.**				
a)	**Labour cost**				
i)	Fitter (Gr-I) (1 No x 1/2 day)	1/2	Per Day	512.00	256.00
ii)	Helper (1 No x 1 day)	1	Per Day	447.00	447.00
b)	**Hiring of requied assembles complete**				
	LS				150.00
c)	**carrying of assembles**			LS	150.00
	Add for Sundries(L.S)				29
					1032.00
	Add for Water charge @1%				10.32
					1042.32
	Add GST(Multipling factor) 0.2127				221.70
					1264.02
	Add contractors profit & overheads @ 15%				189.60
					1453.62
	Add Cess @1%				14.54
	Rate Per no				**1468.16**

(Rupees One thousand four hundred sixty eight & paisa sixteen) only

6.9	**Labour charge for lowering of Submersible pump motor set (2HP/3HP) at a depth of 70 ft to 100 ft column pipe including fitting fixing nuts & bolts etc complete as per direction of the Engineer-in-charge.**				
a)	**Material cost**				
	Nuts and bolts	1.5	kg	110.00	165.00
b)	**Labour cost**				
i)	Fitter (Gr-I) (1/2 No x 1 day)	1/2	Per Day	512.00	256.00
ii)	Helper (1 No x 1 day)	1	Per Day	447.00	447.00
c)	**Hiring of requied assembles complete**				
	LS				150.00
d)	**carrying of assembles**			LS	150.00
	Add for Sundries(L.S)				29
					1197.00
	Add for Water charge @1%				11.97
					1208.97
	Add GST(Multipling factor) 0.2127				257.15
					1466.12
	Add contractors profit & overheads @ 15%				219.92
					1686.04
	Add Cess @1%				16.86
	Rate Per no				**1702.90**

(Rupees One thousand seven hundred two & paisa ninety) only

6.10	Supplying and installation of water lubricated subermissible pump having capacity upto 2000 GPH at total head of 45 mtr. Coupled with submerssible motor suitable for 240 volts (+10% verification) single phase along with 35 mtr long 2.5sqm, PVC insulated 3 core flat cable conforming to IS code in/c fitting , fixing and lowering 40 mm dia GI pipe upto 100 ft.(30 mtr) etc. complete as per direction of the Engineer-in-charge.

6.10.1)	2HP 230V 50HZ Borewell (Lubi Make)

a)	**Material Cost**				
	Submerssible Pump	1	set	Rs. 19,822.00	Rs. 19,822.00
	2.5sqm, PVC insulated 3 core flat cable	35	mtr	Rs. 121.40	Rs. 4,249.00
		SOR(DWS)2023 basic rate 938			
	40 mm dia GI pipe	30	mtr	Rs. 295.00	Rs. 8,850.00
	40 mm dia GI flange with washer	9	Nos	Rs. 185.00	Rs. 1,665.00
	Nut and bolts	4	kg	Rs. 110.00	Rs. 440.00
B)	**Labour cost**				
i)	Mechanic	1/2	Per Day	Rs. 699.00	Rs. 349.50
ii)	Helper	1	Per Day	Rs. 447.00	Rs. 447.00
c)	**Carrying in/c loading & unloading from respective scheme to**				
	L.S				250.00
	Add for Sundries(L.S)				50
					36122.50
	Add for Water charge @1%				361.23
					36483.73
	Add GST(Multipling factor) 0.2127				7760.09
					44243.81
	Add contractors profit & overheads @ 15%				6636.57
					50880.39
	Add Cess @1%				508.80
	Rate Per no				Rs. 51,389.19

(Rupees Fifty One thousand three hundred eighty nine and paisa nineteen) only

6.10.2)	2HP 230V 50HZ Borewell (Crompton

a)	**Material Cost**				
	Submerssible Pump	1	set	Rs. 22,593.00	Rs. 22,593.00
	2.5sqm, PVC insulated 3 core flat cable	35	mtr	Rs. 121.40	Rs. 4,249.00
		SOR(DWS)2023 basic rate 938			
	40 mm dia GI pipe	30	mtr	Rs. 295.00	Rs. 8,850.00
	40 mm dia GI flange with washer	9	Nos	Rs. 185.00	Rs. 1,665.00
	Nut and bolts	4	kg	Rs. 110.00	Rs. 440.00
B)	**Labour cost**				
i)	Mechanic	1/2	Per Day	Rs. 699.00	Rs. 349.50

ii)	Helper	1	Per Day	Rs. 447.00	Rs. 447.00
c)	**Carrying in/c loading & unloading from respective scheme to**				
	L.S				250.00
	Add for Sundries(L.S)				50
					38893.50
	Add for Water charge @1%				388.94
					39282.44
	Add GST(Multipling factor) 0.2127				8355.37
					47637.81
	Add contractors profit & overheads @ 15%				7145.67
					54783.48
	Add Cess @1%				547.83
	Rate Per no				Rs. 55,331.32

(Rupees fifty five thousand three hundred thirty one and paisa thirty two) only

6.10.3)	**3HP 230V 50HZ Borewell (Lubi Make)**				
a)	**Material Cost**				
	Submerssible Pump	1	set	Rs. 24,432.00	Rs. 24,432.00
	2.5sqm, PVC insulated 3 core flat cable	35	mtr	Rs. 121.40	Rs. 4,249.00
		SOR(DWS)2023 basic rate 938			
	40 mm dia GI pipe	30	mtr	Rs. 295.00	Rs. 8,850.00
	40 mm dia GI flange with washer	9	Nos	Rs. 185.00	Rs. 1,665.00
	Nut and bolts	4	kg	Rs. 110.00	Rs. 440.00
B)	**Labour cost**				
i)	Mechanic	1/2	Per Day	Rs. 699.00	Rs. 349.50
ii)	Helper	1	Per Day	Rs. 447.00	Rs. 447.00
c)	**Carrying in/c loading & unloading from respective scheme to**				
	L.S				250.00
	Add for Sundries(L.S)				50
					40732.50
	Add for Water charge @1%				407.33
					41139.83
	Add GST(Multipling factor) 0.2127				8750.44
					49890.27
	Add contractors profit & overheads @ 15%				7483.54
					57373.81
	Add Cess @1%				573.74
	Rate Per no				Rs. 57,947.54

(Rupees fifty seven thousand nine hundred forty seven and paisa fifty four) only

6.10.4)	3HP 230V 50HZ Borewell (Crompton				
a)	**Material Cost**				
	Submerssible Pump	1	set	Rs. 29,661.00	Rs. 29,661.00
	2.5sqm, PVC insulated 3 core flat cable	35	mtr	Rs. 121.40	Rs. 4,249.00
		SOR(DWS)2023 basic rate 938			
	40 mm dia GI pipe	30	mtr	Rs. 295.00	Rs. 8,850.00
	40 mm dia GI flange with washer	9	Nos	Rs. 185.00	Rs. 1,665.00
	Nut and bolts	4	kg	Rs. 110.00	Rs. 440.00
B)	**Labour cost**				
i)	Mechanic	1/2	Per Day	Rs. 699.00	Rs. 349.50
ii)	Helper	1	Per Day	Rs. 447.00	Rs. 447.00
c)	Carrying in/c loading & unloading from respective scheme to				
	L.S				250.00
	Add for Sundries(L.S)				50
					45961.50
	Add for Water charge @1%				459.62
					46421.12
	Add GST(Multipling factor) 0.2127				9873.77
					56294.89
	Add contractors profit & overheads @ 15%				8444.23
					64739.12
	Add Cess @1%				647.39
	Rate Per no				Rs. 65,386.51

(Rupees sixty five thousand three hundred eighty six and paisa fifty one) only

6.11	Repairing of single phase motor starter in/c necessary electric wiring as per direction of the Engineer-in-charge.				
6.11.1	**30A Amps Meter**				
a)	**Material Cost**				
	30A Amps Meter	1	Nos	Rs. 210.00	Rs. 210.00
b)	**Labour cost**				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 274.50
	Add for Water charge @1%				Rs. 2.75
					Rs. 277.25
	Add GST(Multipling factor) 0.2127				Rs. 58.97
					Rs. 336.22
	Add contractors profit & overheads @ 15%				Rs. 50.43
					Rs. 386.65
	Add Cess @1%				Rs. 3.87
	Rate Per no				**Rs. 390.51**

(Rupees three hundred ninety and paisa fifty one) only

6.11.2	300A Voltmeter				
a)	**Material Cost**				
	300A Voltmeter	1	Nos	Rs. 210.00	Rs. 210.00
b)	**Labour cost**				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 274.50
	Add for Water charge @1%				Rs. 2.75
					Rs. 277.25
	Add GST(Multipling factor) 0.2127				Rs. 58.97
					Rs. 336.22
	Add contractors profit & overheads @ 15%				Rs. 50.43
					Rs. 386.65
	Add Cess @1%				Rs. 3.87
	Rate Per no				Rs. 390.51

(Rupees three hundred ninety and paisa fifty one) only

6.11.3	2 Pole Contactor				
a)	**Material Cost**				
	2 Pole Contactor	1	Nos	Rs. 1,525.00	Rs. 1,525.00
b)	**Labour cost**				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 1,589.50
	Add for Water charge @1%				Rs. 15.90
					Rs. 1,605.40
	Add GST(Multipling factor) 0.2127				Rs. 341.47
					Rs. 1,946.86
	Add contractors profit & overheads @ 15%				Rs. 292.03
					Rs. 2,238.89
	Add Cess @1%				Rs. 22.39
	Rate Per no				**Rs. 2,261.28**

(Rupees two thousand two hundred sixty one and paisa twenty eight) only

6.11.4	Capacitor				
a)	**Material Cost**				
	Capacitor	1	Nos	Rs. 425.00	Rs. 425.00
b)	**Labour cost**				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 489.50
	Add for Water charge @1%				Rs. 4.90

					Rs. 494.40
	Add GST(Multipling factor) 0.2127				Rs. 105.16
					Rs. 599.55
	Add contractors profit & overheads @ 15%				Rs. 89.93
					Rs. 689.49
	Add Cess @1%				Rs. 6.89
	Rate Per no				**Rs. 696.38**

(Rupees six hundred ninety six and paisa thirty eight) only

6.11.5	**Green Push Button**				
a)	**Material Cost**				
	Green Push Button	1	Nos	Rs. 170.00	Rs. 170.00
b)	**Labour cost**				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 234.50
	Add for Water charge @1%				Rs. 2.35
					Rs. 236.85
	Add GST(Multipling factor) 0.2127				Rs. 50.38
					Rs. 287.22
	Add contractors profit & overheads @ 15%				Rs. 43.08
					Rs. 330.31
	Add Cess @1%				Rs. 3.30
	Rate Per no				**Rs. 333.61**

(Rupees three hundred thirty three and paisa sixty one) only

6.11.6	**Red Push Button**				
a)	**Material Cost**				
	Red Push Button	1	Nos	Rs. 130.00	Rs. 130.00
b)	**Labour cost**				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 194.50
	Add for Water charge @1%				Rs. 1.95
					Rs. 196.45
	Add GST(Multipling factor) 0.2127				Rs. 41.78
					Rs. 238.23
	Add contractors profit & overheads @ 15%				Rs. 35.73
					Rs. 273.96
	Add Cess @1%				Rs. 2.74
	Rate Per no				**Rs. 276.70**

(Rupees two hundred seventy six and paisa seventy) only

6.11.7	5 Way Connector

a)	**Material Cost**				
	5 Way Connector	1	Nos	Rs. 130.00	Rs. 130.00
b)	**Labour cost**				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 194.50
	Add for Water charge @1%				Rs. 1.95
					Rs. 196.45
	Add GST(Multipling factor) 0.2127				Rs. 41.78
					Rs. 238.23
	Add contractors profit & overheads @ 15%				Rs. 35.73
					Rs. 273.96
	Add Cess @1%				Rs. 2.74
	Rate Per no				**Rs. 276.70**

(Rupees two hundred seventy six and paisa seventy) only

6.11.8	Voltmeter Switch

a)	**Material Cost**				
	Voltmeter Switch	1	Nos	Rs. 85.00	Rs. 85.00
b)	**Labour cost**				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 149.50
	Add for Water charge @1%				Rs. 1.50
					Rs. 151.00
	Add GST(Multipling factor) 0.2127				Rs. 32.12
					Rs. 183.11
	Add contractors profit & overheads @ 15%				Rs. 27.47
					Rs. 210.58
	Add Cess @1%				Rs. 2.11
	Rate Per no				**Rs. 212.68**

(Rupees two hundred twelve and paisa sixty eight) only

6.11.9	Panel Indicator

a)	Material Cost				
	Panel Indicator	1	Nos	Rs. 85.00	Rs. 85.00
b)	Labour cost				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 149.50
	Add for Water charge @1%				Rs. 1.50
					Rs. 151.00

	Add GST(Multipling factor) 0.2127				Rs. 32.12
					Rs. 183.11
	Add contractors profit & overheads @ 15%				Rs. 27.47
					Rs. 210.58
	Add Cess @1%				Rs. 2.11
	Rate Per no				**Rs. 212.68**

(Rupees two hundred twelve and paisa sixty eight) only

6.11.10	Relay (Fixed)				
a)	**Material Cost**				
	Relay (Fixed)	1	Nos	Rs. 210.00	Rs. 210.00
b)	**Labour cost**				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 274.50
	Add for Water charge @1%				Rs. 2.75
					Rs. 277.25
	Add GST(Multipling factor) 0.2127				Rs. 58.97
					Rs. 336.22
	Add contractors profit & overheads @ 15%				Rs. 50.43
					Rs. 386.65
	Add Cess @1%				Rs. 3.87
	Rate Per no				**Rs. 390.51**

(Rupees Three hundred ninety and paisa fifty one) only

6.11.11	Overload Relay				
a)	**Material Cost**				
	Overload Relay	1	Nos	Rs. 765.00	Rs. 765.00
b)	**Labour cost**				
i)	Mechanics	0.05	Per Day	Rs. 699.00	Rs. 34.95
ii)	Bandhani/Helper	0.05	Per Day	Rs. 391.00	Rs. 19.55
	Add for Sundries(L.S)				Rs. 10.00
					Rs. 829.50
	Add for Water charge @1%				Rs. 8.30
					Rs. 837.80
	Add GST(Multipling factor) 0.2127				Rs. 178.20
					Rs. 1,015.99
	Add contractors profit & overheads @ 15%				Rs. 152.40
					Rs. 1,168.39
	Add Cess @1%				Rs. 11.68
	Rate Per no				**Rs. 1,180.08**

(Rupees one thousand one hundred eighty and paisa eight) only

6.12	**Supplying & fitting fixing of panel box of MS sheet with locking arrangement comprises with starter, main switch, busber voltmeter, selector switch etc. inside the box with roof for rain water protection and 4(four) noos. stand by CC works in all respect as per direction of the Engineer-in-charge.**

a)	**Material Cost**				
	MS Sheet 1 mm thick 3X0.9X0.6=1.62 Sqm 2X0.9X0.45=0.81 Sqm 2X0.60x0.60=0.72 Sqm 2X1/2X0.60X0.30=0.18 Sqm Total= 3.33 Sqm @ 7.85kg/Sqm= 26.14 kg	26.14	kg	Rs. 59.50	Rs. 1,555.33
	SOR(Bldg),2023 Basic Rate, 5041				
	MS Angle 40X40X5 mm 4X1.65=6.60 M @3KG/Mtr= 19.80 kg	19.80	kg	Rs. 59.53	Rs. 1,178.69
	SOR(Bldg),2023 Basic Rate, 5056				
	MS Flat 20X3 mm 5X0.90=4.50 Mtr 2X0.60=1.20 Mtr 4X0.45=1.80 Mtr Tot= 7.50 Mtr @0.6 KG/Mtr= 4.50 kg	4.50	kg	Rs. 59.54	Rs. 267.93
	SOR(Bldg),2023 Basic Rate, 5026				
	Cost for E/W and PCC for fixing the box			LS	Rs. 200.00
	Welding Charge	750.00	Cm	Rs. 2.50	Rs. 1,875.00
	SOR(Bldg),2023 Basic Rate, 9022				
b)	**Labour cost**				
	Labour for making the MS Box				
i)	Fitter (Gr-I)	0.15	Per Day	Rs. 512.00	Rs. 76.80
ii)	Bandhani/Helper	0.20	Per Day	Rs. 391.00	Rs. 78.20
	Add for Sundries(L.S)				Rs. 20.00
					Rs. 5,251.95
	Add for Water charge @1%				Rs. 52.52
					Rs. 5,304.47
	Add GST(Multipling factor) 0.2127				Rs. 1,128.26
					Rs. 6,432.74
	Add contractors profit & overheads @ 15%				Rs. 964.91
					Rs. 7,397.65
	Add Cess @1%				Rs. 73.98
	Rate Per no				**Rs. 7,471.62**

(Rupees seven thousand four hundred seventy one and paisa sixty two) only

6.13	**Sercice connection of SBTW Scheme within 35mtr length from LT line by providing all necessary materials as per direction of the Engineer-in-charge.**

a)	**Material Cost**				
	Service Connection weir 4 Sqmm	35.00	Mtr	Rs. 171.60	Rs. 6,006.00
	SOR(DWS),2023 Basic Rate,939				
b)	**Labour cost**				
	Labour for service connection				
i)	Fitter (Gr-I)	0.2	Per Day	Rs. 512.00	Rs. 102.40
ii)	Bandhani/Helper	0.20	Per Day	Rs. 391.00	Rs. 39.10
	Add for Sundries(L.S)				Rs. 20.00
					Rs. 6,167.50
	Add for Water charge @1%				Rs. 61.68
					Rs. 6,229.18
	Add GST(Multipling factor) 0.2127				Rs. 1,324.95
					Rs. 7,554.12
	Add contractors profit & overheads @ 15%				Rs. 1,133.12
					Rs. 8,687.24
	Add Cess @1%				Rs. 86.87
	Rate Per no				**Rs. 8,774.11**

(Rupees eight thousand seven hundred seventy four and paisa eleven) only

6.14	**Supplying & fitting fixing of single phase motor starter/panel unit (with 2 pole contactor, overload relay, volt meter & amps meter), 32 amps main switch (220 volt) of Havels/ BCH/L&T make in KIOSK including necessary electric wiring and GI pipe earthing etc. complete as per direction of the Engineer-in-charge.For 3 HP submersible motor.**

a)	**Material Cost**				
	2HP /3HP Submerssible Panel / Starter	1	Each	Rs. 5,338.50	Rs. 5,338.50
b)	**Labour cost**				
i)	Fitter (Gr-I)	0.1	Per Day	Rs. 512.00	Rs. 51.20
ii)	Bandhani/Helper	0.10	Per Day	Rs. 391.00	Rs. 39.10
	Add for Sundries(L.S)				Rs. 20.00
					Rs. 5,448.80
	Add for Water charge @1%				Rs. 54.49
					Rs. 5,503.29
	Add GST(Multipling factor) 0.2127				Rs. 1,170.55
					Rs. 6,673.84
	Add contractors profit & overheads @ 15%				Rs. 1,001.08
					Rs. 7,674.91
	Add Cess @1%				Rs. 76.75
	Rate Per no				**Rs. 7,751.66**

(Rupees seven thousand seven hundred fifty one and paisa sixty six) only