

avm's compilation
of

HARYANA

P. W. D.

SCHEDULE OF RATES

H.S.R.

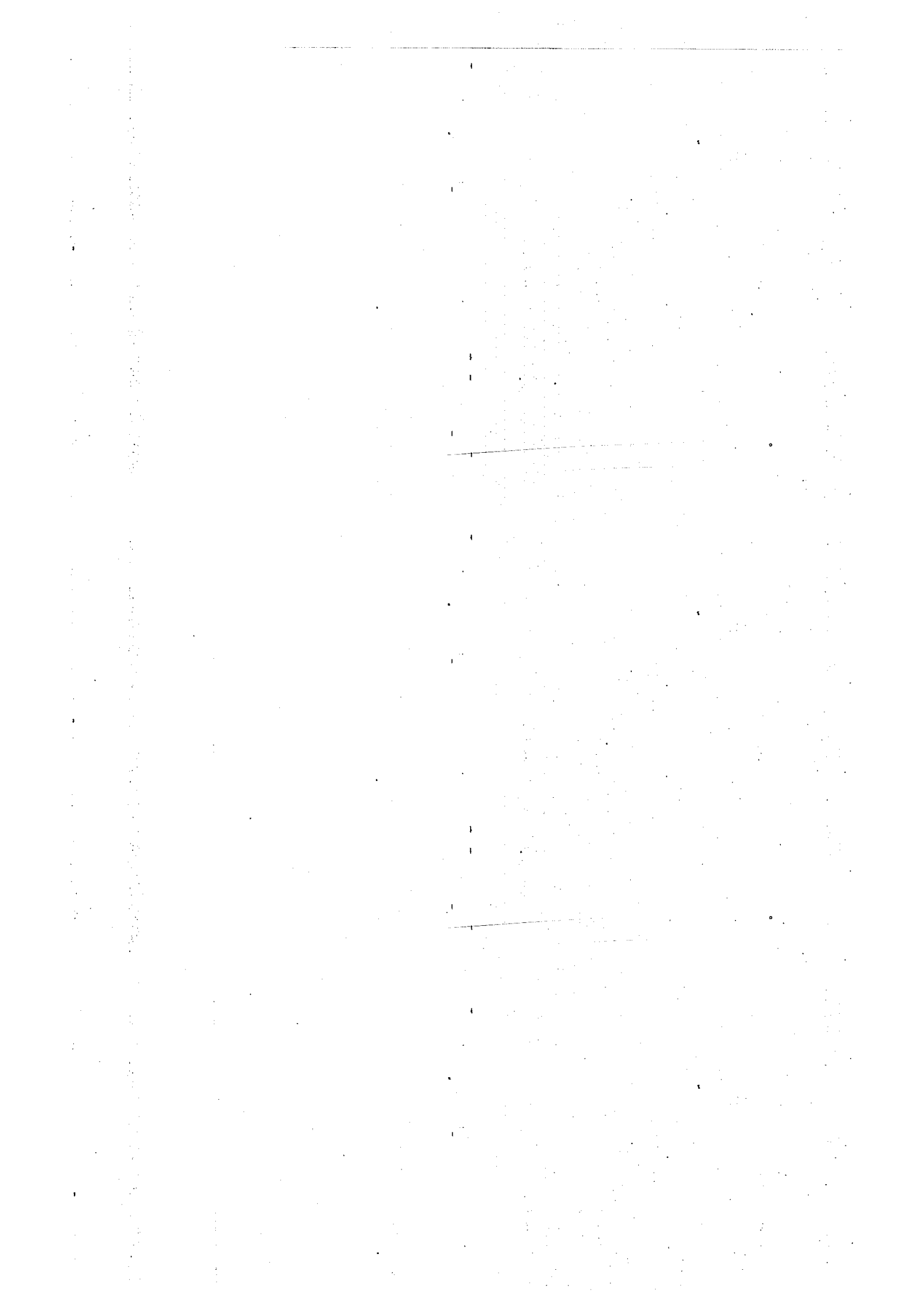
1988 (2nd Edition)

Correction & Amendment incorporated

up to

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GENERAL RULES

1. All the labour and through rates, in the Haryana Schedule of Rates, 1988, have been based on detailed analysis of rates of each item of work. These analysis will be printed separately for office use only. Care must be taken by the departmental officers to keep analysis of Rates strictly confidential, and not to divulge the same to the contractors. It is however a privileged document.

2. The authority to issue any amendment will rest officially with the Direction Committee of the Chief Engineers.

3. This Schedule of Rates is applicable to the work, to be executed by the various branches of the Haryana State P.W.D. The rates given in this Schedule are for normal construction and maintenance works. For concentrated works, big projects, special and emergent works, like closure works, separate rates may be determined by the Chief Engineer of the Department concerned.

4. The rates given in this schedule are based on the Haryana P.W.D. specifications, 1988 including subsequent Agenda and Corrigenda, issued from time to time for all chapters.

5. Unless specified to the contrary, the labour rates for various items of construction include handling of materials within 100 metres. Through rates include all rehandling of materials, at the site of work and no payment is due to the contractors on this account.

6. The through rates given in this schedule include the carriage of materials as follows :

For such materials, like timber, bajri, stone, sand, bricks and electrical goods, etc. which have to be arranged by the contractor, and like cement, steel etc. which are issued from Govt. stores, the entire carriage is included in the rate irrespective of any lead involved.

The carriage of electrical goods, cement and steel etc. issued from Government Stores is, however, not to be paid as the entire carriage to site of work is included in the rates.

7. The through rates include all octroi charges, toll tax, sales tax and other local taxes, etc. paid by the contractor in bringing the materials to the site of work.

8. Unless specified to the contrary, the labour rates include the cost of water, tools and plants, labour and materials for scaffolding and centring and shuttering and cost of good earth for mud mortar and mud plaster, wherever required.

9. In case the water is supplied by the department, free of cost, a recovery of 0.50% of the total cost of the work, executed by the contractor i.e. including cost of all materials and labour etc. shall be made and if the work is let out on labour contract basis, a deduction of 1.75% on this account shall be made.

10. The through rates include the wastage and breakage of various materials during construction.

11. Haryana P.W.D. Schedule of Rates 1988, takes into account the current market prices of labour and materials. However, there can always be variation in the market prices of materials, and wages of labour can also fluctuate with time and locality. The Haryana P.W.D. Schedule of Rates, 1988 will, therefore, work with either premium or abatement, depending upon the working conditions of the locality. The power to fix premium/abatement, on the Haryana Schedule of Rates, 1988 will vest in the Central Zonal Committee of Superintending Engineers of all the branches of the P.W.D. subject to the approval of Direction Committee of Chief Engineers. One of the Superintending Engineer, of the Building and Roads Branch will act as the Convener of the Committee. This Committee will normally meet every six month to review the position on the basis of actual tenders received in the previous six months for different works.

As regards composition and quorum of Central Zonal Committee is concerned, it will be constituted as under :-

- (i) 4 Members of the level of S.E. from PWD B&R Br. to be nominated by Engineer-in-Chief Haryana PWD B&R Br. Chandigarh, with Superintending Engineer PWD (B&R) Ambala acting as the Convener.
- (ii) 4 Members of the level of S.E. from Irrigation Br. to be nominated by Engineer-in-Chief, Irrigation Br. Haryana, Chandigarh.
- (iii) 3 Members of the level of S.E. from Public Health Br. to be nominated by Engineer-in-Chief, Hr. PWD Public Health Br.
- (iv) One Member of the level of S.E. from H.S.E.B. to be nominated by Technical Member of the Haryana State Electricity Board.

12. The rates, given in the Schedule of Rates, are for works in plains and hilly area. The area higher than 460 metres above mean sea level (M.S.L.) in Haryana State, shall be distinguished as hilly. Kalka town however, is to be taken as plain.

13. Where the description of any item is too long, the essential portion has been printed in CAPITAL. Only such essential portion needs to be written in estimates, tenders, contracts and measurement books, although it will mean to cover the entire items, as described fully in the Schedule of Rates. Where the description is only in one type of letters, it should be repeated as a whole.

14. For contracts, the supply of drinking water to labour, employed on irrigation works, shall be the liability of the contractor, if the water is available within 3 Km. of work site and/or upto a depth of 15 metres. If the water is available at a distance of more than 3 Km of work site, and/or the sub soil water level is more upto 15 metres below ground level, drinking water shall be arranged by the department, and no part of the cost, so incurred, shall be recoverable from the contractor in the latter case, and that it may be stipulated in the contract as such.

15. The rates in this schedule are based on present day levy rates of cement and steel both structural and steel reinforcement from Haryana Concast. In case, however, at a later stage the rates of levy cement and for steel the rates of Haryana Concast are more than provided in the Schedule the difference shall be accounted for in the estimates and for calculating the financial implications on tenders. This difference is, however, not payable to the contractors.

The contractors under any circumstances should not be permitted to bring the structural steel as well as steel required for reinforcement and accordingly Notice inviting Tenders shall provide for the issue of steel from departmental store at specified stock issue rates based on the rates of Haryana Concast.

16. Where the sinking of well is involved below spring level, it will be termed as wet sinking. The reference level for measurement of wet sinking shall be the spring level and not the ground level. The cost of wet sinking will, however, depend upon the depth of spring level, from the ground level. In case the spring level is very near the ground level, the cost of well sinking will be much less than what it would be, when the spring level is 15 meters below ground level. With greater depth of the spring level, the working becomes difficult, and the haulage of soil, from below the well becomes costlier. The rates of wet well sinking, have to bear a relation with the depth of spring level. The rates given in the Schedule, apply to wet well sinking, when the depth of spring level is upto 7.50 metres below ground level. When the depth of spring level is beyond 7.50 meters but upto 15 metres, the rates of wet well sinking will be increased by 50 percent. If the depth of spring level is beyond 25 metres to 30 metres below ground level, the rates for wet well sinking will be increased by 100 percent.

17. No material of any description should be purchased or obtained from any supplier or contractor whether against complete works or otherwise, unless clearly permitted otherwise by the relevant contract or specifications without I.S.I. mark of the product itself save situation where

there is no such product which is I.S.I. marked available in the country within a reasonable period, conforming to the requirements. Such exceptional situations will require the relaxation orders of the Superintending Engineer in writing, before any Executive Engineer obtains a non I.S.I. product.

18. In case of petty maintenance work costing upto Rs. 50,000/- irrespective of works let out on work order or agreement basis, the component of labour only will be paid at enhanced rate of 20%.

19. For rounding off the values, the following rules should be applied :-

- (i) When the figure, next beyond the last figure or place, to be retained, is less than 5; the figure in the last place retained, shall be left unchanged.
- (ii) When the figure, next beyond the last figure or place, to be retained, is more than 5 or is 5, followed by any figure other than zero; the figure, in the last place retained, shall be increased by 1.

20. The A & C slips, to be issued by the competent authority (The Direction Committee of the Chief Engineers) shall become part of the Haryana P.W.D. Schedule of Rates, 1988. However, A & C slips in the nature of corrigendum to cater for typographical mistakes/drafting inadequates may be issued by the Chairman of the Direction Committee of Chief Engineers subject to ratification by the Direction Committee when they meet next.

(Amended General Rules No. 20 vide A & C slip No. 8 dated 10-12-1992)

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ABBREVIATIONS

Abbreviations of units, wherever occurring, in the Haryana P.W.D. Schedule of Rates, 1988. Second Edition, are as under :-

(A)	LENGTH		(F)	DENSITY	
	Millimetre	mm		kilogram per cubic metre	kg/cu m
	centimetre	cm	(G)	DISCHARGE	
	decimetre	dm		Cubic metre per second	cu m/s
	metre	m	(H)	MISCELLANEOUS	
	decametre	dam		Director General of	D.G.S. & D
	hectometre	hm		Supplies and Disposal	
	kilometre	km		Public Works Department	P.W.D
(B)	AREA			Indian Standard	I.S. (IS)
	square millimetre	sq mm (mm ²),		Indian Standards Institute	I.S.I
	square centimetre	sq cm (cm ²)		Indian Roads Congress	I.R.C.
	square metre	sq m (wherever appearing in schedule as Sqm/ Sq m may be considered as sq m)		Billet Rolled Committee	B.R.C.
	acre	a		Tools and Plants	T & P
	hectare	ha		Notice Inviting Tenders	N.I.T.
	square kilometre	sq km		Galvanized Iron	G.I.
(C)	VOLUME			Asbestos Cement	A.C.C.
	Cubic millimetre	cu mm (mm ³)		Corrugated	
	cubic centimetre	cc (cu cm) (cm ³)		Joint Plant Committee	J.P.C.
	cubic metre	cu m (m ³) (wherever appearing in schedule as cum/cum may be considered as cu m)		Cast Iron	C.I.
				Heavy Cast Iron	H.C.I.
				Reinforced Cement Concrete	R.C.C./RCC
				Poly Vinyl Chloride	PVC
				Short Way Mesh	S.W.M.
				Mild steel	M.S.
				Rolled Steel	R.S.
				Open Flume	O.F.
				Adjustable Proportionate Module	A.P.M
(D)	CAPACITY			Orifice Semi Module	O.S.M.
	Millilitre	ml		Full Supply Depth	F.S.D.
	litre	l (LT)		Natural Surface Level	N.S.L.
	kilolitre	kl		Ground Level	G.L
				Spring Level	S.L
				Plinth Level	P.L.
(E)	WEIGHT			Boiling Water Resistance	B.W.R.
	milligram	mg		Cold Water Resistance	C.W.R.
	gram	g		Average	Av./avg
	kilogram	kg		Rupces	Rs.
	quintal	q			
	tonne	t			

Note :- The above abbreviations signify both singular as well as plural number.

Rupee	Re.	Alternate current	A.C.
Damp proof course	D.P.C.	Kilovolt	KV
Diameter	Dia	Cycles per second	C/S
Minimum	Min.	Supplying and fixing or supply & fix or supplied and fixed.	S/F (S&F)
Maximum	Max.	Providing and Fixing	P/F (P&F)
Number	No.	Outer Dia	O.D.
Ditto	-do-	Internal Dia	i/d
hour	hr.	Ampere	amp.
Addenda and corrigenda	A & C	General purpose	G.P.
That is	i.e. (ie)	Bayonet Cap	B.C.
for example	eg.	Exceeding	exc.
Figure	Fig.	Double Pole	DP
Etcetera	etc.	Namely	viz.
degree centigrad (temprature)	"C	Ordinary Portland Cement	OPC
High Rupturing Capacity	H.R.C.	Portland Pozzolana Cement	PPC
Branch Distribution Board	B.D.B.	Shade carrier	SC
Miniature Circuit Breaker	M.C.B.	Single Pole	SP
Single Pole with Neutral	S.P.N.	Tripple Pole	TP
Triple Pole with Neutral	T.P.N.	Kilo calories	KCL
Kilo Ampere	K.A.	Watt	W
Providing	Pdg.	Qhm	$\frac{\Omega}{m}$
Under Ground	U/G	Volt meter	V/m
Supply and Erection	S/E	Ohm metre	$\frac{\Omega}{m}$
Alluminium	Al	Ampere/Metr	A/M
Copper	Cu		
Revolution per Minutes	RPM		
Micro farad	mfd.		
Voltage	V		

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CHAPTER NO. 1

DAILY WAGES

NOTES :

(I) The wages, given below, have been adopted for analysing the rates for various items of works.

(II) For employment of departmental labour on muster rolls, the rates given below, may be considered as maximum rates, upto which an Executive Engineer can authorise employment of labour. If in a certain locality, prevailing conditions necessitate payment of higher rates of wages, the Superintending Engineer shall increase the rates suitably upto a maximum of 50% above these rates. This increase in rates shall be for a specified period, not exceeding 6 months after which the rates should be reviewed again and revised down wards, if the conditions so warrant. The Chief Engineer of a branch shall have full powers to authorise any increase in the labour wages for departmental work for any duration of time, in any particular locality.

(III) The minimum wages Act and Rules, framed there under, shall be strictly followed in all employments, specified in the Schedule, appended to, in the said Act.

Sr. No.	Description	Unit	All inclusive wages.
1	2	3	4
			Rs.
1.1	Adult Mazdoor	Per Day	20.52
1.2	Mazdoor of age not less than 15 years and under 18 years old.	-do-	16.52
1.3	Adult Mazdoor employed through contractor	-do-	21.02
1.4	Bhishti with Mushak	-do-	21.02
1.5	Driller (for blasting)	-do-	29.52
1.6	Blaster (for blasting)	-do-	29.52
1.7	Tarring Mate	-do-	21.52
1.8	Sprayer (for tar, bitumen, etc.)	-do-	21.52
1.9	Bajri spreader (tarring work)	-do-	20.52
1.10	Bucketman (tarring work)	-do-	21.02
1.11	Handleman (tarring work)	-do-	21.02
1.12	Survey Khalasi	-do-	20.52
1.13	Head Survey Khalasi	-do-	21.02
1.14	Pair of bullock including attendant	-do-	62.00
1.15	Bullock-cart including attendant	-do-	70.00
1.16	Camel excluding camelman	-do-	19.50
1.17	Camelman	-do-	20.52
1.18	Donkey excluding donkey-man	-do-	11.00
1.19	Donkey-man	-do-	20.52
1.20	Mate earthwork	-do-	21.02
1.21	Dresser (for earthwork)	-do-	21.52
1.22	Dresser through contractor	-do-	21.52

1	2	3	4
1.23	Hire of boat with boatman	Per day	31.52
1.24	Mason, plasterer, Class-I	-do-	33.52
1.25	Mason Class-II and stone dresser.	-do-	27.52
1.26	Carpenter, Class-I	-do-	33.52
	Class-II	-do-	27.52
1.27	Painter and paper Hanger Class-I	-do-	33.52
	Class-II	-do-	27.52
1.28	White-Washing and Colour-Washingman	-do-	21.52
1.29	Distemperer Class-I	-do-	33.52
	Class-II	-do-	27.52
1.30	Glazier	-do-	27.52
1.31	Upholsterer	-do-	33.52
1.32	Floor polisher	-do-	27.52
1.33	Head Mali	-do-	21.52
1.34	Mali	-do-	21.02
1.35	Tailor	-do-	28.52
1.36	Mochi	-do-	21.52
1.37	Thatcher	-do-	21.02
1.38	Well Sinker	-do-	27.52
1.39	Blacksmith, Class-I	-do-	33.52
	Class-II	-do-	27.52
1.40	Hammerman	-do-	21.52
1.41	Bellowsman	-do-	21.02
1.42	Plumber, Class-I	-do-	33.52
	Class-II	-do-	27.52
1.43	Sewer Helper	-do-	21.52
1.44	Fitter or Turner, Class-I	-do-	33.52
	Class-II	-do-	27.52
1.45	Fitter Mazdoor	-do-	21.02
1.46	Greaser/Oil Man	-do-	21.02
1.47	Lineman, Class-I	-do-	27.52
	Class-II	-do-	23.52
1.48	Wireman, Class-I	-do-	27.52
	Class-II	-do-	23.52
1.49	Electrician	-do-	27.52
1.50	Gutman	-do-	23.52
1.51	Air-conditioning/Refrigeration Mechanic	-do-	42.52

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CHAPTER NO. 2

MONTHLY WAGES

NOTES :

(I) The pay-scales, given below are exclusive of dearness allowance which will be admissible over and above these rates, according to Government orders, issued from time to time.

(II) These pay-scales are subject to change in accordance with the pay, fixed by the Direction Committee of the Chief Engineers, in concurrence with the Govt. orders, issued from time to time.

(III) All classes of work-charged establishment which are likely to be employed in any branch of the Public Works Department, have been included in this chapter, except some special type of staff, which is needed for the specialised projects. For these projects, separate schedule for the employment of work-charged establishment, on monthly wages shall be issued by the project authorities concerned.

(IV) The pay scales given under col.3 are applicable w.e.f. 1-1-1986.

Sr. Nu.	Name of the Post	Revised pay scale w.e.f. 1-1-86.
1	2	3
	Mechanical Staff	(Rs.)
2.1	(a) Foreman Special/Foreman Driller	1600-50-2300-EB-60-2660
	(b) Foreman Heavy Plant Overhaul/ Assistant Foreman, Special.	1400-40-1600-50-2300-EB-60-2600
2.2	Foreman, Miscellaneous-Machine shop, Carpentry Reinforcement, Mechanical/Electrical, and Drilling, Permanent way, Carriage/Wagon	1400-40-1600-50-2300-EB-60-2600.
2.3	Assistant Foreman Heavy Plant, Overhaul, Electrical (Heavy Plant)	1400-40-1600-50-2300-EB-60-2600.
2.4	Assistant Foreman, Miscellaneous for Jobs given under Foreman, Miscellaneous.	1200-30-1560-EB-40-2040
2.5	Electrical (Light Plant) Chargeman for Jobs given against Foreman (Heavy Plant, Overhaul)	1200-30-1560-EB-40-2040
2.6	Chargeman Miscellaneous for Jobs against Foreman Miscellaneous, Boiler/Chargeman Civil.	950-20-1150-EB-25-1500
2.7	(a) Superintendents, Power Plant, Superintendent, Air Conditioning/Refrigeration.	(i) 2000-60-2300-75-2900 -EB-100-3500 (For Degree Holders) (ii) 2000-60-2300-EB-75-3200 (For others)
	(b) Assistant Superintendent, Air-Conditioning Refrigeration.	1400-40-1600-50-2300-EB-60-2600
	(c) Chargeman, Air Conditioning/Refrigeration	1200-30-1560-EB-40-2040
	(d) Supervisor, Air Conditioning/Refrigeration and Refrigeration/Air Conditioning Mechanic	950-20-1150-EB-25-1500

1	2	3 (Rs.)
	(c) Operator, Air Conditioning/Refrigeration. Grade-I Grade-II.	950-20-1150-EB-25-1400
2.8	Superintendent, Water Works/Superintendent, Distribution.	
	(a) For plants of capacity, higher than 2 M.G.D.	1400-40-1600-50-2300-EB- 60-2600.
	(b) For plants of capacity, 0.5 M.G.D to 2 M.G.D. and for plants having gravity filters upto 2 M.G.D.	1400-40-1600-50-2300-EB- 60-2600
	(c) For plants of smaller sizes than given above under items (a) & (b)	1200-30-1560-EB-40-2040
2.9	Shift Engineer, Grade-I/Project Engineer	2000-60-2300-EB-75-3200 (Degree Holders)
2.10	Shift Engineer, Grade-II/Project Sectional Officer	1400-40-1600-50-2300-EB- 60-2600
2.11	Supervisor (including Electrical)	950-20-1150-EB-25-1400
2.12	Safety Supervisor	950-20-1150-EB-25-1400
2.13	Template Maker of Steel Structure	1200-30-1560-EB-40-2040
2.14	Fitter, Steel Structure	1200-30-1560-EB-40-2040
2.15	Fitter, Heavy Machine	950-20-1150-EB-25-1400
2.16	Fitter, Heavy Vehicle Tyres	950-20-1150-EB-25-1500
2.17	Erector, Steel Structure	950-20-1150-EB-25-1500
2.18	Tool Operator Machine	1200-30-1560-EB-40-2040
2.19	Blacksmith	950-20-1150-EB-25-1500
2.20	Copper and Tin Smith	950-20-1150-EB-25-1400
2.21	Pipe Fitter-Grade-I Grade-II	1200-30-1560-EB-40-2040 950-20-1150-EB-25-1400
2.22	Diesel and Auto Motor Mechanic	950-20-1150-EB-25-1400
2.23	Plate-Layer	950-20-1150-EB-25-1400
2.24	Operators and Drivers of Oxygen and Acetylene Plants	950-20-1150-EB-25-1400
2.25	(i) Telephone Operator/Clerk (ii) Telephone Attendant	950-20-1150-EB-25-1500 775-12-955-EB-14-1025
2.26	Planer Operator	950-20-1150-EB-25-1400
2.27	Saw Operator	950-20-1150-EB-25-1400
2.28	Driller, Jack Hammer	950-20-1150-EB-25-1400
2.29	Attendant, Grout Pump	750-12-870-EB-14-940
2.30	Trade man's Mate to all above Trades	750-12-870-EB-14-940
2.31	Instrument Mechanic	950-20-1150-EB-25-1400

1	2	3(Rs.)
Operators and Drivers.		
2.32	(i) Shovels, Draglines and Cranes (Diesel) Ordinary.	1200-30-1560-EB-40-2040
2.33	-do- Special	1400-40-1600-50-2300-EB-60-2600
2.34	(ii) Shovels (Electrical 2 cum to 4 cum)	1400-40-1600-50-2300-EB-60-2600
2.35	Electrical overhead travelling crane Operator	1200-30-1560-EB-40-2040
2.36	Operator Control Room (Heavy Plant)	1200-30-1560-EB-40-2040
2.37	Turbine Operator (Heavy Plant)	1200-30-1560-EB-40-2040
2.38	Operator Boiler (Heavy Plant)	1200-30-1560-EB-40-2040
2.39	Auxiliary Operator	950-20-1150-EB-25-1400
2.40	Assistant Turbine Operator.	950-20-1150-EB-25-1400
2.41	Assistant Operator Boiler (Light Plant)	950-20-1150-EB-25-1400
2.42	Ross Studdle Carrier	800-15-1010 EB-20-1150
Drivers of Carriers.		
2.43	Light Vehicle, Cars, Petrol Trucks 2½ Tonnes, etc. and heavy vehicle Diamond toes Mack dumpers.	1200-30-1560-EB-40-2040 + Rs. 100/- special pay for Jeep drivers.
2.44	Bus Drivers	1200-30-1560-EB-40-2040
2.45	Road Roller Driver (Steam or Diesel)	1200-30-1560-EB-40-2040
2.46	Euclid Driver	1200-30-1560-EB-40-2040
2.47	Dinkey Loco Driver	1200-30-1560-EB-40-2040
2.48	Main Line Loco driver	1200-30-1560-EB-40-2040
2.49	Assistant Dinkey Loco Driver	950-20-1150-EB-25-1400
(iv) Tractor Operators		
2.50	All type of Tractor Drivers	1200-30-1560-EB-40-2040
2.51	Earth moving machinery other than tractors, like Road Graders, Scrapers and Bulldozers etc.	1200-30-1560-EB-40-2040
2.52	Rocker shovel/Operator	1200-30-1560-EB-40-2040
2.53	Touma Rocker Operator	950-20-1150-EB-25-1400
2.54	Hoist Operator/Lift Operator	950-20-1150-EB-25-1400
(v) Operators Stationary Plants		
2.55	Mechanical and Electrical Air Compressor, Pump Crete, Welding Sets, Concrete Mixers, small Generating Sets/Turner	950-20-1150-EB-25-1400
2.56	Workshop Machinery Operator	950-20-1150-EB-25-1400
2.57	Operator, Diamond Drill	950-20-1150-EB-25-1400
2.58	Operator Crizzly	950-20-1150-EB-25-1400
2.59	Operator (Misc.) calling Plant	950-20-1150-EB-25-1400

1	2	3 (Rs.)
2.60	Operator Air-compressor, 30 cum per min. or above/Diamond Drill operator	950-20-1150-EB-25-1400
2.61	Operator Cement Pump/Operator Pump-Crete/Assistant Driver	950-20-1150-EB-25-1400
2.62	(i) Operator Water Pump (Mechanical) Driver (Diesel and Electrical) Grade-I	950-20-1150-EB-25-1400
	(ii) Assistant Driver, Grade-II	950-20-1150-EB-25-1400
Concrete Placement Crew		
2.63	Vibrator Operator	1200-30-1560-EB-40-2040
2.64	Bucket Operator	950-20-1150-EB-25-1400
2.65	Sand Blast Operator	950-20-1150-EB-25-1400
2.66	Laitence Cutter	950-20-1150-EB-25-1400
2.67	Air/Water jet Operator	950-20-1150-EB-25-1400
2.68	Concrete Finisher	950-20-1150-EB-25-1400
2.69	Bell Boy	800-15-1010-EB-20-1150
2.70	Clean-up man	750-12-870-EB-14-940
2.71	Helpers for above operations (skilled labour)	750-12-870-EB-14-940
2.72	Operator (Gas Producer Plant)	950-20-1150-EB-25-1400
2.73	Cleaner/Oil Man	750-12-870-EB-14-940
2.74	Boiler Attendant	950-20-1150-EB-25-1400
2.75	Hammer man	950-20-1150-EB-25-1400
2.76	T.M. Mate	750-12-870-EB-14-940
2.77	Greaser	750-12-870-EB-14-940
2.78	Attendant, Concrete Mixer	750-12-870-EB-14-940
2.79	Attendant pumps	750-12-870-EB-14-940
2.80	Workshop Gangman	750-12-870-EB-14-940
2.81	Gangmates	750-12-870-EB-14-940
2.82	Coalman	750-12-870-EB-14-940
2.83	Condenser Attendant	750-12-870-EB-14-940
2.84	Mucker Jamadars	750-12-870-EB-14-940
2.85	Muckers	750-12-870-EB-14-940
2.86	Slingers	750-12-870-EB-14-940
2.87	Barryman (Crowbarman)	750-12-870-EB-14-940
2.88	Fireman	750-12-870-EB-14-940

1	2	3 (Rs.)
Fire Fighting		
2.89	Fire Station Officer	1400-40-1600-50-2300-EB-60-2600
2.90	Sub Fire Officer	1400-40-1600-50-2300-EB-60-2600
2.91	Leading Fireman	1200-30-1560-EB-40-2040
2.92	Driver/Fire Pump Operator	950-20-1150-EB-25-1400
2.93	Driver-cum-Mechanic	1200-30-1560-EB-40-2040
2.94	Fire fighting man	950-20-1150-EB-25-1400
Transportation		
2.95	Station Master	950-20-1150-EB-25-1500
2.96	Train Examiner	950-20-1150-EB-25-1500
2.97	Railway Guard	950-20-1150-EB-25-1500
2.98	Head Shunter	950-20-1150-EB-25-1400
2.99	Shunter	750-12-870-EB-14-940
2.100	Gangman	750-12-870-EB-14-940
2.101	Trolleyman	750-12-870-EB-14-940
2.102	Keyman	750-12-870-EB-14-940
2.103	Gangmate	750-12-870-EB-14-940
2.104	Trolley Jamadar	750-12-870-EB-14-940
2.105	Brakesman	750-12-870-EB-14-940
2.106	Travelling Ticket Checker	950-20-1150-EB-25-1500
2.107	Fireman or Stoker	750-12-870-EB-14-940
2.108	Pointman	750-12-870-EB-14-940
2.109	Permanent Way Inspector	1400-40-1600-50-2300-EB-60-2600
2.110	Assistant Way Inspector	1400-40-1600-50-2300-EB-60-2600
2.111	Bus Conductor	750-12-870-EB-14-940
2.112	Cable Joiner/ Electrical Armature	1200-30-1560-EB-40-2040
2.113	Filter	950-20-1150-EB-25-1400
2.114	Wireman Grade-I	950-20-1150-EB-25-1400
	Grade-II	950-20-1150-EB-25-1400
2.115	Lineman Grade-I	950-20-1150-EB-25-1400
	Grade-II	950-20-1150-EB-25-1400
2.116	Switch Board Attendant	950-20-1150-EB-25-1400
2.117	Cuttiman	950-20-1150-EB-25-1500
2.118	Blastman Grade-I	950-20-1150-EB-25-1500
	Grade-II	950-20-1150-EB-25-1400

1	2	3 (Rs.)
2.119	Attendant Electrical Pump	750-12-870-EB-14-940
2.120	Wireless Mechanic	950-20-1150-EB-25-1400
2.121	Meter Reader Electrical/water	950-20-1150-EB-25-1500
2.122	Electrician Grade-I	950-20-1150-EB-25-1500
	Grade-II/Electric Mistri	950-20-1150-EB-25-1400
2.123	Trade man's Mate to all above trades	750-12-870-EB-14-940
	Civil Engineering	
2.124	Carpenter Grade-I	1200-30-1560-EB-40-2040
	Grade-II	950-20-1150-EB-25-1500
2.125	Stone Mason Class-I	1200-30-1560-EB-40-2040
	Class-II	950-20-1150-EB-25-1500
2.126	Painter Class-I	1200-30-1560-EB-40-2040
	Class-II	950-20-1150-EB-25-1500
2.127	Brick Layer Grade-I (Mason)	1200-30-1560-EB-40-2040
	Grade-II	950-20-1150-EB-25-1500
2.128	Plumber Class-I	1200-30-1560-EB-40-2040
	Class-II	950-20-1150-EB-25-1500
2.129	Coal Tar Enamel, Painter	950-20-1150-EB-25-1500
2.130	Surveyor	950-20-1150-EB-25-1500
2.131	Rock Driller/Well Borer	1200-30-1560-EB-40-2040
2.132	Trademan's Mate to all above Trades	750-12-870-EB-14-940
2.133	Tubewell Driller	1400-40-1600-50-2300-EB-60-2600
2.134	Work Inspector	950-20-1150-EB-25-1500
2.135	Work Mistri/Supervisor	950-20-1150-EB-25-1400
2.136	Earth Work Mistri/Supervisor	750-12-870-EB-14-940
2.137	Work Munshi or Mortar Mate	750-12-870-EB-14-940
2.138	Gang Mate/Road Mate	750-12-870-EB-14-940
2.139	Tar Sprayer	750-12-870-EB-14-940
2.140	Darogha (Alboriculture) or Head Mali	750-12-870-EB-14-940
2.141	Reservoir Keeper	750-12-870-EB-14-940
2.142	Keyman or Turncock (Water supply works)	750-12-870-EB-14-940
2.143	Patrolman	750-12-870-EB-14-940
2.144	Pipe Lineman	750-12-870-EB-14-940
2.145	Sewer Helper	750-12-870-EB-14-940 + Rs. 50/- Special allowance.
2.146	Discharge and sounding Attendant	750-12-870-EB-14-940
2.147	Storekeeper	950-20-1150-EB-25-1500

1	2	3 Rs.)
2.148	Store-Clerk, Store Munshi Time Clerk, Ledger/Bin Card Clerk	950-20-1150-EB-25-1500
2.149	Store Attendant/Store Coolie	750-12-870-EB-14-940
2.150	Material Mistri	750-12-870-EB-14-940
2.151	Silt Analyst	950-20-1150-EB-25-1500
2.152	Silt Observer, Pressure Pipe Observer, Strata Observer	950-20-1150-EB-25-1400
2.153	Assistant Laboratory Attendant	750-12-870-EB-14-940
2.154	Bhisti	750-12-870-EB-14-940
2.155	Chowkidar	750-12-870-EB-14-940
2.156	Boatman or Ferryman	750-12-870-EB-14-940
2.157	Mali	750-12-870-EB-14-940
2.158	Mazdoor Hospital	750-12-870-EB-14-940
2.159	Dak Cyclist	750-12-870-EB-14-940
2.160	Dak Runner (Foot)	750-12-870-EB-14-940
2.161	Frashes	750-12-870-EB-14-940
2.162	Khalasi	750-12-870-EB-14-940
2.163	Peon, Telegraphic and Revenue	750-12-870-EB-14-940
2.164	Sowar (Camel)	750-12-870-EB-14-940
2.165	Sweeper/Sewerman (i) For sweeper (ii) For Sewerman	750-12-870-EB-14-940 Rs.65/- special allowance Rs.50/- special allowance
2.166	Sweeper/Jamadar (i) For sweeper (ii) No sweeper allowance for Jamadar.	750-12-870-EB-14-940 Rs.65/- special allowance ---
2.167	Beldar or Regulation Beldar	750-12-870-EB-14-940
2.168	Khansama	750-12-870-EB-14-940
2.169	Boatman Head or Jamadar	750-12-870-EB-14-940
2.170	Boatman Naib Jamadar	750-12-870-EB-14-940
2.171	Bullockman and Cartman (without bullocks) or Camelman (without Camel)	750-12-870-EB-14-940
2.172	Bullockman with one Bullock/camelman with one camel/or muleman with one Mule.	750-12-870-EB-14-940 + Bullock, or Camel or Mule allowance.
2.173	Bullockman with two bullocks/ Camelman with two Camels/ Muleman with two Mules.	750-12-870-EB-14-940 + Bullock, or Camel or Mule allowance.
2.174	Gate-keeper	750-12-870-EB-14-940
2.175	Khalasis Survey	750-12-870-EB-14-940
2.176	Khalasis, Survey Head	750-12-870-EB-14-940
2.177	Mali, Chowkidar	750-12-870-EB-14-940

1	2	3 (Rs.)
2.178	Road Inspector	1400-40-1600-50-2300-EB-60-2600
2.179	Terrazzo Finisher Grade-I	1400-40-1600-50-2300-EB-60-2600
	Grade-II	1200-30-1560-EB-40-2040
2.180	Plasterer	1200-30-1560-EB-40-2040
2.181	Core Observer	950-20-1150-EB-25-1500
2.182	Gauge Reader	750-12-870-EB-14-940
2.183	White-washing and Colour-Washingman	950-20-1150-EB-25-1500
2.184	Floor Polisher	950-20-1150-EB-25-1500
2.185	Welder	950-20-1150-EB-25-1500
2.186	Horticulture Supervisor	950-20-1150-EB-25-1500
2.187	Laboratory Assistant.	(i) 950-20-1150-EB-25-1500 (For Matriculates)
		(ii) 750-12-870-EB-14-940 (For Others)
2.188	Research Assistant	1400-40-1600-50-2300-EB-60-2600
2.189	Chemist	1400-40-1600-50-2300-EB-60-2600
2.190	Water Meter Inspector	1200-30-1560-EB-40-2040
2.191	Patwari	950-20-1150-EB-25-1500
2.192	Other Misc. Class-IV categories such as Skilled Coolie, Fitter, Coolie, Skilled Helper, Fitter Attendant etc. etc.	750-12-870-EB-14-940

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CHAPTER NO. 3

BASIC RATES OF MATERIALS

NOTES :

(I) All the rates in this chapter are for materials at the source except where specified otherwise.

(II) The rates are for the purpose of analysing the rates, and not for obtaining supplies from market, which shall be obtained after calling competitive tenders or quotations. In case of bricks and tiles, the tendered rates shall not be more than controlled rates, fixed by the Deputy Commissioners of the respective districts, the Food and Supplies Department, of Haryana State.

(III) The rates for item Nos. 3.1, 3.2 and 3.3, include the cost of land and water. In case where land and water is given by Government, free of cost, the rates shall be suitably reduced.

(IV) The rates of portland cement, in item Nos. 3.12 is for analysis and not for the purpose of issuing cement to contractors. The issue rate for cement shall be fixed by the Executive Engineers after taking into account, any extra lead, involved from railway station.

(V) The size of bricks in item Nos. 3.1 and 3.2 will be 22.86 cm × 11.11 cm × 6.83 cm and of tiles for item No. 3.3, will be :-

(i) 30.48 cm × 15.24 cm × 5.08 cm

(ii) 22.86 cm × 11.43 cm × 3.81 cm

(VI) Two classes of rates of paint have been provided in this chapter for estimating purposes only. Firstly, for first quality paint of best quality of reputed firms such as Goodless-Nerolac, Berger, Garware, Jenson, Nicholson, Asian and Shalimar etc. in the trade mark of Nerolac Luxol, Eomite/Garcoat, Brolac, Apcolite and Superlock respectively or its equivalent are considered as first quality rates of paint and secondly, second quality paints of reputed firms in the trade mark of Glossolite, Parrot, Kinglac, Jensonin, Three mangoes and Durolac or its equivalent and I.S. marked paints are considered second quality rates of paints.

(VII) Unless specified to the contrary, the labour rates for various items of construction include handling of materials within 100 metres. The through rates include all rehandling of materials at the site of work, and no payment is due to the contractors on this account.

Sr. No.	Description	Unit	Rate	Reference of PWD specification
1	2	3	4	5
(a)	Bricks and Tiles		Rs.	
3.1	Sundried bricks at kiln site	1000 Nos.	76.00	3.5
3.2	Bricks 22.86 cm × 11.11 cm × 6.83 cm hand moulded at kiln site :-			
	(i) first class	-do-	450.00	3.5
	(ii) second class	-do-	400.00	3.5
	(iii) third class	-do-	315.00	3.5
(b)	Brick Bats and Ballast			
	(a) Brick bats from well burnt or over burnt bricks	cum	58.00	3.5
	(b) Bricks ballast from well burnt or over burnt Bricks or brick bats :-			

1	2	3	4 (Rs.)	5
	(i) 40 mm nominal size	Cum	70.00	3.7
	(ii) 31.50 mm nominal size	-do-	75.00	3.7
	(iii) nominal size 20 mm	-do-	80.00	3.7
(c)	Tiles Hand Moulded at Kiln Site:			
3.3	(i) size 30.48 cm × 15.24 cm × 5.08 cm	1000 NOs.	650.00	3.6
	(ii) size 22.86 cm × 11.43 cm × 3.81 cm	-do-	550.00	3.6
(d)	Lime and Surkhi etc.			
3.4	White (stone or non hydraulic) lime unslaked :-			
	(i) F.O.R. destination station in wagon load	Quintal	90.00	3.8
	(ii) delivered at site of work for small requirements upto 4 quintals	-do-	100.00	3.8
	(iii) Factory made dry hydrated lime conforming to I.S. 712-1973 in bags at site.	-do-	90.00	3.8
3.5	Surkhi prepared from well burnt bricks ground and screened at source.	cum	75.00	3.9
3.6	Cinder screened at site	-do-	50.00	3.10
(e)	Sand and Stone Aggregates			
3.7	(a) Fine sand clean and screened within 30 metres, excluding washing but including royalty where removal of over burden of soil to any depth is necessary.	-do-	21.00	3.11
	(b) Fine quarried aggregate (coarse sand) for concrete from the following quarries :-			
	(i) Ghaggar and Chandi Mandir	-do-	12.40	3.30
	(ii) Badarpur near Delhi (washed)	-do-	100.00	3.30
3.8	Kankar including digging, breaking and cleaning, duly stacked at quarry.	-do-	13.00	3.33
3.9	Boulders including digging and collection (including Royalty, Malkana etc.)	-do-	20.00	3.31
3.10	Shingle from natural shingle deposits within a lead of 150 metres including digging and screening but not washing.			
	(i) 10 mm size	-do-	74.20	3.29
	(ii) 15 mm size	-do-	67.10	3.29
	(iii) 20 mm size	-do-	67.10	3.29
	(iv) 25 mm size	-do-	67.10	3.29
	(v) 40 mm size	-do-	49.50	3.29
	(vi) 50 mm size	-do-	45.90	3.29
	(vii) 75 mm size	-do-	35.30	3.29
3.11	(a) Coarse aggregate for concrete or stone ballast from quarried stone :-			
	(i) 40 mm nominal size	-do-	54.00	3.29
	(ii) 25 mm nominal size	-do-	70.00	3.29
	(iii) 20 mm nominal size	-do-	70.00	3.29
	(b) From Boulder stones :-			
	(i) 40 mm nominal size	-do-	64.00	3.29

1	2	3	4 (Rs.)	5
	(ii) 25 mm nominal size	-do-	67.00	3.29
	(iii) 20 mm nominal size	Cum	70.00	3.29
3.12	Machine-crushed stone bajri at crusher, site :-			
	(i) 12 mm nominal size	-do-	80.00	3.29
	(ii) 10 mm nominal size	-do-	80.00	3.29
(f)	Cement			
3.13	Portland cement including bag at PWD Godown including storage charges	Per bag of 50 kg.	56.60	3.12
3.14	White cement including bag at site	-do-	220.00	3.13
(g)	Steel			
3.15	(a) Mild steel at PWD Godown including storage Charges :-			
	(i) bars	Quintal	767.00	3.20
	(ii) Pats/plates	-do-	833.00	3.19
	(iii) Joists	-do-	888.00	3.19
	(iv) angles	-do-	827.00	3.19
	(v) channels	-do-	860.00	3.19
	(b) deformed bars (tor/ribbed steel for reinforcement) at PWD Godown (including storage charges)			
	(i) bars	-do-	815.00	3.22
3.16	Galvanised iron sheet 0.80 mm thick tested plain or corrugated at site of work	Tonne	13350.00	3.27
3.17	Galvanised iron wire at site of work 3.25 mm 4 mm and 4.75 mm dia.	Quintal	1100.00	3.26
(h)	Timber			
3.18	Timber at site of work			
	(i) deodar in sleepers	cum	9000.00	3.15
	(ii) teak in scantlings	-do-	14800.00	3.15
	(iii) kail in sleepers	-do-	6100.00	3.15
	(iv) sal in scantling	-do-	6100.00	3.15
	(v) cheel (chir) in sleepers	-do-	4200.00	3.15
	(vi) commercial hard wood such as hollock, champ, chikrassy and chaplash etc. (non-coniferous timber other than teak conforming to I.S. specification No. 1003 kiln seasoned)	-do-	5750.00	3.15
(i)	Boards			
3.19	(a) Natural colour insulation boards, such as celotex sheeting at site of work 12 mm thick.	Sqm.	90.00	3.42
	(b) White faced insulating boards, perforated celotex sheeting at site of work 12 mm thick.	-do-	103.00	3.42
3.20	Commercial Ply-wood 4 mm thick 3 ply at site of work.	-do-	53.00	3.16
3.21	Glass panes at site of work :-			

1	2	3	4 (Rs.)	5
	(a) plain			
	(i) 2 mm thick	-do-	44.00	3.39
	(ii) 3 mm thick	Sqm	66.00	3.39
	(iii) 4 mm thick	-do-	80.00	3.39
	(b) frosted			
	(i) 2 mm thick	-do-	56.00	3.39
	(ii) 3 mm thick	-do-	78.00	3.39
	(iii) 4 mm thick	-do-	92.00	3.39
	(c) plate glass 5.50 mm thick (Indian)	-do-	125.00	3.39
(j)	Asbestos Products			
3.22	Asbestos cement products at site of work			
	(i) plain ceiling boards			
	(a) 4.00 mm thick	Sqm.	41.00	3.46
	(b) 5.00 mm thick	-do-	52.00	3.46
	(c) 6.00 mm thick	-do-	64.00	3.46
	(ii) corrugated sheets 7 mm thick	-do-	56.00	3.46
	(iii) corrugated sheets 6 mm thick	-do-	53.00	3.46
	(iv) semi corrugated sheets 7 mm thick	-do-	54.00	3.46
	(v) semi corrugated sheets 6 mm thick	-do-	51.00	3.46
	(vi) ridges 1.10 metres long	Pair	47.00	3.46
	(vii) valley gutters 45 cm x 12.5 cm x 15cm in 2 metres length.	Each	110.00	3.46
	(viii) plain bend 100 mm dia	-do-	7.50	3.46
	(ix) swan-neck 100 mm dia	-do-	7.50	3.46
	(x) hexagonal rain water head 33 cm x 24 cm	-do-	10.00	3.46
	(xi) shoe 100 mm dia	-do-	7.50	3.46
	(xii) rain water pipe 100 mm dia	Metre	10.00	3.46
(k)	C.I. Pipes			
3.23	Cast iron rain water pipe and fitting at site of work :-			
	(i) C.I. Rain water non pressure pipe 100 mm dia I.S.I mark	-do-	65.00	3.14(2)
	(ii) H.C.J. soil pipe 100 dia I.S.I. mark	-do-	71.00	3.14(2)
	(iii) C.I. Head 100 mm dia	each	25.00	3.14(2)
	(iv) C.I. Shoe 100 mm dia	-do-	20.00	3.14(2)
(l)	Fittings			
3.24	Door and window fittings at site of work :			
	(a) Iron			
	(i) butt hinges 50 mm	100 Nos.	115.00	3.38
	(ii) butt hinges 75 mm	-do-	136.00	3.38
	(iii) butt hinges 100 mm	-do-	247.00	3.38
	(iv) butt hinges 125 mm	-do-	370.00	3.38
	(v) lower bolts 200 mm	-do-	370.00	3.38
	(vi) lower bolts 150 mm	-do-	282.00	3.38
	(vii) lower bolts 75 mm	-do-	154.00	3.38
	(viii) handles 150 mm	-do-	165.00	3.38

1	2	3	4 (Rs.)	5
	(ix) handles 200 mm	-do-	248.00	3.38
	(x) screws 25 mm	100 Nos.	7.00	3.38
	(xi) screws 40 mm to 50 mm	-do-	17.00	3.38
	(xii) hasp with staples 150 mm	-do-	300.00	3.38
	(xiii) T-Hinges 300 mm	-do-	660.00	3.38
	(b) brass			
	(i) butt hinges 50 mm	-do-	280.00	3.38
	(ii) butt hinges 75 mm	-do-	528.00	3.38
	(iii) butt hinges 100 mm	-do-	1169.00	3.38
	(iv) butt hinges 125 mm	-do-	2224.00	3.38
	(v) tower bolts	Linear cm	1.15	3.38
	(vi) handles 150 mm	100 Nos.	1500.00	3.38
	(vii) screws 25 mm	-do-	27.00	3.38
	(viii) screws 40 mm to 50 mm	-do-	76.00	3.38
	(ix) hasp with staples 150 mm	-do-	1435.00	3.38
	(c) aluminium			
	(i) tower bolts 200 mm	-do-	995.00	3.38
	(ii) tower bolts 150 mm	-do-	834.00	3.38
	(iii) tower bolts 75 mm	-do-	533.00	3.38
	(iv) handles 150 mm	-do-	750.00	3.38
	(v) handles 200 mm	-do-	925.00	3.38
	(vi) hasp with staples 150 mm	-do-	850.00	3.38
(m)	Wire Gauge			
3.25	Wire gauge 140 or 120 G designation at site of work.	Sqm.	40.00	3.25
3.26	Expanded metal 20 mm x 60 mm strands, 3 mm wide and 1.6 mm thick	-do-	35.00	3.28
(n)	Marble Stone and Chips			
3.27	(a) Marble Makrana/Narnaul chippings at site of work :-			
	(i) white and black	Quintal	33.00	3.45
	(ii) red, chocolate and buff	-do-	48.00	3.45
	(iii) green and blue	-do-	50.00	3.45
	(b) white Dehradun marble chippings at site of work.	-do-	47.50	3.45
(o)	Pigments			
3.28	Pigments at site of work :-			
	(i) black, red and chocolate	Kg.	15.00	3.40
	(ii) orange, buff, yellow and pink	-do-	18.00	3.40
	(iii) blue and green	-do-	19.00	3.40
(p)	Glazed Tiles			
3.29	(a) white glazed tiles of first quality at site of work 5 mm thick 15 cm x 15 cm size	per dozen	32.00	3.43

1	2	3	4 (Rs.)	5
	(b) white glazed tiles of first quality at site of work 5 mm thick 10 cm x 10 cm size	Per dozen	16.00	3.43
	(c) coloured glazed tiles of first quality at site of work 5 mm thick 15 cm x 15 cm size	-do-	35.00	3.43
	(d) coloured glazed tiles of first quality at site of work 5 mm thick 10 cm x 10 cm size	-do-	18.00	3.43
(q)	Linoleum			
3.30	Linoleum plain coloured at site of work (3.20 mm thick)	Sqm	100.00	3.41
(r)	Distemper			
3.31	Distempers of approved manufacture at site of work :-			
	(i) dry	Quintal	1300.00	3.36
	(ii) oil-bound	-do-	2000.00	3.37
	(iii) distemper primer	Litre	18.00	--
3.32	Exterior cement based decorative paint such as snowcem, Robbiacem etc. at site of work.	Quintal	1000.00	3.35
(s)	Miscellaneous			
3.33	Hessian cloth at site of work 1 metre wide and weighing at 400 gm per metre	Metre	6.00	3.44
3.34	(a) bitumen 85/25 at site of work	Tonne	4000.00	3.62
	(b) bitumen 80/100 at site of work	-do-	2980.00	3.62
3.35	(a) munj ban at site of work	Kg.	8.00	--
	(b) plastic Niwar	-do-	40.00	--

Sr. No.	Description	Unit	1st quality paint	2nd quality paint	Reference to PWD specifications.
1	2	3	4	5	6
			Rs.	Rs.	
(t)	Paints				
3.36	Paints and other allied material at site of work :-				
	(i) aluminium, wood primer	Litre	39.00	31.00	3.34
	(ii) pink primer	-do-	38.00	30.00	3.34
	(iii) metal primer	-do-	38.00	30.00	3.34
	(iv) synthetic enamel paint	-do-	57.00	39.00	3.34
	(v) ready mixed paint for wooden surfaces	-do-	40.00	30.00	3.34
	(vi) red lead genuine dry	Kg.	30.00	18.00	3.34
	(vii) cement primer	Litre	33.00	--	3.34
	(viii) ready-mixed emulsion paint for plastered or concrete surfaces	-do-	70.00	--	3.34

1	2	3	4 (Rs.)	5 (Rs.)	6
(ix)	ready mixed exterior paint for plastered or concrete surfaces	-do-	52.00	--	3.34
(x)	ready mixed exterior paint for metallic surfaces.	Litre	44.00	30.00	3.34
(xi)	kerosene oil	-do-	--	2.47	3.34
(xii)	caustic soda	Kg.	--	6.00	3.34
(xiii)	solignum	Litre	--	18.00	3.34
(xiv)	copal Varnish	-do-	32.00	16.00	3.34
(xv)	linseed oil	-do-	27.50	18.00	3.34
(xvi)	creosote oil	-do-	--	8.00	3.34
(xvii)	bée's wax	Kg.	--	42.00	3.34
(xviii)	methylated spirit (without container)	Litre	--	9.00	3.34
(xix)	roofing red ready-mixed paint for corrugated sheets	-do-	38.00	28.00	3.34
(xx)	roofing white, grey or green ready mixed paint for corrugated sheets.	-do-	40.00	30.00	3.34
(xxi)	floor paint	-do-	50.00	--	3.34
(xxii)	aluminium paint	-do-	43.00	34.00	3.34
(xxiii)	anti-corrosive odourless black bitumastic paint.	-do-	29.00	--	3.34
(xxiv)	anti-corrosive bitumastic paint	-do-	26.50	20.00	3.34
(xxv)	turpentine oil	-do-	--	8.00	3.34
(xxvi)	road marking paint white	-do-	64.00	38.00	3.34
(xxvii)	road marking paint spirit based yellow.	-do-	63.00	38.00	3.34
(xxviii)	road marking paint spirit based black.	-do-	38.00	27.00	3.34

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CHAPTER NO. 4
LOADING AND UNLOADING

NOTES :

(I) Where the lead for loading or unloading is more than the lead, specified in the following rates, this should be paid at carriage rates (Chapter-5) for second and third chain of 30 metres length, as the case may be.

(II) The rates for unloading metre-gauge wagons will be 2/3rd the rates, for broad-gauge wagons where the unit for measurement is specified, as wagon.

(III) The rates for unloading materials like sand, stone, ballast etc. from tipping-wagons or tipping trucks, shall be reduced by 50 percent. There shall, however, be no reduction in the rates for loading.

(IV) Bricks and tiles shall be properly stacked in vehicles and not dumped. While unloading, these shall be directly placed into stacks, and not dumped on the ground, and then stacked.

(V) While making measurements for loading, unloading or stacking, suitable deduction shall be made to account for voids, in the loose stacking, according to the factors, mentioned in the relevant specifications of materials, as given in chapter No. 3 of the P.W.D. Specifications.

(VI) The rate of loading, unloading and stacking shall also include the loading, unloading and stacking of containers, in which the materials are contained. For instance, if 100 tonne of bitumen is loaded or unloaded in 160/200 litre drums, the net weight of bitumen will be 100 tonne and weight of the drum will be over and above this weight. Nothing extra will be paid, for the weight of the bitumen drums, which are supposed to be carried, in addition to the bitumen, within the same rate.

(VII) The following rates do not provide for any special arrangement such as provision of mechanical equipment for loading purpose. The unloading of heavy machinery or consignments requiring crane work or special arrangements will be done departmentally or paid for on the merit of each case.

Sr. No.	Description	Unit	Rate for loading into wagons trucks or boats, within 15 metres lead	Rate for unloading from wagons nontipping trucks or boats including clearing 1.5 metres away from the rail or 6 metres away from the water edge and excluding stacking unless otherwise stated.
1	2	3	4	5
4.1	(a) Stone (building or pitching), sand, bajri, shingle, spalls, bricks-hats, brick ballast and stone meta)	Cum	3.00	1.75
	(b) Manure or Sludge	-do-	2.70	1.55
4.2	Coal	Tonne	6.35	3.15
4.3	Bricks 22.86 cm size (including stacking)	1000 No.s	6.40	6.40
4.4	Tiles including stacking.			
	(i) 30.48 cm × 15.24 cm × 5.08 cm	-do-	7.70	7.70

1	2	3	4	5
	(ii) 22.86 cm x 11.43 cm x 3.81 cm	1000 Nos.	5.10	5.10
4.5	Cement bags full including stacking upto 10 bags height.	100 Nos.	24.00	24.00
4.6	Empty cement bags including stacking	-do-	0.50	0.50
4.7	White or (non-hydraulic) lime or kankar or hydraulic lime in bags including stacking	Tonne	5.10	5.10
4.8	White lime or kankar lime in bulk	-do-	6.35	6.35
4.9	M.S. bars, structural steel, G.I. Pipes and specials, C.I. manhole covers steps and other castings and other ancillary items, like lead, hemp-yarn etc., including stacking	-do-	10.25	8.35
4.10	(a) 200 litres barrel full including stacking.	Each	1.30	0.80
	(b) Bitumen drums full including stacking.	-do-	1.20	0.75
4.11	Small packages of store upto one quintal including stacking.	Quintal	0.75	0.75
4.12	Timber sleepers (standard size and by manual labour)	100 Nos.	20.50	20.50
4.13	Packages-containing material.			
	(i) (a) Heavy above one tonne if crane or any other suitable device is arranged by the contractor.	Tonne	28.50	28.50
	(b) Heavy above one tonne if crane or any other suitable device is arranged by the deptt.	-do-	7.50	7.50
	(ii) Medium 0.50 tonne	-do-	15.00	15.00
	(iii) Light-under 0.50 tonne	-do-	9.00	9.00
4.14	Rails with fastenings	-do-	7.70	7.70
4.15	Sal ballies			
	(i) Less than 20 cm girth at centre, 4 to 6 metres long.	100 Nos.	12.80	12.80
	(ii) 20-35 cm girth at centre, 6 to 9 metres long	-do-	15.35	15.35
	(iii) 35-50 cm girth at centre 6 to 10.5 metres long.	-do-	17.95	17.95
4.16	Shuttering			
	(i) in trucks	Truck load	12.80	12.80
	(ii) in wagons (broad gauge)	Wagon load	38.45	38.45
	(iii) in Bogies- trucks (broad gauge)	4 wheeled Bogie	76.85	76.85
4.17	Stone sets into or from wagons, trucks or boats including stacking within one chain of the unloading point.	cum	5.10	5.10

1	2	3	4	5
4.18	Petrol 10 litre tins including checking and weighing	100 Nos.	7.70	7.70
4.19	Kerosene oil or petrol 20 litre tins, including checking and weighing	-do-	15.35	15.35
4.20	Cast iron pipes including stacking			
	(i) cast iron pipes upto 300 mm i/d	Tonne	9.75	7.50
	(ii) cast iron pipes exceeding 300 mm but upto 450 mm i/d	-do-	19.50	19.50
	(iii) cast iron pipes exceeding 450 mm but upto 600 mm i/d	-do-	29.25	22.50
4.21	Asbestos cement pipes including stacking	-do-	9.75	7.50
4.22	Stone ware pipes including stacking	-do-	9.75	7.50
4.23	P.V.C. pipes including stacking	-do-	9.75	7.50
4.24	R.C.C. pipes including stacking-			
	(i) upto 300 mm i/d	-do-	9.75	7.50
	(ii) above 300 mm i/d	-do-	19.50	15.00
Sr. No.	Stacking within 15 metres of the unloading points into stacking of specified sizes.		Unit	Rate
1	2		4	5
4.25	(a) pitching stones, spalls, brickbats, building stone, ballast, stone metal, sand, bajri and shingle		Cum	2.00
	(b) manure or sludge		-do-	1.80
4.26	Coal		-do-	1.30
4.27	White lime or kankar lime in bulk		Tonne	1.30
4.28	Timber		cum	1.00
4.29	Bricks 22.86 cm size		1000 Nos.	3.85
4.30	Tiles -			
	(i) 30.48 cm × 15.24 cm × 5.08 cm		-do-	5.10
	(ii) 22.86 cm × 11.43 cm × 3.81 cm		-do-	3.20
4.31	Cement bags full		100 Nos.	12.80
4.32	Empty cement bags		-do-	0.25 and for bundling 0.75
4.33	White or non hydraulic lime or kankar or hydraulic lime in bags		Tonne	3.20
4.34	M.S. Bars, structural steel, G.I. pipes and specials, C.I. Manhole covers, steps, other castings and other ancillary items, like lead, hemp yarn etc.		-do-	4.50
4.35	(a) 200 litres barrel full		Each	0.35
	(b) Bitumen drum full		-do-	0.25
4.36	Small packages of store upto one quintal		Quantal	0.25

1	2	4	5
4.37	Cast iron pipes-		
	(i) upto 300 mm i/d	Tonne	3.85
	(ii) exceeding 300 mm, but upto 450 mm i/d	-do-	7.70
	(iii) exceeding 450 mm but upto 600 mm i/d	-do-	10.25
4.38	Asbestos cement, stone ware and P.V.C pipes	-do-	3.85
4.39	R.C.C. pipes -		
	(i) upto 300 mm i/d	-do-	3.85
	(ii) above 300 mm i/d	-do-	7.70

Note : The rates of item Nos. 4.29 to 4.39 are not payable over and above the rates of Items Nos. 4.3 to 4.7, 4.9 to 4.11 and 4.20 to 4.24

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CHAPTER NO. 5

CARRIAGE

NOTES :

(I) Unless otherwise stated, the carriage rates include loading unloading and stacking for purpose of measurement.

(II) For carriage of materials on river or choe beds, 30 percent extra. over the rates of the subsequent kms. should be paid for (excepting those for item Nos. 5.1, 5.3 to 5.5, 5.6 (a) and 5.9 to 5.11) actual river or choe bed length involved, irrespective of the position of the Km.

(III) For carriage of materials on unmetalled roads, 25 percent extra on the rates of the subsequent km (excepting those for item Nos. 5.1, 5.3 to 5.5, 5.6 (a) and 5.9 to 5.11) should be paid, irrespective of the position of the km.

(IV) For carriage of lengths above 6 metres, of heavy steel sections, like R.S. Joists, Rails etc. which can not be easily bent, increase the rates for steel in Item No. 5.2 by 50 percent.

(V) Carriage of materials should be done by Government Transport except in cases, where such transport cannot be employed on account of the terrain of the locality, in which carriage is to be done or where on account of weight of the materials, to be carried, it would be uneconomical to use Government transport, or where such transport is not available.

(VI) Carriage work, if done by boats, shall be paid at the same rates, as given in this chapter, for carriage by road.

(VII) Carriage rates of all materials, carried in the containers, include the carriage of containers in which the materials are carried. Only the net weight of material carried, is payable excluding the weight of container.

(VIII) The rates for carriage of materials, manually upto 0.48 and by mechanical means, for every km. lead, have been given. In case actual lead exceeds one km. and falls into next, full rate for the next km. will be paid, i.e. fraction of the km will be payable for the full km.

(IX) While making measurements of materials for the purpose of payment for carriage, suitable deduction shall be made to account for voids in loose stacking. This factor will be different with different materials, and may be ascertained from the relevant specification of that material, as given in Chapter No. 5 of PWD specifications.

Sr. No.	Description	Unit	For first 30 metres	Cost of carriage for every additional lead 30 metres or part thereof, beyond 1st 30 metres up to 15 such additional leads
1	2	3	4	5
5.1	(A) By Manual Labour Carriage of materials by manual labour including stacking upto 0.48 km.			
	(i) Surkhi, Sand, Bajri, Ballast, Stone Boulders, Kankar and Building rubbish	Cum	3.00	0.35
	(ii) Cement	Tonne	6.00	0.25
	(iii) Tar, Bitumen, & other road binders	-do-	6.00	0.25

1	2	3	4	5
(iv)	M.S. Bars, steel and G.I. Pipes and specials, C.I. manhole covers, steps and other castings and ancillary, miscellaneous items, like lead hemp-yarn etc.	Tonne	10.00	0.25
(v)	Timber	Cum	2.50	0.20
(vi)	Bricks 22.86 cm × 11.11 cm × 6.83 cm	1000 Nos.	7.50	1.00
(vii)	Tiles 30.48 cm × 15.24 cm × 5.08 cm	-do-	9.50	1.20
(viii)	Tiles 22.86 cm × 11.43 cm × 3.81 cm	-do-	6.00	0.75
(ix)	Coal and lime	Tonne	10.00	0.25

Note :- The rates of loading and unloading are not payable on the rates of Item No. 5.1.

Sr. No.	Description	Unit	Lead							
			1 Km	2 Km	3 Km	4 Km	5 Km	6 to 10 Km (per Km)	11 to 20 Km (per Km)	Beyond 20 Km i.e. subsequent Km (per Km)
1	2	3	4	5	6	7	8	9	10	11
(B) Mechanical Means										
5.2	Carriage of materials (metalled roads), lead more than 0.48 Km, excluding loading, unloading and stacking.									
(a)	Surkhi, sand, Bajri, Ballast, Stone Boulders Kankar & Building rubbish.	Cum	10.00	12.40	14.70	16.90	19.00	1.50	1.00	0.50
(b)	Earth work	Cum	12.00	14.40	16.70	18.90	21.00	1.50	1.00	0.50
(c)	Manure or sludge	Cum	9.00	11.15	12.80	15.20	17.10	1.35	0.90	0.45
(ii)	Cement	Tonne	4.10	5.75	7.30	8.55	9.60	1.10	0.90	0.55
(iii)	Tar, Bitumen and other road binders	Tonne	5.10	7.40	9.50	11.30	13.00	1.10	0.90	0.60
(iv)	M.S. Bars, Steel and G.I. Pipes and specials C.I. Manhole covers steps and other castings and ancillary, miscellaneous items, like lead, hemp-yarn etc.	Tonne	7.50	9.20	10.80	12.20	13.50	0.80	0.75	0.45
(v)	Timber	Cum	5.15	6.35	7.45	8.50	9.50	0.60	0.55	0.35
(vi)	Bricks 22.86 cm	1000 Nos.	15.50	21.50	27.50	33.00	38.50	3.70	2.60	1.00
(vii)	Tiles 30.48 cm × 15.24 cm × 5.08 cm	-do-	19.50	27.00	34.50	41.50	48.00	4.50	3.25	1.25

1	2	3	4	5	6	7	8	9	10	11
	(viii) Tiles 22.86 cm × 11.43 cm × 3.81 cm	1000Nos.	11.30	14.20	16.90	19.50	22.00	1.30	1.20	0.75
	(ix) Coal and lime	Tonne	7.80	8.90	9.80	10.70	11.60	0.90	0.70	0.40
	(x) C.I Pipes -									
	(a) upto 200 mm i/d	-do-	13.50	15.00	16.25	17.25	18.25	1.20	0.80	0.35
	(b) above 200 mm i/d	-do-	23.15	25.00	26.75	28.50	30.00	1.80	1.00	0.65
	(xi) A.C./P.V.C. Pipes all sizes.	-do-	16.50	18.00	19.50	21.00	22.50	1.50	0.90	0.60
	(xii) S.W. Pipes all sizes	-do-	22.70	24.80	26.90	29.00	31.10	2.10	1.10	0.85
	(xiii) R.C.C. Pipes--									
	(a) Upto 300 mm i/d	-do-	15.85	17.20	18.55	19.90	21.25	1.35	1.05	0.60
	(b) Above 300 mm i/d but upto 900 mm i/d	-do-	17.10	18.55	20.00	21.45	22.90	1.45	1.10	0.65
	(c) above 900 mm i/d	-do-	20.75	23.50	24.25	26.00	27.75	1.75	1.20	0.80

Sr. No.	Description	Unit	Rate(Rs.)
1	2	3	4
	(C) By Animal Means		
5.3	(a) Donkey load upto 1 quintal and distance upto 10 Km excluding donkey man	Each	8.00
	(b) Donkey man for 1 to 6 donkeys	-do-	20.52
	(c) Camel load upto 2.5 quintals, and distance upto 16 Km. excluding the wages of camel man.	-do-	20.50
	(d) Camel man for 1 to 3 camels	-do-	22.25
	(e) Cart load weight of consignment upto 8 quintals and distance upto 8 Km.	-do-	40.00
	(f) add for every Km for distance exceeding 8 Km but upto 16 km. in sub-item (e)	-do-	4.00
	(D) Miscellaneous		
5.4	Carriage of small consignment, out of the railway premises, to a distance of 5 to 10 chains, of 30 metres each, including loading unloading and stacking :-	Quintal.	4.00
5.5	Carriage over short distance of small consignments, upto 2 quintals in weight, including loading, unloading and stacking :-		
	(a) 1 Km	-do-	6.50
	(b) 2 Km	-do-	9.00
	(c) 3 Km	-do-	11.00
	(d) Subsequent kilometres. per Km	-do-	1.00
5.6	Carriage of light/medium package, containing material :-		
	(a) by manual labour, individual piece weighing from 1.5 quintals to 4 quintals and not mounted on wheels, including stacking :		

1	2	3	4
	(i) upto 150 metres	Piece	25.00
	(ii) exceeding 150 metres and upto 300 metres.	-do-	40.00
	(b) by mechanical transport including the use of pulley-block, individual piece weighing upto one Tonne :-		
	(i) 1st 300 metres	Tonne	25.00
	(ii) add for every 300 metres upto 1200 metres	-do-	3.00
	(iii) for 1600 metres exceeding 1200 metres	-do-	15.00
	(iv) add for every subsequent Km upto 8 Km.	-do-	3.50
	(v) add for every subsequent Km above 8 Km upto 16 Km.	-do-	2.75
<i>Note:- The rates, under Item No. 5.6 do not provide for special carriage arrangements, like cranes, trailers etc. carriage of machinery, not covered by this item should be paid at special rates to be determined after inviting quotations or tenders or the work may be got done by employing departmental labour.</i>			
5.7	Carriage of empty cement bags excluding bundling :-		
	(i) 1st Km	100 Nos.	1.50
	(ii) 2nd Km	-do-	2.40
	(iii) 3rd Km	-do-	3.20
	(iv) above 3 Km upto 13 Km	100 Nos. per Km.	0.60
	(v) Subsequent Km	-do-	0.50
5.8	Carriage of soaking and mortar mixing tanks :-		
	(i) 1st Km	Quintal	2.50
	(ii) 2nd Km	-do-	4.00
	(iii) 3rd Km	-do-	4.50
	(iv) 4th Km	-do-	5.35
	(v) 5th Km	-do-	6.00
	(vi) 6th Km	-do-	6.65
	(vii) subsequent Km	Quintal per Km	0.60
5.9	Bending M.S. Bars for carriage purposes	Tonne	11.00
5.10	Mazdoor load upto 40 Kg. and distance upto 3 Km	Each	10.00
5.11	Mazdoor load upto 40 kg. and distance above 3 Km but upto 6 Km.	-do-	20.00

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CHAPTER NO. 6

EARTH WORK

NOTES :

(I) Converting lift into horizontal lead :- For converting lift into horizontal lead, the lift upto 4.0 metres will be multiplied by 10 and from above 4.0 metres to 6 metres, it will be squared and multiplied by 3.25 and beyond 6 metres, it will be multiplied by 20. No cross-leads, what so ever, shall be measured and paid for.

(II) Rehandling of earth work and gravel work :- The rates for rehandling of recently deposited earth work and gravel work after excavation will be 20 percent less on excavation rates. Earth work, deposited before monsoon, which has had a full monsoon on it, will be considered as a normal earthwork for excavation.

(III) Measurement of lift :- The lift shall be measured from the centre of gravity of the excavated earth to that of placed earth. This shall constitute the mean lift for that section. When earth has to be carried over a spoil bank, and dumped beyond it, the mean lift would be the difference in level between the centre of gravity of the excavated earth and top of the spoil bank, omitting the dower.

(IV) Rates for additional lead have been given in slab for 7.5 metres each of additional lead. If the lead exceeds a slab by 1.5 metres or so, full payment for 7.5 metres lead will be paid.

(V) The payment for compensation should only be made on the production of a certificate from the revenue authorities, that the contractor has paid compensation to the land owners. However, no compensation is payable, when the earth is borrowed from Govt. land.

(VI) The work earthwork/soil/sand/silt/clay will also include fly ash. However, the work of embankment construction using fly-ash shall be executed as per specifications contained in Indian Road Congress SP : 58—2001."

(Note No. VI inserted vide A & C slip 20 dt. 21/5/2003)

Sr No.	Description	Unit	Rate(Rs.)
	(A) Earthwork Excavation in Embankments and Cuttings.		
6.1	Earthwork of silt-clearance of channels and drains-		
	(a) Kassi work undressed involving an average horizontal throw upto 2 metres and average vertical lift upto 0.5 metre	100 Cum	415.50
	(b) basket work with a combined lead upto 7.5 metres undressed.	-do-	564.50
	(c) dressing for sub-items (a) and (b) supra	-do-	40.25
	(d) extra for every 7.5 metres additional lead	-do-	19.20
<i>Note :- No extra allowance of werness, shush, humus or daldal etc., is payable for item No. 6.1</i>			
6.2	Earth work excavation in ordinary soil exclusive of compensation of earth -		
	(a) Kassi work undressed involving an average horizontal throw upto 2 metres, and an average vertical lift upto 0.5 metre including breaking of clods.	-do-	415.50
	(b) earth work undressed with a combined lead upto 15 metres including breaking of clods	-do-	586.60

Sr No.	Description	Unit	Rate (Rs.)
(c)	Lead		
	When overall lead is upto 60 metres-		
(i)	Extra for every 7.5 metres additional lead beyond 15 metres, but upto 60 metres by manual mean.	100 cum.	22.65
	When overall lead is more than 60 metres		
(i)	Extra for every 7.5 metres additional lead beyond 15 metres but upto 60 metres by animal or by animal driven cart.	-do-	15.00
(ii)	Extra for every 7.5 metres additional lead beyond 60 metres but upto 300 metres by animal or by animal-driven cart.	-do-	13.25
(iii)	Extra for every 7.5 metres additional lead beyond 300 metres but upto 495 metres by animal or by animal-driven cart.	-do-	12.00
Note :-	<i>For leads beyond 495 metres earth work shall be payable at carriage rates arrived at for Earth Work in Chapter 3 item No. 5.2 (ii) with loading and unloading as per item No. 4.1 (a) of Chapter 4 This rate also includes excavation of Earth Work in all kinds of soil.</i>		
(d)	Wet Earth Work -		
(i)	extra for wet earth work from bottom of excavation upto level of sub-soil water,	-do-	304.70
(ii)	extra for wet earth work from level of sub-soil water upto 30 cm above.	-do-	166.20
(iii)	extra for wet earthwork for depth above 30 cm of sub-soil water level	-do-	83.10
Note:-	<i>(i) Wetness allowance shall be payable only after obtaining the written approval of the Superintending Engineer.</i>		
	<i>(ii) Pumping for wet earthwork will be done departmentally.</i>		
(e)	Hardness -		
(i)	extra for hard soil with D.B.D. (Dry Bulk Density) from 1.6 to 1.7.	-do-	96.95
(ii)	extra for hard soil with D.B.D (Dry Bulk Density) exceeding 1.7 but upto 1.8	-do-	193.90
Note :-	<i>(i) For D.B.D. upto 1.8 rate shall be approved by the Superintending Engineer, on recommendation by the Executive Engineer.</i>		
	<i>(ii) For D.B.D. above 1.8 special reference shall be made to the Superintending Engineer for decision, who may allow a maximum extra rate upto Rs. 260.00 per 100 cum.</i>		
(f)	Extra for puddling work	-do-	498.60
(g)	Compaction -		
(i)	extra for laying earth as per specification for compaction in 25 cm layers and dressing, but excluding cost of rolling.	-do-	68.10

Sr. No.	Description	Unit	Rate (Rs.)
(ii)	extra for watering the earth, laid in 25 cm layers, as per specifications for compaction when the water is arranged on cost, at the source of water including lead upto 1 Km.	100 cum.	75.00
(iii)	extra for watering the earth, laid in 25 cm layers, as per specifications for compaction, when the water is taken free of cost, at the source of water but including lead upto 1 Km.	-do-	32.50
(iv)	Rolling to specifications bring the earth into suitable optimum moisture contents with the use of water bowers, laying the earth into 25 cm layers with the use of motor grader, and rolling with vibratory roller complete including testing charges.		
(a)	with a desired field density not less than 95% of maximum dry density (Heavy proctor test)	-do-	1330.00
(b)	with a desired field density not less than 100% of maximum dry density (Heavy proctor test).	-do-	1600.00
<i>Note :- The item No. 6.2 (g) IV (a) & (b) shall be allowed under special circumstances only with the written approval of the Chief Engineer. These rates are for National Highway Works.</i>			
(v)	Extra rolling to specifications with road roller/sheep foot roller and tractor or any other like machinery under suitable moisture contents with desired field density not less than 95% maximum dry density (ordinary proctor test)	-do-	225.00
<i>Note :- (i) Watering and rolling shall usually be done departmentally.</i>			
(ii)	Where the lead of water exceeds one Km. add Rs. 3.00 per 100 cum for every additional lead of 100 metres, or part thereof, in the rates of item No. 6.2(g) (iii) & (iv)		
(h)	Admixture of shingle or Kankar -		
(i)	extra for admixture of shingle or kankar upto 10 percent.	-do-	Nil
(ii)	extra for admixture of shingle or kankar, exceeding 10 percent, but upto 20 percent.	-do-	124.65
(iii)	extra for admixture of shingle or kankar, exceeding 20 percent, but upto 30 percent.	-do-	193.90
(iv)	extra for admixture of shingle or kankar, exceeding 30 percent, but upto 40 percent.	-do-	318.55
<i>Note :- For admixture above 40 percent, rates for gravel work excavation shall apply.</i>			

Sr No.	Description	Unit	Rate (Rs.)
	(i) Extra for slush.	100 cum.	162.00 to 360.00
	<i>Note :- Slush is that which will not support a man's weight. The rate will be paid depending upon the nature of the slush, after obtaining approval of the Superintending Engineer.</i>		
	(j) Extra for daldal.	-do-	395.00 to 523.50
	<i>Note :- Daldal is clay that will flow like molasses. The rate shall be paid according to the merits for each case, after obtaining sanction of the Superintending Engineer.</i>		
	(k) Extra for humus	-do-	844.00
	<i>Note :- Humus is decayed vegetable and animal mould (growth caused by dampness) that will contain sewage, flows like molasses, and will not support a man's weight. The rate shall be paid only after obtaining approval of the Superintending Engineer.</i>		
6.3	Dressing of Earthwork :-		
	(i) new work or remodelling work	-do-	45.90
	(ii) repair work	-do-	58.10
	(iii) sand only	-do-	30.75
6.4	Compensation for earth, taken from private land.	-do-	35.00
6.5	Gravel (in loose form in non-cohesive binding material) work in excavation with occasional use of picks, exclusive of compensation of earth, undressed with a combined lead upto 15 metres, with percentage of gravel or kankar :-		
	(a) exceeding 40 percent, but upto 60 percent.	-do-	890.45
	(b) exceeding 60 percent, but upto 80 percent.	-do-	1038.80
	(c) exceeding 80 percent, but upto 100 percent.	-do-	1135.80
	(d) extra for every 7.5 metres additional lead	-do-	30.45
	(e) extra for wet work, above subsoil water level	-do-	244.45
	(f) extra for work, under standing water	-do-	637.15
	(g) extra for work, under flowing water	-do-	969.55
	(h) extra for dressing work.	-do-	58.10
	<i>Note :- Where water is depressed by pumping, rate shall be for wet gravel work, if actually wet, and not for work, under standing or flowing water.</i>		
	(B) (i) Earthwork in Excavation of Foundation in Trenches.		
6.6	Earth work in excavation in foundations, trenches, etc. in all kinds of soils, not exceeding 2 metres depth including dressing of bottom and sides of trenches stacking the excavated soil, clear from the edge of excavation and subsequent filling around masonry, in 15 cm layers with compaction, including disposal of all surplus soil, as directed within a lead of 30 metres.	-do-	1108.10

Sr No.	Description	Unit	Rate (Rs.)
	(ii) Earthwork in Excavation for Underground Structures, Sullage Drains etc.		
6.7	Earthwork in excavation in foundations, trenches, of under ground structures, sullage drains, etc., and other similar works in ordinary soil including dressing of bottom and sides, to correct levels and templates, cutting of trees and bushes, dewatering of rain water, diversion of traffic, fixing and maintenance of caution boards, and night signals, crossing over trenches for access to houses, watching, stacking of excavated soil, clear from the edge of excavation, and subsequent filling, where required around masonry, in 15 cm layers, with compaction and disposal of surplus soil as directed within a lead of 30 metres for depth upto 2 metres below natural ground level (For Public Health works only).	100 cum	932.00
<p><i>Notes :- (i) If the depth of foundation, or disposal of surplus soil is more than that specified in this item, extra payment at the rate specified in Item No. 6.2(C), shall be made for the additional lead or lift, additional lift shall be made for the additional lead or lift. Additional lift shall be calculated only for earth work below 2 metres depth from top of excavation.</i></p> <p><i>(ii) Item No. 6.7 above does not include the provision of timbering, however, in case it is necessary to provide timbering, the payment may be made for the type of timbering provided. This extra payment is only allowed on the written orders certificate of the Engineer-in-charge, and at the rates, as fixed by the Superintending Engineer.</i></p>			
	(iii) Excavation for Pipe Lines.		
6.8	Excavation for pipelines running under pressure in trenches and pits, in open areas, where disposal of surplus earth is done alongwith the alignment including trimming & dressing sides, levelling of beds of trenches to correct grade, cutting joint holes, cutting trees and bushes, etc. refilling consolidation and watering of refill, in 15 cm layers and restoration of unmetalled or unpaved surface to its original condition, including the cost of dewatering of rain water, diversion of traffic, night signals, fixing caution boards, watching, fencing etc. and outside the town in ordinary soil :-		
	(a) Without timbering and shoring upto 1.5 metres depth.	-do-	1030.00
	(b) With timbering and shoring -		
	(i) upto 1.5 metres depth	-do-	1422.00
	(ii) exceeding 1.5 metres depth, but upto 2.25 metres depth.	-do-	1472.00

Sr No.	Description	Unit	Rate (Rs.)
	(iii) Exceeding 2.25 metres depth, but upto 3.00 metres depth.	100 Cum	1597.00
	(iv) exceeding 3.00 metres depth, but upto 4.5 metres depth.	-do-	1718.00
	(v) exceeding 4.5 metres depth, but upto 6.00 metres depth.	-do-	1837.00
6.9	Excavation for pipelines running under pressure in trenches and pits, in streets & lanes including trimming and dressing sides, levelling of beds of trenches to correct grade, cutting joint holes, cutting trees and bushes, etc. refilling consolidation and watering of refill, in 15 cm layers and restoration of unmetalled or unpaved surface to its original condition, including the cost of dewatering of rain water, diversion of traffic, night signals, fixing caution boards, crossing over trenches for access to the houses, watching, fencing etc. and disposal of surplus soil outside and inside the town, involving lead upto one km in ordinary soil :-		
	(a) without timbering and shoring upto 1.5 metres depth.	-do-	1183.00
	(b) with timbering and shoring :-		
	(i) upto 1.5 metres depth.	-do-	1575.00
	(ii) exceeding 1.5 metres depth, but upto 2.25 metres depth.	-do-	1623.00
	(iii) exceeding 2.25 metres depth, but upto 3.00 metres depth.	-do-	1748.00
	(iv) exceeding 3 metres depth, but upto 4.5 metres depth.	-do-	1868.00
	(v) exceeding 4.5 metres depth, but upto 6.00 metres depth.	-do-	1962.00
	(iv) Excavation for Storm Sewers		
6.10	Excavation of trenches in streets, lanes or in open areas for storm sewer, sewers running by gravity and manholes to full depths as shown in drawings including shoring, timbering of paling boards, frame system type, dressing to correct sections and dimensions, according to templates and levels, dewatering, provision for diversion of traffic, cutting trees and bushes, etc. night signals, profiles, pegs, sight rails, boning rods, crossing over trenches for access to the houses. watching fencing etc. fixing and maintenance of caution board refilling of trenches, watering of refill, in 15 cm layers ramming and restoration of unmetalled or unpaved surface to original condition and removal of surplus soil, from site of work, upto a lead of 1 Km in ordinary soil.		
	(a) for depths of excavation not exceeding 3 metres below ground level	-do-	1919.00

Sr No.	Description	Unit	Rate (Rs.)
(b)	for depths of excavation exceeding 3 metres, but not exceeding 4.5 metres.	100 Cum	2114.00
(c)	for depths of excavation exceeding 4.5 metres, but not exceeding 6.00 metres	-do-	2529.00
(d)	for depths of excavation exceeding 6 metres, but not exceeding 7.5 metres.	-do-	2734.00
(e)	for depths of excavation exceeding 7.5 metres but not exceeding 9.0 metres.	-do-	3024.00

(Item No. 6.10 (a) Rate amended vide A & C slip 2 dated 3/10/91)

6.11	Extra over and above the rate of excavation, contained in item No. 6.10 for providing close board timbering in place of poling boards, frame system of timbering per metre of sewer trenches, for every 2 metres depth or part thereof, where such timbering is done.	Metre	23.00
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Example :-

Trenche depth is 6 metres, three stage timbering, each stage 2 metres, has been done. The strata, met with from 4 to 6 metres necessitate the provision of close timbering and is done. Thus, rate of Rs. 23.00 per metre of the effected sewer trench will be paid. In case the close timbering has been done from 2 to 6 metres below ground level, i.e. 2 stages of 2 metres each, then payment of two stages of Rs. 23.00 per metre, i.e. Rs. 46.00 per metre of the effected sewer trench will be payable.

6.12	Extra over and above item No. 6.11 for driven/piled type timbering, required in running sandy strata for every 2 metres depth, or part thereof.	Metre	18.00
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Note :

- (i) Rates as per item No. 6.10 include cost of poling board, frame type of timbering and where timbering is not actually done, a recovery at the rate of Rs. 730.00 per 100 cum of earth work shall be made.
- (ii) If any excavation of trenches, as per item No. 6.10 in which timbering has not been done, has to be abandoned due to the change of alignment, of the sewer, necessitated by any obstruction such as pipelines, electric pole, telephone or telegraph cables wired poles, coming in the way of the sewer, or for any other cause, what so ever, the contractor will be paid at the rate of Rs. 932.00 per 100 cum, for such excavation, not withstanding that he may have made arrangements for the timbering of such trenches or actually brought it to the site, Payment for abandoned trenches at the above rate will include for the back filling of the trenches, in 15 cm layers, well watered, consolidated and for the restoration of the site to its original condition.
- (iii) If any timbering or shoring is left permanently in any trench or excavation, under orders of the Engineer-in-charge, of the work; the contractor

Sr No.	Description	Unit	Rate (Rs.)
	<i>shall be entitled to a payment of Rs. 1199.00 per cum of the timbering, left permanently in the work. Intimation of such payment, should be given to the Superintending Engineer in due course.</i>		
(iv)	<i>The minimum width of trenches for measurement purposes shall be as given in P.W.D. Specifications. If the actual width of the trenches is less than that given therein, the actual volume of excavation only shall be measured and paid for. If the actual width of trenches is greater than that given therein, the width to be measured, for calculations of volume of the excavation, to be paid for, shall be in accordance with the specifications.</i>		
(v)	<i>If the trenches are carried down below spring level, special rates shall be fixed appropriate to the special conditions of each job.</i>		
(vi)	<i>Extra rate for removal of kankar/gravel, met in the excavation in respect of Item No. 6.7 to 6.10 will be payable extra as per item No. 6.2(h) where it is upto 40 percent. In case it is above 40 percent, rates as per Item No. 6.2(a), (h) and (e) will be paid extra after deduction of the rate, as per item No. 6.2(b)</i>		
(vii)	<i>Extra cost for the hardness of soil, slush, daldal and humus in respect of Item No. 6.7 to 6.10 shall be payable as per item No. 6.2(e), (i), (j) and (k).</i>		
(viii)	<i>The depth of the spring level, below ground level, will be decided by the Engineer-in-charge; and the decision will be final and binding on the contractor.</i>		
(ix)	<i>If the excavation for any sewer shall be carried out by 'cut and cover' i.e. sinking shafts and tunnelling in between, the contractor shall be paid for such work, as if the trench has been opened the full length, but nothing extra shall be allowed, other than the full measurements of the trench excavation at the rate of Item No. 6.10 above, for excavation purpose. It will entirely be at the discretion of the Engineer-in-charge, to permit excavation by cut and cover method back-filling of shafts thoroughly, and to the satisfaction of the Engineer-in-charge.</i>		
(x)	<i>In case construction of sewer is carried out by "sinking chambers methods," then the payment for various items, involved in the construction of chambers, i.e., Brick work, Cement concrete, R.C.C. and sinking, etc., will be made at the respective rates, provided for, in the schedule without any extra payment due to supposed special or difficult nature of work.</i>		
(xi)	<i>Extra rate, provided vide item Nos. 6.11 and 6.12 above for closed board, driven/piled type, timbering will only be payable on the written orders/certificate of the Superintending Engineer.</i>		

Sr No.	Description	Unit	Rate (Rs.)	
(C) Earth Filling Under Floors				
6.13	(a) Earth filling under floors with surplus soil excavated from foundation and taken only from outside the building plinth, in 15 cm layers including ramming watering and consolidating lead upto 30 metres.	100 cum		343.40
	(b) Earth work (exclusive of compensation for earth) in excavation, in ordinary soil, and filling in 15 cm layers, in foundation and plinth including ramming, watering and consolidation under floor with earth brought from a distance not exceeding 30 metres.	-do-		729.70
	(c) Extra for additional lead above 30 metres	-do-		As per rate under item No. 6.2(c).
(D) Earth Work Over Roofs.				
6.14	(a) Earth work over roofs of one storey building with good earth, free of any admixture of foreign matter, including breaking of clods, ramming watering, dressing and horizontal lead upto 30 metres.	-do-		1246.50
	(b) Extra for additional lead above 30 metres	-do-		As per rate under item No. 6.2(c)
	(c) Extra for every additional storey	-do-		77.90
(E) Antitermite Treatment (using Aldrin)				
			<u>Labour</u>	<u>Through</u>
			Rate	Rate
6.15	(a) <i>Preconstruction Work</i>			
	(i) Providing and injecting chemical emulsion for pre-construction antitermite treatment and creating a chemical barrier under and around the column pits, wall trenches basement excavation, top surface of plinth filling junction of wall and floor alongwith the external perimetre of building, expansion joints surrounding of pipes and conduite etc. complete (plinth area of the building at ground floor only shall be measured) Aldrin Emulsifiable concentrate 0.5%)	Sqm	5.25	133.75
	(b) <i>Post Construction Work</i>			
	(i) Along external wall where the apron is not provided using chemical emulsion at the rate of 7.5 liters per sqm of the vertical surface of the substructure to a depth of 300 cm including excavation channel along the wall and rodding etc. complete.	Metre	1.50	5.60
	(ii) Along the external wall below concrete or masonry apron using chemical emulsion @ 2.25 litres per liner metre including drilling and plugging holes, etc. in apron.	-do-	2.05	6.55

Sr No.	Description	Units	Labour rate	Through rate
	(iii) Treatment of soil of existing floors using chemical emulsion @ one litre per hole. 300 mm apart including drilling and plugging 12mm dia holes with cement-mortar 1 : 2 (1 cement : 2 coarse sand) to match the existing floors.	Sqm	8.30	31.90
	(iv) of voids in masonry using chemical emulsion one litre per hole, at 300 mm intervals including drilling holes at 45° and replugging them with cement-mortar 1 : 2 (1 cement : 2 coarse sand)	Metre	1.05	8.05
Notes:-	(i) The labour rates of item No. 6.15 i.e. (ii) to (iv) includes the cost of mortar for plugging holes.			
	(ii) The rates for item no. 6.15 are for estimating purposes only. This item should be got done departmentally.			
(F)	Miscellaneous	Unit		Rate
6.16	Earthwork undressed by boats including hiring of boats :-			
	(a) digging and loading in boats within 15 metres lead	100cum		575.35
	(b) carriage by boats upto 300 metres	-do-		290.00
	(c) extra for distance beyond 300 metres and upto 495 metres per 15 metres.	-do-		11.50
Note:-	For lead beyond 495 metres, the rates under item No. 6.2 (c) will be applicable.			
	(d) unloading earth from boats	-do-		316.60
6.17	Earthwork undressed by tramway or rail :-			
	(a) digging and loading into trucks within 1 metre lead	-do-		581.75
	(b) hand shunting of N.G. tip wagons, per chain of 30 metres.	-do-		29.00
	(c) unloading earth from tip wagons and clearing within 3 metres from rail.	-do-		155.80
	(d) unloading earth from B.G. trucks and clearing 1.5 metres from rail.	-do-		324.10
	(e) unloading earth from B.G. trucks and spreading 4.5 metres from rail.	-do-		433.60
	(f) unloading from B.G. trucks and spreading upto 30 metres from rail	-do-		537.75
6.18	Dressing of dowels in addition to payment for dressed earthwork.	100 metres		27.55
6.19	Restoring boundary road drains.	-do-		29.35
6.20	Making new boundary road, including levelling and dressing 3 metres to 4.5 metres wide :-			
	(a) in unploughed land	-do-		66.25
	(b) in ploughed land	-do-		137.10

Sr. No.	Description	Units	Rate
<i>Note:- The rate for item No. 6.20 are to be paid only in reaches, where no earthwork for boundary road is paid for.</i>			
6.21	(a) Covering boundary road with 7.5 cm deep sarkanda or jungle, upto 300 metres lead, including cutting and supply of sarkanda or jungle.	100 metres	77.90
	(b) Covering boundary road with 7.5 cm deep sarkanda or jungle, lead beyond 300 metres and upto 1 km. including cutting and supply of sarkanda or jungle.	-do-	124.65
	(c) Extra for carriage of sarkanda :-	-do-	92.35
	(i) 2nd Km	-do-	71.25
	(ii) 3rd Km	-do-	62.35
	(iii) 4th Km	-do-	51.95
	(iv) 5th Km	-do-	46.15
	(v) subsequent Km	-do-	251.10
6.22	Ploughing or levelling borrow-pits	Hectare	251.10
6.23	Berm-trimming both sides :		
	(a) channels, upto 1.00 metres depth	Kilometre	199.45
	(b) channels, exceeding 1.00 metres, but upto 1.5 metres depth.	-do-	299.20
	(c) channels, exceeding 1.5 metre, but upto 2.5 metres depth.	-do-	448.75
6.24	Dag-belling :-		
	(a) single kassi stroke, minimum 7.5 cm deep	-do-	41.55
	(b) double kassi stroke, 'V' shaped, minimum 10 cm deep.	-do-	74.80
	(c) double kassi stroke 'V' shaped, minimum 15 cm deep.	-do-	99.75
6.25	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish lead upto 50 m and lift upto 1.5 m.		
	(a) soft/loose soil	100 Sqm.	67.55
	(b) hard/dense soil	-do-	94.75
6.26	Clearing jungle including uprooting of rank vegetation grass brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 metre above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	-do-	66.80
<i>Note:- If however, only grass is met with the area will be measured and paid for under item No. 6.27</i>			
6.27	Clearing grass and removal of the rubbish upto distance of 50 m outside the periphery of the area cleared.	-do-	21.45

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CHAPTER NO. 7

ROCK CUTTING

• NOTES :

(I) Converting lift into horizontal lead -

For converting lift into horizontal lead, the lift upto 4 metres will be multiplied by 10, and from above 4 metres to 6 metres it will be squared and multiplied by 3.25, and beyond 6 metres, it will be multiplied by 20. No cross leads, what so ever, shall be measured, and paid for

(II) Measurement of lift -

The lift shall be measured from the centre of gravity of the excavated rock to that of placed earth. This shall constitute the mean lift for that section. When earth has to be carried over a spoil bank and dumped beyond it, the mean lift would be the difference in level, between the centre of gravity of the excavated rock and top of the spoil bank, omitting the dowl :-

Sr. No.	Description	Unit	Rate (Rs.)
	Excavation including handling of materials, within 15 metres inclusive of cost of explosive and dressing, compressed air, T & P :-		
7.1	Pick work	100 cum	1097.00
7.2	Pick and Jumper work	-do-	1745.00
7.3	Jumper work	-do-	1918.00
7.4	Jumper with occasional blasting	-do-	2536.00
7.5	Blasting ordinary rock	-do-	3839.00
7.6	Blasting hard rock	-d-	5706.00
7.7	Blasting conglomerate mass	-do-	6990.00
7.8	Blasting conglomerate trenches	-do-	9295.00
7.9	Through-cut rock excavation	-do-	10 percent extra over and above rates.
7.10	Extra for every 7.5 metres additional lead	-do-	27.50

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CHAPTER NO. 8

DEMOLITION

NOTES :

(I) Unless otherwise stated, the rates include sorting and stacking dismantled, material and removing the same within a distance of 100 metres.

(II) The rates, given in item No.s 8.1 (a) to (f), 8.5 (a) to (i), 8.6 (a) to (f), 8.8 (a) to (c), (f), (g) and (h), 8.25, 8.26, 8.27, 8.28 and 8.32 (b) and (c) are for work done in foundation and plinth of any depth and also upto height of 4 metres from plinth level or upto first storey roof top level which ever is less. For additional height the extra rate shall be paid as under :-

- (a) For item No. 8.1 (a) to (f), 8.5 (a) to (i), 8.6 (a) to (f), 8.8 (g) and (h) add Rs. 5.00 per cum extra in the rates of the above items for every additional storey upto 4 metres above the top level of the roof of lower storey.
- (b) For item No. 8.8 (a) to (c) and (f), 8.25 and 8.27 add Re. 0.50 per sqm. in the rate of the above items for every additional storey upto 4 metres above the top level of the roof of the lower storey.
- (c) For item No. 8.26 and 8.28 add Re. 0.25 per sqm in the rate of the above items for every additional storey upto 4 metres above the top level of the roof of the lower storey.
- (d) For item No. 8.32 (b) and (c) add Re. 0.06 per sqm in the rate of above items for every additional storey upto 4 metres above the top level of the roof of the lower storey.

(III) Where any single storey exceeds 4 metres in height, the rate for dismantling under item No. 8.1 (a) to (f), 8.5 (a) to (i), 8.6 (a) to (f), 8.8 (g) and (h) having height greater than 4 metres will be increased by Rs. 5.00 per cum and for item No. 8.8 (a) to (c) and (f), 8.25 and 8.27 will be increased by Re. 0.50 per sqm and for item No. 8.26 and 8.28 increase the rate by Rs. 0.25 per sqm for every additional height of 2 metres or part thereof and for item No. 8.32 (b) and (c) add Re. 0.06 per sqm for every additional height of 2 metres or part thereof. This additional rate of dismantling shall also be added for dismantling for subsequent storeys. This additional rate is not to be paid for dismantling having height less than 4 metres within the storey, though the overall height of the storey may be over 4 metres, such as in case of low partition walls or wall below a mezzanine inter floor, not going above the mezzanine floor level and upto the full storey height. In case of walls of varying heights, average height shall be considered for fixing the rates.

(IV) The rates, given below are for non-hydraulic works. For hydraulic works these shall be enhanced by 50 percent (Hydraulic works are those which remain submerged under water, for most of their lives) The items, which can be considered as hydraulic works are :-

"Stone masonry in lime or cement, burnt bricks/tile lining and tile masonry in lime or cement mortar, lime or cement concrete and reinforced cement concrete and pucca grouted pitching."

(V) Unless otherwise specified, the rates of this Chapter include the cost of T & P and Scaffolding required for dismantling.

Serial No.	Description	Unit	Rate (Rs.)
(A)	Dismantling Stone Masonry.		
8.1	(a) dressed stone work, ashlar face stone work, marble work in lime.	Cum	34.65
	(b) dressed stone work, ashlar face work, marble work in cement.	-do-	49.85

Serial No.	Description	Unit	Rate (Rs.)
	(c) rubble stone masonry in lime	Cum	26.20
	(d) rubble stone masonry in cement	-do-	37.40
	(e) scabbled or rubble stone masonry in mud	-do-	13.60
	(f) dry rubble or dry scabbled stone masonry	-do-	8.90
(B)	Dismantling Stone Pitching or Soling		
8.2	(a) stone pitching dry	-do-	8.90
	(b) stone pitching laid dry, but grouted with natural silt and clay.	-do-	16.60
	(c) stone pitching laid dry, and grouted with dry ballast.	-do-	12.45
	(d) stone pitching grouted with dry ballast and with natural silt and clay.	-do-	17.80
(C)	Dismantling Stone Spalls or Brickbats Filling		
8.3	(a) in dry	-do-	8.30
	(b) grouted with natural silt and clay	-do-	11.75
	(c) in-wire crates including opening of crates and stacking crate material.	-do-	14.65
	<i>Note: When the work to be dismantled, under item No. 8.2 and 8.3 is under water add 60 percent to above rates.</i>		
8.4	Dismantling pucca grouted pitching	-do-	26.60
(D)	Dismantling Brick Work, Tile Masonry or Tile Lining and Tile Terracing,		
8.5	(a) in lime	-do-	26.60
	(b) in cement	-do-	35.60
	(c) arch work in cement or lime	-do-	44.50
	(d) in mud	-do-	13.30
	(e) in mud, with jibi face	-do-	16.60
	(f) gilafi brick work	-do-	8.90
	(g) gilafi brick work with jibi face	-do-	11.75
	(h) sundried brick work in mud	-do-	7.65
	(i) dry brick work	-do-	7.65
	(j) dismantling mud walling	-do-	7.60
	(k) dismantling dhajji walling	sqm.	2.65
(E)	Dismantling Concrete.		
8.6	(a) lime concrete, cement concrete of 1 : 6 : 12 or leaner mix.	Cum	22.15
	(b) cement concrete plain 1 : 4 : 8 or 1 : 5 : 10	-do-	37.40
	(c) cement concrete plain 1 : 3 : 6	-do-	51.35
	(d) cement concrete plain 1 : 2 : 4	-do-	71.85
	(e) reinforced cement concrete with cleaning and straightening and cutting of bars if required.	-do-	108.05
	(f) dismantling reinforced brick or R B/ R.C. work including reinforcement		

Serial No.	Description	Unit	Rate (Rs.)
	with cleaning and straightening and cutting of bars if required.	Cum	87.90
8.7	dismantling metalling or dry brick ballast	-do-	8.90
(F)	Dismantling Roofing		
8.8	(a) first class mud roofing	Sqm.	3.15
	(b) second class mud roofing with brick tiles, precast C.C. tiles or stone slabs	-do-	2.70
	(c) mud roofing with wooden planks laid over battens	-do-	2.50
	(d) thatched roofing	-do-	0.85
	(e) sirki sarkanda roofing	-do-	1.25
	(f) jack-arch roofing excluding joists or terraced roofing.	-do-	3.35
	(g) demolishing mud phaska in tile terracing	Cum	12.45
	(h) removing R.C.C. Battens from roof	-do-	49.85
8.9	Dismantling wood work from roof.	-do-	31.50
8.10	Stripping and stacking slates or tiles of a roof	Sqm.	2.20
8.11	Stripping and stacking iron sheets of a roof, including ridging, flashing, eaves' boards, gutters and down pipes.	-do-	1.55
8.12	Add for planks and battens in case of item Nos. 8.10 and 8.11	-do-	1.45
8.13	Add for roof trusses of iron or wood in case of item No. 8.10 and 8.11	-do-	2.90
8.14	Dismantling wire gauze with frame work including separating frame work and putting wire gauge into rolls.	-do-	0.60
8.15	Dismantling asbestos cement celotax or other hard-board ceiling or partition walls including supporting timber.	-do-	2.40
8.16	Dismantling wooden chhajjas and sun-shades	-do-	2.90
8.17	Removing doors and windows (wooden and steel) together with the dismantling of walls :-		
	(a) doors	each	6.25
	(b) windows	-do-	4.15
	(c) clerestory windows	-do-	2.10
8.18	Removing door and windows (wood and steel) with chowkats by making recesses in walls when the wall is not to be dismantled :-		
	(a) doors	-do-	11.90
	(b) windows	-do-	7.55
	(c) clerestory windows	-do-	3.80
8.19	Removing sal ballies from structures including stacking.	-do-	2.05
8.20	Dismantling sleepers from centring including stacking outside.	-do-	2.05

Serial No.	Description	Unit	Rate (Rs.)
8.21	Dismantling steel work upto a height between ridge and floor level upto 5 metres in single section including dismembering :-		
	(a) R.S. Joists	Quintal	10.40
	(b) channels, angles, tees and flats	-do-	7.90
8.22	Dismantling steel work upto a height of 5 metres in built up section in angles, tees, flats and channels including all gusset plates, bolts, nuts, beading etc.		
	(a) including dismembering	-do-	16.20
	(b) excluding dismembering	-do-	11.20
Note :	(i) Extra for item No. 8.21 and 8.22 for cutting rivets @ Rs. 0.25 each rivet.		
	(ii) In case height of dismantling work done for item No. 8.21 and 8.22 is more than 5 metres increase the rate by Rs. 1.60 per quintal for every additional height of two metres or part thereof beyond 5 metres height.		
8.23	Removing glazing fixed or openable (wood and steel) including chowkat holdfasts and concrete blocks :-		
	(a) together with dismantling of walls	Sqm.	2.10
	(b) by making recesses in walls when the wall is not to be dismantled.	-do-	4.00
8.24	Removing rolling shutters including top cover brackets and side guides etc. complete.	-do-	2.10
(G)	Dismantling Flooring and Ceiling		
8.25	Dismantling cement conglomerate/terrazzo-floors 25 mm to 50 mm thick including concrete base.	-do-	5.75
8.26	Dismantling cement conglomerate/terrazzo-floors 25 mm to 50 mm thick without concrete base.	-do-	3.05
8.27	Dismantling brick or flagged stone slab flooring including concrete base.	-do-	4.45
8.28	Dismantling brick or flagged stone slab flooring without concrete base	-do-	1.70
8.29	Dismantling plank flooring	-do-	2.90
8.30	Dismantling plank ceiling and supporting timber	-do-	3.55
8.31	Dismantling cloth ceiling and supporting timber	-do-	1.65
(H)	Scraping		
8.32	(a) white wash and colour wash	-do-	0.45
	(b) lime plaster	-do-	1.90
	(c) cement plaster	-do-	1.90
	(d) mud plaster	-do-	0.35
	(e) brick dismantled from brick work in lime or cement.	1000 No.s	83.10

Serial No.	Description	Unit	Rate (Rs.)
(f)	brick dismantled from brick work in mud.	1000 Nos.	20.75
(g)	tiles 30.48 cm × 15.24 cm × 5.08 cm dismantled from tile work in lime or cement.	-do-	110.80
(h)	dismantled boulder masonry	Cum	33.25
(i)	in cement or lime	-do-	7.50
(ii)	in mud		
(I)	Miscellaneous		
S.33	(a) Removal of old broken glass panes (any thickness or size, quality or description) from wooden frames, glazed with putty or fixed with beads.	Sqm.	3.85
	(b) Removal of old broken glass panes (any thickness or size, quality or description) from metal frames including punching or drilling out old glazing pins/clips.	-do-	4.85
	(c) Removing serviceable glass of any thickness or size or description except polished plate glass from old wood or metal frames etc. (any thickness or size) hatching out old putty etc. including making good breakages in taking out and handling complete.	Sqm.	4.85
S.34	Dismantling stone ware drains and of concrete.	Metre	1.05
S.35	Removing hume pipes NP 2 & 3		
(a)	150 mm to 300 mm dia	-do-	5.00
(b)	above 300 mm to 600 mm dia	-do-	8.30
(c)	above 600 mm to 900 mm dia	-do-	11.75
S.36	Dismantling tramway track	-do-	0.70
S.37	Dismantling A.C.C. or C.I. rain water pipes with clamps and specials.	-do-	1.20
S.38	Dismantling white or coloured glazed tiles (to be carefully removed)	Sqm.	7.10

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CHAPTER NO. 9

CENTRING AND SHUTTERING

NOTES :

- (I) Where smooth exposed concrete finish is desired which is not to be touched or plastered but is to be left as it comes out of the shuttering, extra smooth shuttering or proper steel shuttering has to be used. As it involves more expenditure than the ordinary shuttering an additional rate of 33-1/3 percent shall be payable on the items of labour rates, where such finish is desired. The through rates shall also be increased correspondingly. Sometimes, in architectural work, shuttering pattern is specified to get an impression of shuttering lines; in a certain pattern in such cases, the shuttering has to be specially manufactured in panels so that their joints give the lines in the specified pattern in concrete face. For such cases, a separate rate, on the superficial area, as per item No. 9.20 has to be allowed over and above the basic rates of the centring and shuttering; but the increase of 33-1/3 percent will not be allowed in addition to this rate. Payment for shuttering pattern will only be allowed, if a definite pattern has been specified in the architectural drawings and not otherwise.
- (II) (a) For work done in storeys, above the first storey upto a height of 4 metres or part thereof, upto the roof top level of that storey, add Re. 0.60 per sqm of contact area for every additional storey, except for item No. 9.2, 9.3, 9.4, 9.12 and 9.20.
- (b) Whenever any single storey exceeds 4 metres in height the rates for centring and shuttering (except for item No. 9.2, 9.3, 9.4, 9.12 and 9.20) in the storey will be increased by Re. 0.60 per sqm of contact area, for every additional height of 2 metres, or part thereof.
- (c) For subsequent storey, having a height of 4 metres, or part thereof, situated above a storey, having a height more than 4 metres, the rates of centring and shuttering except for item No. 9.2, 9.3, 9.4, 9.12 and 9.20 shall be the same as for the upper most stage rate of the storey.
- (III) Unless specified to the contrary, the labour rates for various items of construction include handling of materials within 100 metres and through rates include all re-handling of materials at the site of work and no payment is due to the contractors on this account.
- (IV) Unless specified to the contrary, the labour rates include the cost of water, tools and plants, labour and materials for scaffoldings and centring and shuttering and cost of good earth for mud mortar and mud-plaster, wherever required.
- (V) Extra rate for centring and shuttering in circular work in horizontal plan wherever not appearing in the items the labour and through rates shall be increased by 20%

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
9.1	Centring and shuttering for flat surfaces such as suspended floors, roofs, landings, chhajjas, shelves etc. inclination not exceeding 25 degree with horizontal.	Sqm.	16.20	40.65

Note:- In case the inclination of the R.C.C. slab is more than 25 degree, the labour as well as through rate of item No. 9.1 shall be increased by 10% and nothing extra shall be paid for lesser inclination.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
9.2	Centring and shuttering for reinforced cement concrete north light folded plate roofing including all components of folded plates and including diaphragm beam.	Sqm.	30.90	108.35
9.3	Centring and shuttering for reinforced cement concrete pyramid type roofing complete in all respects.	-do-	24.75	67.00
9.4	Centring and shuttering for reinforced cement concrete conical type roofing complete in all respects.	-do-	29.70	80.35
9.5	Centring and shuttering for faces of walls, partitions, retaining walls, well steining and the like (vertical or battering) including attached pilasters, buttresses etc.	-do-	19.65	54.85
9.6	Centring and shuttering for faces of walls, partitions, retaining walls, well steining and the like (vertical or battering) including attached pilasters, buttresses etc. when curved.	-do-	22.10	60.70
9.7	Centring and shuttering for sides and soffits of beams, hunchings, girders, bressumers and lintels.	-do-	18.70	57.80
9.8	Centring and shuttering for staircases with sloping soffits including risers and stringers.	-do-	18.85	50.90
9.9	Centring and shuttering for columns (square or rectangular or polygonal in plan)	-do-	18.75	49.45
9.10	Centring and shuttering for columns (circular or curved in plan)	-do-	24.10	63.40
9.11	Centring and shuttering for corbel, parapets, fascias and other similar items, including edges.	-do-	22.80	39.60
9.12	Centring and shuttering for R.C.C. domes	-do-	40.00	130.00
9.13	Shuttering for faces of concrete foundation and foundation beams (vertical or battering).	-do-	6.95	30.65
9.14	Shuttering for precast R.C.C. battens.	-do-	5.30	13.80
9.15	Shuttering for precast plain or R.C. concrete or soil blocks, wall plates, bed plates shelves etc. (small units upto 0.07 cum each)	-do-	4.65	12.45
9.16	Centring and shuttering for arches of verandah openings.	Per metre of clear span	8.05	12.55
9.17	Centring and shuttering for arches of doors and windows.	-do-	4.05	5.85

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
9.18	Centring and shuttering for slab culverts :-			
(a)	upto 3 metres span	Sqm	16.20	40.80
(b)	exceeding 3 metres but upto 6 metres span.	-do-	18.00	52.20
9.19	Form work for cement concrete blocks, in situ, such as staggered R.C.C. blocks arrows and plain cement concrete blocks	-do-	8.70	28.45
9.20	Extra for steel shuttering pattern, as specified by the Engineer-in-Charge as per architectural drawings.	Sqm of surface area	--	13.50
9.21	Centring and shuttering for well kerbs, complete in all respects :-			
(a)	for square, rectangular, polygonal wells.	Sqm.	6.95	30.65
(b)	for circular wells	-do-	15.05	48.20
9.22	Centring and shuttering for arched roof curved slab (curvature in one directions)	-do-	21.60	69.15

Note :- All curved slabs, with curvature in two directions, shall be covered under item No. 9.12 of this chapter.

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CHAPTER NO. 10

CONCRETE

NOTES :

(I) The labour, as well as through rates of concrete, include the cost of water and curing. Wherever curing is got done departmentally, and not through the contractor, the rates shall be reduced by Rs. 3.50 per cum.

(II) All type of concreting is to be done with use of mechanical mixer and vibrator. Accordingly the rates of all type of concrete, in this chapter include the cost of mixing with mechanical mixer and with the use of vibrator which are to be arranged by the contractors at its own expenses. However, an exemption for the use of mechanical mixer and vibrator upto a quantity of 10 cum of concrete for each exceptional/isolated work shall be given with the written approval of Executive Engineer with the reduction of rates accordingly.

(III) The rates of cement concrete, 1 : 3 : 6, 1 : 2 : 4, 1 : 1½ : 3, and 1 : 1 : 2 are with the use of stone aggregates upto 20 mm nominal size. In case 40 mm nominal size stone aggregate are used, decrease the through rates of these items by Rs. 16.20, 15.50, 14.80 and 13.75 per cum respectively.

(IV) In case design mix cement concrete is laid in various items of R.C.C., the cost of centring and shuttering and steel reinforcement shall be payable extra on the rates as specified in Chapter 9 "Centring and Shuttering" and Chapter No. 18 "Steel Work" of the respective item.

- (V) (a) The rates given in item Nos. 10.81, 10.82, 10.86 to 10.89, 10.91, 10.94 and 10.96 are also for work done upto a height of 4 metres above plinth level, or upto the first storey roof top level, whichever may be lower.
- (b) For work done, in storeys above the first storey, having a height of 4 metres or part thereof upto the roof top level of that storey, if the height of the storey immediately below is 4 metres, or part thereof add Rs. 7.30 per cum to the rates, for items Nos. 10.81, 10.82, 10.86 to 10.89, 10.91, 10.94 and 10.96 and add Rs. 2.55 per cum for item Nos. 10.2, 10.9 to 10.13, 10.20 to 10.25, 10.44 to 10.61, 10.70 to 10.76, 10.80, 10.105 to 10.112, for the storey immediately below.
- (c) In case the height of any individual storey is more than 4 metres the rates for concrete above 4 metres height, shall be increased by Rs. 7.30 per cum, for item Nos. 10.81, 10.82, 10.86 to 10.89, 10.91, 10.94 and 10.96 and Rs. 2.55 per cum for item Nos. 10.2, 10.9 to 10.13, 10.20 to 10.25, 10.44 to 10.61, 10.70 to 10.76, 10.80, 10.105 to 10.112 for every additional height of 2 metres or part thereof.
- (d) For subsequent storey, having a height 4 metres, or part thereof, situated above a storey, having height more than 4 metres, the rates for work done in item Nos. 10.2, 10.9 to 10.13, 10.20 to 10.25, 10.44 to 10.61, 10.70 to 10.76, 10.80, 10.81, 10.82 & 10.86 to 10.89, 10.91, 10.94, 10.96, 10.105 to 10.112 shall be the same, as for the upper most stage rate of the storey below, calculated as per provisions, made in note (V) (c) above.
- (e) (1) In case of basement, the concrete for basement floor, shall be payable at the rate of items of superstructure above the floor of basement, for its foundation portion, for plain concrete, allow Rs. 2.55 per cum extra in the foundation rate for every additional depth of 4 metres, or part thereof, from ground level and for reinforced concrete, that is payable as per rate given under item No. 10.90.

- (2) The depth of foundation shall be deemed upto 1.5 metres below ground level. If the depth of foundation, where no basement is to be provided, is more than 1.5 metres, add Rs. 2.55 per cum in rates of items of foundation concrete, i.e. item Nos. 10.1, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.14 to 10.19, 10.26 to 10.43, 10.63 to 10.69, 10.79, 10.97 to 10.104 and add Rs. 6.00 per cum, for item Nos. 10.90 for every additional depth of 4 metres or part thereof.
- (3) As regards the payment of extra rate for subsequent storey above ground level, the structure above plinth level on natural ground level will be considered as first storey.

(VI) The rate for plain as well as plum concrete, done upto 1.5 metres height above the top of foundation concrete, in case of compound walls and in other engineering works; is the same as for rates of foundation and plinth. In the case of foundation of bridges, for those with ordinary open foundations, plain and plum concrete above top of foundation concrete, and in case of well-foundations above top of well cap, for a height of 1.5 metres, shall be paid for, at the rate appearing in the schedule for plain and plum concrete, in foundation and plinth.

(VII) A mezzanine floor is an inter floor, having a plinth area equal to or less than 40 percent of the plinth area of the main storey of the building, immediately below the above said inter floor. The inter floor, having a plinth area, more than 40 percent of the plinth area of the main storey of the building immediately below, shall be regarded for the purpose of note (V) above, as a regular storey. In the case of a building storey containing a mezzanine floor, the storey shall be considered for full height ignoring the existence of the mezzanine inter floor.

(VIII) The rates given in this chapter, are for both cast-in-situ and precast concrete work. The precast work includes, the cost of hoisting and fixing in position.

(IX) The rates for Item No. 10.1 to 10.61 and 10.63 to 10.76 exclude the cost of form work, which if used, shall be payable extra at the rates specified in Chapter No. 9

(X) The labour rate for item No. 10.81 to 10.96 include the cost of T & P, cost of labour and material for centring and shuttering but excluding labour for bending and binding reinforcement.

(XI) In case of such items, of this chapter, that include the cost of labour and materials, for centring and shuttering where smooth, exposed concrete finished surface is required, additional payment shall be allowed at the rate of 33.1/3 percent of the labour rate of centring and shuttering as given in the Chapter No. 9. In case where shuttering pattern is specified to give architectural effect, additional payment according to item No. 9.20 only will be allowed.

(XII) Sand for item of cement concrete 1 : 3 : 6, 1 : 2 : 4, 1 : 1½ : 3, 1 : 1 : 2 and items of design mix concrete shall be Badarpur or Ghaggar sand (from Chandimandir or Mubarkpur), or from any other sand quarry in river, canal or Khud bed, having a fineness modulus of 2.50 to 3.50. In certain cases, where coarse sand, of the equivalent quality is available locally it may be allowed to be used by the Executive Engineer. Equivalent quality means having a fineness modulus from 2.50 to 3.50.

(XIII) It is not considered worth while introducing lengthy calculations and measurements for the deductions of the volume of steel reinforcement in reinforced cement concrete; which is of a very small magnitude. Accordingly, no such provision has been made for the deduction of volume of steel, from the volume of concrete.

(XIV) The re-inforcement shall be paid at the rate of item No. 18.21 or 18.22 for the quantity consumed, in the items of re-inforced cement concrete.

(XV) Factory made dry-hydrated lime conforming to I.S.712-1973 shall be used in all items of lime concrete, appearing any where, in this schedule.

(XVI) The labour and through rates include the cost of water and where the water is supplied by the department, the rates shall be decreased accordingly.

(XVII) Unless specified to the contrary, the labour rate for various items of construction includes handling materials within 100 metres. Through rates include all re-handling of materials, at the site of work, and no payment is due to the contractors, on this account.

(XVIII) Unless specified to the contrary, the labour rates include the cost of water, tools and plants, labour and materials for scaffolding and centring and shuttering and cost of good earth for mud-mortar and mud-plaster, wherever required.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(A)	Mud Concrete			
10.1	Mud concrete with brick ballast, 40 mm nominal size in foundation and plinth.	Cum	32.50	137.00
10.2	Mud concrete with brick ballast, 40 mm nominal size in first storey, upto 4 metres above plinth level	-do-	38.75	143.25
(B)	Lime Concrete			
10.3	Lime concrete 1:2:8, 0.13 cum lime, 0.26 cum surkhi and 1.00 cum brick ballast 40 mm nominal size in foundation and plinth.	-do-	60.80	284.00
10.4	Lime concrete 1:1:1:8, 0.13 cum lime, 0.13 cum surkhi, 0.13 cum sand and 1.00 cum brick ballast 20 mm nominal size in foundation and plinth.	-do-	60.80	289.25
10.5	Lime concrete 1:1:1:8, 0.13 cum lime, 0.13 cum surkhi, 0.13 cum sand and 1.00 cum brick ballast, 40 mm nominal size in foundation and plinth.	-do-	60.80	278.25
10.6	Lime concrete 16:24:100, 0.16 cum lime 0.24 cum surkhi and 1.00 cum brick ballast, 31.50 mm nominal size in foundation and plinth.	-do-	60.80	308.10
10.7	Lime concrete 16:24:100, 0.16 cum lime 0.24 cum surkhi and 1.00 cum brick ballast 20 mm nominal size in foundation and plinth.	-do-	60.80	313.60
10.8	Lime concrete 1:2:5, 0.18 cum lime, 0.36 cum sand and 0.90 cum brick ballast 40 mm nominal size in foundation and plinth.	-do-	60.80	303.35
10.9	Lime concrete 1:2:8, 0.13 cum lime, 0.26 cum surkhi and 1.00 cum brick ballast, 40mm nominal size in first storey, upto 4 metres above plinth level.	-do-	67.05	290.25
10.10	Lime concrete 1:1:1:8, 0.13 cum lime, 0.13 cum surkhi, 0.13 cum sand and 1.00 cum brick ballast, 20 mm nominal size in first storey, upto 4 metres above plinth level.	-do-	67.05	295.50
10.11	Lime concrete 1:1:1:8, 0.13 cum lime, 0.13 cum surkhi, 0.13 cum sand and 1.00 cum brick ballast, 40 mm nominal size in first storey, upto 4 metres, above plinth level.	-do-	67.05	284.50
10.12	Lime concrete 16:24:100, 0.16 cum lime, 0.24 cum surkhi and 1.00 cum brick ballast, 31.50 mm nominal size in first storey, upto 4 metres above plinth level.	-do-	67.05	314.35

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
10.13	Lime concrete 16 : 24 : 100, 0.16 cum lime, 0.24 cum surkhi and 1.00 cum brick ballast, 20 mm nominal size in first storey, upto 4 metres above plinth level.	Cum	67.05	319.85
(C)	Cement Lime Concrete			
10.14	Cement lime concrete 1 : 3 : 12 : 40, 0.025 cum cement, 0.075 cum lime, 0.30 cum sand and 1.00 cum brick ballast, 20 mm nominal size in foundation and plinth.	-do-	60.80	289.30
10.15	Cement lime concrete 1:3:12:40, 0.025 cum cement, 0.075 cum lime, 0.30 cum sand and 1.00 cum brick ballast, 40 mm nominal size in foundation and plinth.	-do-	60.80	278.30
10.16	Cement lime concrete 1 : 2 : 9 : 24, 0.041 cum cement, 0.082 cum lime, 0.37 cum sand and 1.00 cum brick ballast, 20 mm nominal size in foundation and plinth.	-do-	60.80	323.95
10.17	Cement lime concrete 1 : 2 : 9 : 24, 0.041 cum cement, 0.082 cum lime, 0.37 cum sand and 1.00 cum brick ballast, 40 mm nominal size in foundation and plinth.	-do-	60.80	312.95
10.18	Cement lime concrete 1 : 2 : 9 : 24, 0.041 cum cement, 0.082 cum lime, 0.37 cum sand and 1.00 cum stone aggregate, 20 mm nominal size in foundation and plinth.	-do-	64.95	349.00
10.19	Cement lime concrete 1:2:9:24, 0.041 cum cement, 0.082 cum lime, 0.37 cum sand and 1.00 cum stone aggregate, 40 mm nominal size in foundation and plinth.	-do-	64.95	331.40
10.20	Cement lime concrete 1 : 3 : 12 : 40, 0.025 cum cement, 0.075 cum lime, 0.30 cum sand and 1.00 cum brick ballast 20 mm nominal size in first storey upto 4 metres above plinth level	-do-	67.05	295.55
10.21	Cement lime concrete 1 : 3 : 12 : 40, 0.025 cum cement, 0.075 cum lime, 0.30 cum sand and 1.00 cum brick ballast 40 mm nominal size in first storey upto 4 metres above plinth level	-do-	67.05	284.55
10.22	Cement lime concrete 1 : 2 : 9 : 24, 0.041 cum cement, 0.082 cum lime, 0.37 cum sand and 1.00 cum brick ballast 20 mm nominal size in first storey upto 4 metres above plinth level	-do-	67.05	330.20
10.23	Cement lime concrete 1 : 2 : 9 : 24, 0.041 cum cement, 0.082 cum lime, 0.37 cum sand and 1.00 cum brick ballast 40 mm nominal size in first storey upto 4 metres above plinth level.	-do-	67.05	319.20

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
10.24	Cement lime concrete 1 : 2 : 9 : 24, 0.041 cum cement, 0.082 cum lime, 0.37 cum sand and 1.00 cum stone aggregate 20 mm nominal size in first storey upto 4 metres above plinth level.	Cum	71.20	355.25
10.25	Cement lime concrete 1 : 2 : 9 : 24, 0.041 cum cement, 0.082 cum lime, 0.37 cum sand and 1.00 cum stone aggregate 40 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	337.65
(D)	Cement Concrete			
10.26	Cement concrete 1 : 8 : 16 with brick ballast 40 mm nominal size in foundation and plinth.	-do-	60.80	300.20
10.27	Cement concrete 1 : 8 : 16 with brick ballast 20 mm nominal size in foundation and plinth.	-do-	60.80	311.20
10.28	Cement concrete 1 : 8 : 16 with stone aggregate 40 mm nominal size in foundation and plinth.	-do-	64.95	318.65
10.29	Cement concrete 1 : 8 : 16 with stone aggregate 20 mm nominal size in foundation and plinth.	-do-	64.95	336.25
10.30	Cement concrete 1 : 6 : 12 with brick ballast 40 mm nominal size in foundation and plinth.	-do-	60.80	329.95
10.31	Cement concrete 1 : 6 : 12 with brick ballast 20 mm nominal size in foundation and plinth.	-do-	60.80	340.85
10.32	Cement concrete 1 : 6 : 12 with stone aggregate 40 mm nominal size in foundation and plinth.	-do-	64.95	348.25
10.33	Cement concrete 1 : 6 : 12 with stone aggregate 20 mm nominal size in foundation and plinth.	-do-	64.95	365.65
10.34	Cement concrete 1 : 5 : 10 with brick ballast 40 mm nominal size in foundation and plinth.	-do-	60.80	354.05
10.35	Cement concrete 1 : 5 : 10 with brick ballast 20 mm nominal size in foundation and plinth.	-do-	60.80	364.80
10.36	Cement concrete 1 : 4 : 8 with brick ballast 40 mm nominal size in foundation and plinth.	-do-	60.80	385.25
10.37	Cement concrete 1 : 4 : 8 with brick ballast 20 mm nominal size in foundation and plinth.	-do-	60.80	395.80

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
10.38	Cement concrete 1 : 4 : 8 with stone aggregate 20 mm nominal size in foundation and plinth.	Cum	64.95	420.00
10.39	Cement concrete 1 : 4 : 8 with stone aggregate 40 mm nominal size in foundation and plinth.	-do-	64.95	403.10
10.40	Cement concrete 1 : 3 : 6 with stone aggregate 20 mm nominal size in foundation and plinth.	-do-	64.95	516.90
10.41	Cement concrete 1 : 2 : 4 with stone aggregate 20 mm nominal size in foundation and plinth.	-do-	64.95	615.60
10.42	Cement concrete 1 : 1½ : 3 with stone aggregate 20 mm nominal size in foundation and plinth.	-do-	64.95	702.50
10.43	Cement concrete 1 : 1 : 2 with stone aggregate 20 mm nominal size in foundation and plinth.	-do-	64.95	870.90
10.44	Cement concrete 1 : 8 : 16 with brick ballast 40 mm nominal size in first storey upto 4 metres above plinth level.	-do-	67.05	306.45
10.45	Cement concrete 1 : 8 : 16 with brick ballast 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	67.05	317.45
10.46	Cement concrete 1 : 8 : 16 with stone aggregate 40 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	324.90
10.47	Cement concrete 1 : 8 : 16 with stone aggregate 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	342.50
10.48	Cement concrete 1 : 6 : 12 with brick ballast 40 mm nominal size in first storey upto 4 metres above plinth level.	-do-	67.05	336.20
10.49	Cement concrete 1 : 6 : 12 with brick ballast 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	67.05	347.10
10.50	Cement concrete 1 : 6 : 12 with stone aggregate 40 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	354.50
10.51	Cement concrete 1 : 6 : 12 with stone aggregate 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	371.90
10.52	Cement concrete 1 : 5 : 10 with brick ballast 40 mm nominal size in first storey upto 4 metres above plinth level.	-do-	67.05	360.30
10.53	Cement concrete 1 : 5 : 10 with brick ballast 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	67.05	371.05

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
10.54	Cement concrete 1:4: 8 with brick ballast 40 mm nominal size in first storey upto 4 metres above plinth level.	Cum	67.05	391.50
10.55	Cement concrete 1:4: 8 with brick ballast 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	67.05	402.05
10.56	Cement concrete 1:4: 8 with stone aggregate 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	426.25
10.57	Cement concrete 1:4: 8 with stone aggregate 40 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	409.35
10.58	Cement concrete 1:3: 6 with stone aggregate 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	523.15
10.59	Cement concrete 1:2: 4 with stone aggregate 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	621.85
10.60	Cement concrete 1:1½: 3 with stone aggregate 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	708.75
10.61	Cement concrete 1:1: 2 with stone aggregate 20 mm nominal size in first storey upto 4 metres above plinth level.	-do-	71.20	877.15
10.62	Extra over Item No. 10.1 to 10.61 above when work is done in situ in small quantities not exceeding 0.30 cum per block in situ such as staggered blocks, arrows, concrete blocks over inverted filters, bed plates, arches, etc.	-do-	8.00	--
(E)	Design Mix Cement Concrete			
10.63	Design mix cement concrete of grade M-10 with minimum cement contents 220 Kg/cum in foundation and plinth.	-do-	78.30	542.75
10.64	Design mix cement concrete of grade M-15 with minimum cement contents 315 Kg/cum in foundation and plinth.	-do-	79.00	656.35
10.65	Design mix cement concrete of grade M-20 with minimum cement contents 405 Kg/cum in foundation and plinth.	-do-	80.00	737.60
10.66	Design mix cement concrete of grade M-25 with minimum cement contents 405 Kg/cum in foundation and plinth.	-do-	82.00	772.75
10.67	Design mix cement concrete of grade M-30 with minimum cement contents 560 Kg/cum in foundation and plinth.	-do-	83.00	917.70
10.68	Design mix cement concrete of grade M-35 with minimum cement contents 560 Kg/cum in foundation and plinth.	-do-	85.00	943.20

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
10.69	Design mix cement concrete of grade M-40 with minimum cement contents 560 Kg/cum in foundation and plinth.	Cum	87.00	915.15
10.70	Design mix cement concrete of grade M-10 with minimum cement contents 220 Kg/cum in first storey upto 4 metres above plinth level	-do-	84.55	549.00
10.71	Design mix cement concrete of grade M-15 with minimum cement contents 315 Kg/cum in first storey upto 4 metres above plinth level	-do-	85.25	662.60
10.72	Design mix cement concrete of grade M-20 with minimum cement contents 405 Kg/cum in first storey upto 4 metres above plinth level	-do-	86.25	743.85
10.73	Design mix cement concrete of grade M-25 with minimum cement contents 405 Kg/cum in first storey upto 4 metres above plinth level	-do-	88.25	779.00
10.74	Design mix cement concrete of grade M-30 with minimum contents of cement 560 Kg/cum in first storey upto 4 metres above plinth level	-do-	89.25	923.95
10.75	Design mix cement concrete of grade M-35 with minimum cement contents 560 Kg/cum in first storey upto 4 metres above plinth level	-do-	91.25	949.45
10.76	Design mix cement concrete of grade M-40 with minimum cement contents 560 Kg/cum in first storey upto 4 metres above plinth level	-do-	93.25	971.40
(D)	Precast Cement Concrete			
10.77	Precast cement concrete 1:2:4 with stone aggregate 20 mm nominal size in Kerbs and the like items, finished smooth with 6 mm thick cement plaster 1:3 on exposed surface including form work, placing and fixing in position, complete at the ground level or in first storey.	-do-	352.45	942.50
10.78	Precast cement concrete 1:2:4 with stone aggregate 20 mm nominal size in tiles & channels and the like items, finished smooth with 6 mm thick cement plaster 1:3 on exposed surface including form work, placing and fixing in position, complete at the ground level or in first storey.	-do-	372.00	1025.15
Note	in case kerbs, tiles, channels and like items are precasted in cement concrete 1:3:6 the through rates of item No.10.77 and 10.78 be reduced by Rs. 98.70 per cum.			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(G)	Reinforced Cement Concrete			
10.79	Cement concrete 1 : 2 : 4 with stone aggregate 20 mm nominal size for reinforced concrete work but excluding steel reinforcement centring and shuttering in foundation and plinth.	Cum	75.15	625.80
10.80	Cement concrete 1 : 2 : 4 with stone aggregate 20 mm nominal size for reinforced concrete work, but excluding steel reinforcement, centring and shuttering in first storey upto 4 metres above plinth level.	-do-	81.40	632.05
10.81	Cement concrete 1 : 2 : 4 with stone aggregate 20 mm nominal size for reinforced concrete work in shelves excluding steel reinforcement, but including centring and shuttering, laid in position, complete in all respect.	do-	397.05	947.70
10.82	Cement concrete 1 : 2 : 4 with stone aggregate 20 mm nominal size for reinforced concrete work in slabs with inclination not exceeding 25 degree with horizontal, excluding steel reinforcement, but including centring and shuttering, laid in position, complete in all respect.	-do-	447.25	697.90
<i>Note</i>	<i>10 percent extra is payable on labour only for inclination more than 25 degree with R.C.C. slab and nothing extra shall be paid for slabs of lesser inclination.</i>			
10.83	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in north light folded plate roofing (including all its components and diaphragm beam) excluding steel reinforcement, but including centring and shuttering, laid in position, complete in all respects.	-do-	1075.75	1626.40
10.84	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in pyramid type roofing excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respect.	-do-	729.15	1380.00
10.85	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in conical type roofing excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respect.	-do-	849.30	1400.00

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
10.86	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work for walls exceeding 20 cm thickness (straight and curved) beams, girders, stairs, columns, (square or rectangular) battens and lintels etc. excluding steel reinforcement but including centring and shuttering, laid in position complete in all respects.	Cum	551.20	1101.85
10.87	Cement concrete 1:2:4 with stone aggregate 20mm nominal size for reinforced concrete work for walls (10 cm to 20 cm thickness) straight and curved excluding steel reinforcement but including centring and shuttering, laid in position complete in all respect.	-do-	849.30	1400.00
10.88	Cement concrete 1:2:4 with stone aggregate 20mm nominal size for reinforced concrete work for circular or curved columns excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respect.	-do-	715.40	1265.05
10.89	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in fascias parapets and other thin vertical sections, not covered by Item Nos. 10.82, 10.86 to 10.88 not exceeding 10 cm thickness excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respects.	-do-	1071.40	1622.05
10.90	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in footing, strips, foundations, beams, rafts, pedestals and approach slabs of bridges etc. excluding steel reinforcement and including centring & shuttering, laid in position, complete in all respects (For work upto 1.5 metres below ground level.)	-do-	136.45	687.10

Notes: (a) For work below 1.50 metres depth below ground level, add Rs. 6.00 per cum for every additional depth of 1 metre, or part thereof, in the above rate of item No. 10.90

(b) Reinforced cement concrete column or reinforced cement concrete wall portion above the top of pedestal level and above top of beams, in foundation, shall be payable as per rates, given above for respective item.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
10.91	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in arches or curved roof (curvature in one direction) excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respects.	Cum	634.60	1185.25
	<i>Note. All curved slabs, with curvature in two directions shall be covered under Item No. 9.12 of Chapter No. 9 'Centring and Shuttering' i.e. For R.C.C. domes.</i>			
(H)	Reinforced Cement Concrete for Well Foundation.			
10.92	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in well kerbs excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respects-			
	(a) for square, rectangular and polygonal wells.	-do-	201.95	752.60
	(b) for circular wells.	-do-	272.15	822.80
10.93	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work for well caps excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respects-			
	(a) for wells plugged upto top in square rectangular, polygonal, circular and elliptical wells.	-do-	118.05	668.70
	(b) wells not plugged upto top.	-do-	439.40	990.00
10.94	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work for bed plates in square, rectangular, polygonal, circular and elliptical wells, excluding steel reinforcement but including centring and shuttering laid in position, complete in all respect.	-do-	176.85	727.50
10.95	(a) extra over Item No. 10.79 to 10.94 if 1:1½:3 mix is used, instead of 1:2:4.	-do-	—	86.90
	(b) extra over Item Nos. 10.79 to 10.94 if 1:1:2 mix is used instead of 1:2:4	-do-	—	255.30
10.96	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work for slabs with brickplumbing, excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respects.	-do-	445.50	959.25

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
<i>Note: For reinforced cement concrete work in well and steining, the item shall be paid separately for concreting steel reinforcement and shuttering as per actual quantity involved, as per rates of chapter 10, 18 and 9 respectively.</i>				
(1)	Plum Cement Concrete			
10.97	Plum cement concrete 1:8:16 with stone aggregate 40 mm nominal size using 20 percent plum in foundation and plinth.	Cum	62.15	248.55
10.98	Plum cement concrete 1:6:12 with stone aggregate 40 mm nominal size using 20 percent plum in foundation and plinth.	-do-	62.15	272.50
10.99	Plum cement concrete 1:5:10 with stone aggregate 40 mm nominal size using 20 percent plum in foundation and plinth.	-do-	62.15	291.95
10.100	Plum cement concrete 1:4:8 with stone aggregate 40 mm nominal size using 20 percent plum in foundation and plinth.	-do-	62.15	317.20
10.101	Plum cement concrete 1:8:16 with stone aggregate 40 mm nominal size using 15 percent plum in foundation and plinth.	-do-	62.85	257.45
10.102	Plum cement concrete 1:6:12 with stone aggregate 40 mm nominal size using 15 percent plum in foundation and plinth.	-do-	62.85	282.90
10.103	Plum cement concrete 1:5:10 with stone aggregate 40 mm nominal size using 15 percent plum in foundation and plinth.	-do-	62.85	303.60
10.104	Plum cement concrete 1:4:8 with stone aggregate 40 mm nominal size using 15 percent plum in foundation and plinth.	-do-	62.85	330.45
10.105	Plum cement concrete 1:8:16 with stone aggregate 40 mm nominal size using 20 percent plum in first storey upto 4 metres above plinth level.	-do-	68.40	254.80
10.106	Plum cement concrete 1:6:12 with stone aggregate 40 mm nominal size using 20 percent plum in first storey upto 4 metres above plinth level.	-do-	68.40	278.75
10.107	Plum cement concrete 1:5:10 with stone aggregate 40 mm nominal size using 20 percent plum in first storey upto 4 metres above plinth level.	-do-	68.40	298.20
10.108	Plum cement concrete 1:4:8 with stone aggregate 40 mm nominal size using 20 percent plum in first storey upto 4 metres above plinth level.	-do-	68.40	323.45
10.109	Plum cement concrete 1:8:16 with stone aggregate 40 mm nominal size using 15			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
10.110	percent plum in first storey upto 4 metres above plinth level.	Cum	69.10	263.70
10.111	Plum cement concrete 1:6:12 with stone aggregate 40 mm nominal size using 15 percent plum in first storey upto 4 metres above plinth level.	-do-	69.10	289.15
10.112	Plum cement concrete 1:5:10 with stone aggregate 40 mm nominal size using 15 percent plum in first storey upto 4 metres above plinth level.	-do-	69.10	309.85
10.113	Plum cement concrete 1:4:8 with stone aggregate 40 mm nominal size using 15 percent plum in first storey upto 4 metres above plinth level.	-do-	69.10	336.70
(J)	Damp Proof Course			
10.113	Damp proof course 75 mm thick of cement concrete 1:2:4 using stone aggregate with 2 coats of bitumen 20/30 penetration, at 1.65 Kg. per sqm laid hot and sanded.	Sqm	7.25	56.10
10.114	Damp proof course 40 mm thick of cement concrete 1:2:4 using stone aggregate with 2 coats of bitumen 20/30 penetration at 1.65 Kg per sqm laid hot and sanded.	-do-	5.45	35.05
10.115	Damp proof course 25 mm thick of cement concrete 1:2:4 using stone aggregate with 2 coats of bitumen 20/30 penetration at 1.65 Kg. per sqm laid hot and sanded.	-do-	5.05	26.40
Note	<i>In case bitumen painting is not done in item from 10.113 to 10.115 the rates of these items shall be decreased by Rs. 8.45 and Rs. 1.20 per sqm from the through and labour rates respectively.</i>			
(K)	Miscellaneous			
10.116	Laying dry brick bats.	Cum	6.25	106.70
10.117	Laying dry brick ballast (40 mm gauge)	-do-	6.25	121.20
10.118	Nicking cement concrete surface (over 28 days old) including preparation and laying slurry.	Sqm.	1.10	--
10.119	Washing concrete surface scrubbing with brushes including preparing and laying slurry.	-do-	0.70	--
10.120	Nicking lime concrete surface	-do-	0.75	--
10.121	Grouting concrete between the grooves of gates including labour for shuttering.	-do-	18.00	--

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
10.122	Preparing watering and ramming surface for laying concrete-			
	(a) Head Works :-			
	(i) Horizontal	Sqm	1.25	--
	(ii) Glacis and Crest	-do-	2.50	--
	(b) Channels (Irrigation) :-			
	(i) Horizontal	-do-	1.00	--
	(ii) Glacis and Crest	-do-	1.50	--
10.123	Preparing surface for inverted filters.	-do-	0.60	--
10.124	Extra for skipping concrete in wells	Cum	26.70	--
10.125	Breaking stones into spalls of 80 mm size	-do-	15.00	--
10.126	Breaking stone ballast from stones (excluding screening and washing)-			
	(i) Size 40 mm gauge	-do-	40.00	--
	(ii) Size 25 mm gauge	-do-	55.00	--
	(iii) Size 20 mm gauge	-do-	65.00	--
10.127	Washing ballast or bajri	-do-	6.00	--
10.128	Washing sand	-do-	9.00	--
10.129	Reinforced cement concrete 1:2:4 Kilometre stone of standard design, fixed in position, including finishing but excluding painting-			
	(i) 5th Kilometre stone	Each	42.10	191.20
	(ii) Ordinary Kilometre stone	-do-	25.85	117.00
	(iii) Kilometre stone on village roads	-do-	24.30	106.70
10.130	Reinforced cement concrete 1:2:4 village board of standard design, fixed in position, including finishing but excluding painting.	-do-	23.05	86.40
10.131	Reinforced cement concrete 1:2:4 boundry pillars of standard design, fixed in position, including finishing but excluding painting.	-do-	25.50	97.65
10.132	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size in pavements, roads, taxi-tracks and runways, laid to required slope and camber, including consolidation, finishing and tamping complete.	Cum	91.70	642.40
10.133	Extra for bailing/pumping out standing water of pond caused by spring, sub soil water, canal or river seepage and broken water mains or drains except rain water collected in the trenches or foundation before laying concrete work.	Kilolitre	--	4.75

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
<i>Note: The work of this item, is to be done departmentally.</i>				
10.134	Extra for laying concrete in or under foul position.	Cum	--	11.45
(L)	Guniting			
10.135	Drilling for fixing bolts.	Each	--	150.00
10.136	Fixing of bolts i/c supplying	Kg.	--	35.00
10.137	Providing and spreading chain link mesh	-do-	--	25.00
10.138	Guniting on concrete/brick work using step ladder/scaffolding as supplied on hire erected by the contractor using compressor guniting drum gun and piping as supplied by the contractor on hire charges operating charges using drum mixed cement/screened sand in proportion 1:3 as per IS 9012 (1938) at 2.1 to 2.8 Kg/per Sq. centimetre (av) 40 mm th. to columns, slabs beams, chhajjas, i/c finishing the surface with sand faced plaster as per specs. and for thickness as directed & 3 coats of white wash, colour wash, cement paint, oil bound distemper, plastic, emulsion as per specs. and as directed after curing, guniting surface for 7 days i/c of replacement of windows etc. during guniting and disposal of debris-	Sqm	--	120.00
	(a) for additional 10 mm thickness	-do-	--	45.00
	(b) for additional 20 mm thickness	-do-	--	80.00
	(c) for additional 30 mm thickness	-do-	--	120.00
	(d) for additional 40 mm thickness	-do-	--	165.00
(M)	Drilling and Grouting			
10.139	Percussion drilling 38 to 100 mm	Metre	--	510.00
10.140	Conducting water test to find lugon value	Each	--	256.00
10.141	Grouting holes with-			
	(a) Cement	Bag	--	70.00
	(b) Bentonite	Kg	--	1.20
(N)	Rock Anchoring			
10.142	Boring in O.B. (over burden)	Metre	--	400.00
10.143	Boring in rock with T.C. bits	-do-	--	910.00
10.144	Boring in rock with diamond bits	-do-	--	1150.00
10.145	Site installation for rock anchoring	Assly.	--	1,50,000.00
10.146	Providing 125 mm dia M.S. pipes in O.B. (over burden)	Metre	--	235.00
10.147	Conducting water test in fixed length	Each	--	410.00
10.148	Grouting with cement i/c cost of cement	Bag	--	150.00

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
10.149	P/F 160 tonne capacity of anchor fixture	Set	--	700.00
10.150	Providing and lowering anchor assembly	Metre	--	22,000.00
10.151	Stressing for anchor	No.	--	410.00
10.152	Prestressing for anchor	No.	--	410.00
10.153	Providing 80 to 86 mm dia P.V.C. pipes enclosing free length of the anchor	Metre	--	45.00
10.154	Erection of drilling rig @ each location	No.	--	1050.00
10.155	Painting of H.T.S. wire with two coats of epoxy based paint.	-do-	--	1550.00
10.156	Treating above in fixed length upto 10 m of anchor with epoxy materials.	Kg.	--	50.00

Note : The rates from Item No. 18.135 to 18.156 are for the purpose of estimating only and not for letting out works on these rates. The work of guniting shall be got done on rates to be determined after inviting tenders.

* * * *

CHAPTER NO. 11

BRICK WORK

NOTES :

(I) Through rate for brick work with second class bricks will be less by Rs. 26.40 per cum than the rates, with first class bricks for that item of work.

(II) The rate for brick work, done upto 1.5 metres height above the top of foundation concrete, in case of compound walls, and in other Engineering works, is the same as for brick work in foundation and plinth. In the case of foundation of bridges, for those with ordinary open foundations, masonry above top of foundation concrete, and in case of well foundations, above top of well cap, for a height of 1.5 metres, shall be paid for at the rate, appearing in the schedule for masonry, in foundation and plinth.

(III) To the extent, the plinth area of an inter-floor, called mezzanine, remains within and upto 40 percent of the plinth area, for the main storey of the building immediately below the said inter-floor, such an inter-floor should be regarded as mezzanine and if plinth area of the inter floor exceeds this limiting figure of 40 percent; then, the inter floor should be regarded for the purposes of item No. 11.41 of Chapter No. 11, of the Schedule of Rates, as a regular storey. A mezzanine floor is not to be regarded as a separate additional storey in the structure for the purpose of allowing extra rate for brick work, under Item No. 11.41. In the case of a building storey, having such a mezzanine, therefore, the storey shall be considered for the full height as if ignoring the existence of the mezzanine inter-floor.

(IV) (a) Add Rs. 0.95 per sqm extra for every additional storey, upto 4 metres above the top of structural roof, for Item No. 11.46, 11.48 to 11.51 and 11.53 to 11.54.

(b) Where any single storey exceeds 4 metres in height, the rate for brick work of walls under Items No. 11.46, 11.48 to 11.51 and 11.53 to 11.54, supporting the roof, having height greater than 4 metres, will be increased by Rs. 0.95 per sqm for every additional height of 2 metres, or part thereof. This additional rate of brick work shall also be added for brick work in subsequent storeys. This additional rate is not to be paid for brick walls, having height less than 4 metres within the storey, though the overall height of storey may be over 4 metres, such as in the case of any low partition walls, or walls below a mezzanine inter-floor not going above the mezzanine floor level, and upto the full storey height. In case of walls of varying heights, average height shall be considered for fixing the rate.

(c) Extra rate allowed for additional heights, under the note (IV) (b) will be allowed in the case of all Engineering works.

(V) The through rates, for the required mix of mortar for Item No. 11.89 and 11.90 (well steining) can be arrived at, by adding Rs. 12.60 and Rs. 10.50 respectively, to the through rates of brick work in foundation and plinth, of that mix. Steel will be paid extra where used according to Chapter No. 18, "Steel and Iron Work".

(VI) (a) In case of basement, the masonry for basement floor, above the floor of basement, shall be payable at the rates of the item of superstructure. For its foundation portion, allow Rs. 8.25 per cum extra in the foundation rates, for every additional depth of 4 metres, or part thereof.

(b) The depth of foundation shall be deemed upto 1.5 metres below ground level. If the depth of foundation, where no basement is to be provided, is more than 1.5 metres; add Rs. 8.25 per cum, in the rates of item of foundation, for every additional depth of 4 metres, or part thereof.

(c) As regards the payment of extra rate, for subsequent storey, above ground level; the structure above plinth level, on natural ground level, will be considered as first storey.

(VII) The work of brick masonry, in stone dust, shall only be got done, with prior approval of the competent authority.

(VIII) Factory made dry hydrated lime conforming to I.S. 712-1973 shall be used in all items of brick work, in lime mortar, appearing anywhere in this schedule.

(IX) The labour and through rates include the cost of water and where the water is supplied by the department, free of cost, the rates shall be decreased accordingly.

(X) Unless specified to the contrary, the labour rates for various items of construction include handling of materials within 100 metres. Through rates include all rehandling of materials, at site of work, and no payment is due to the contractor, on this account.

(XI) Unless specified to the contrary, the labour rates include the cost of water, tools and plants, labour and materials for scaffolding and centring and shuttering and cost of good earth for mud-mortar and mud-plaster, wherever required.

(XII) The rates for brick work in chapter 11 are both for clay moulded bricks and clay fly ash bricks.

(Note No. 12 added vide A & C slip No. 7 dt. 10/12/1992)

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(A)	Brick Work in Cement Mortar			
11.1	First class brick work laid in cement sand mortar 1 : 7 in foundation and plinth.	Cum	49.85	382.15
11.2	First class brick work laid in cement sand mortar 1 : 6 in foundation and plinth.	-do-	49.85	393.45
11.3	First class brick work laid in cement sand mortar 1 : 5 in foundation and plinth.	-do-	49.85	407.60
11.4	First class brick work laid in cement sand mortar 1 : 4 in foundation and plinth.	-do-	49.85	424.60
11.5	First class brick work laid in cement sand mortar 1 : 3 in foundation and plinth.	-do-	49.85	461.40
11.6	First class brick work laid in cement sand mortar 1 : 7 in first storey upto 4 metres above plinth level.	-do-	70.85	403.15
11.7	First class brick work laid in cement sand mortar 1 : 6 in first storey upto 4 metres above plinth level.	-do-	70.85	414.45
11.8	First class brick work laid in cement sand mortar 1 : 5 in first storey upto 4 metres above plinth level.	-do-	70.85	428.60
11.9	First class brick work laid in cement sand mortar 1 : 4 in first storey upto 4 metres above plinth level.	-do-	70.85	445.60
11.10	First class brick work laid in cement sand mortar 1 : 3 in first storey upto 4 metres above plinth level.	-do-	70.85	482.40
11.11	First class brick work laid in cement sand mortar 1 : 2 in first storey upto 4 metres above plinth level.	-do-	70.85	541.15
(B)	Brick Work in Lime Mortar			
11.12	First class brick work laid in lime, surkhi, sand mortar 1:1:1 (one lime, one surkhi and one sand) in foundation and plinth.	-do-	49.85	413.30

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
11.13	First class brick work laid in cement, lime, sand mortar 1:1:6 (one cement, one lime & six sand) in foundation and plinth.	Cum	49.85	422.15
11.14	First class brick work laid in cement, lime, sand mortar 1:2:9 (one cement, two lime & nine sand) in foundation and plinth.	-do-	49.85	409.45
11.15	First class brick work laid in cement, lime, sand mortar 1:3:12 (one cement, 3 lime & twelve sand) in foundation and plinth.	-do-	49.85	403.60
11.16	First class brick work laid in lime, surkhi, sand mortar 1:1:1 (one lime, one surdkhi and one sand) in first storey upto 4 metres above plinth level.	-do-	70.85	434.30
11.17	First class brick work laid in lime, sand, cinder/fly-ash mortar 1:1:1 (one lime, one sand and one cinder/fly ash) in first storey upto 4 metres above plinth level.	-do-	70.85	427.70
11.18	First class brick work laid in cement, lime, sand mortar 1:1:6 (one cement, one lime, and six sand) in first storey upto 4 metres above plinth level	-do-	70.85	443.15
11.19	First class brick work laid in cement, lime, sand mortar 1:2:9 (one cement, two lime and nine sand) in first storey upto 4 metres above plinth level.	-do-	70.85	430.45
11.20	First class brick work laid in cement, lime sand mortar 1:3:12 (one cement, three lime and twelve sand) in first storey upto 4 metres above plinth level	-do-	70.85	424.60
(C)	Brick Work in Cement Stone Dust Mortar			
11.21	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 7 in foundation and plinth.	-do-	49.85	402.20
11.22	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 6 in foundation and plinth.	-do-	49.85	413.55
11.23	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 5 in foundation and plinth.	-do-	49.85	427.70
11.24	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 4 in foundation and plinth.	-do-	49.85	444.65
11.25	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 3 in foundation and plinth.	-do-	49.85	481.45
11.26	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 7 in first storey upto 4 metres above plinth level.	-do-	70.85	423.20
11.27	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 6 in first storey			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	upto 4 metres above plinth level.	Cum	70.85	434.55
11.28	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 5 in first storey upto 4 metres above plinth level.	-do-	70.85	448.70
11.29	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 4 in first storey upto 4 metres above plinth level.	-do-	70.85	465.65
11.30	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 3 in first storey upto 4 metres above plinth level.	-do-	70.85	502.45
11.31	First class brick work laid in cement, stone dust (from crusher) mortar 1 : 2 in first storey upto 4 metres above plinth level.	-do-	70.85	560.40
(D)	Brick Work in Lime Surkshi Mortar			
11.32	First class brick work laid in lime, surkhi mortar 1 : 2 (one lime and two surkhi) in foundation and plinth.	-do-	49.85	411.05
11.33	First class brick work laid in lime, surkhi mortar 1 : 2 (one lime and two surkhi) in first storey upto 4 metres above plinth level.	-do-	70.85	432.05
11.34	First class brick work laid in lime, cinder/ Fly-ash mortar 1 : 2 (one lime and two cinder/fly-ash) in first storey upto 4 metres above plinth level.	-do-	70.85	418.85
(E)	Brick Work in Mud Mortar			
11.35	First class brick work laid in mud mortar in foundation and plinth.	-do-	44.20	303.40
11.36	First class brick work laid in mud mortar in first storey upto 4 metres above plinth level	-do-	56.25	315.45
11.37	First class brick work laid in mud mortar with Jibbi face (outer 5cm laid in cement mortar 1 : 5) including striking of joints in first storey upto 4 metres above plinth level.	-do-	62.45	343.30
11.38	Sun-dried brick work laid in mud mortar in first storey upto 4 metres above plinth level.	-do-	47.25	116.00
11.39	Gilafi work with bricks in the face, and sun-dried bricks in the interior, laid in mud mortar including supply of mud mortar in first storey upto 4 metres above plinth level.	-do-	57.60	223.70
11.40	Gilafi work as in Item No. 11.39 with Jibbi face (outer 5 cm laid in cement, mortar 1:5) including striking joints.	-do-	67.90	251.05
11.41	Extra for additional storey upto 4 metres above the top of structural roof of lower storey.	-do-	8.25	8.25

Note (i) Where any single storey exceeds 4 metres in height, the rate for brick work of walls, supporting the roof, having height greater than 4 metres will be increased by Rs. 8.25 per cum, for every additional height of 2 metres, or part thereof. This additional rate of brick work shall also be added for brick work

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	<i>in subsequent storeys. This additional rate is not to be paid for brick walls having height less than 4 metres within the storey; though over all height of storey may be over 4 metres, such as in the case of any low partition walls, or walls below a mezzanine inter-floor, not going above the mezzanine floor level, and upto the full storey height. In case of walls of varying heights, average height shall be considered for fixing the rate.</i>			
(iii)	<i>Extra rate allowed for additional heights, under Note (ii) above, will be allowed in case of all engineering works.</i>			
11.42	Extra for brick work in Square or rectangular pillars in buildings.	Cum	12.40	12.40
11.43	Extra for brick work in circular pillars, constructed with dressed bricks, including cost of dressing bricks.	-do-	57.30	134.15
11.44	Extra for brick work in arches including cost of shuttering -			
	(a) upto 1.50 metres span.	-do-	22.10	41.30
	(b) more than 1.50 metres, but upto 3 metres span	-do-	55.35	84.45
	(c) more than 3 metres, but upto 6 metres span.	-do-	65.60	104.00
11.45	(a) extra for profile walls	-do-	5.30	5.30
	(b) extra for flared out walls of syphons, super passages, falls etc.	-do-	7.70	7.70
	(c) extra for brick work curved on plan up to a meanradius not exceeding 6 metres	-do-	21.45	47.80
(F)	Half Brick Masonry.			
11.46	11.43 cm thick brick wall with every fourth course, reinforced with hoop-iron, laid in 1 : 4 cement sand mortar in super structure.	Sqm	13.45	62.85
11.47	11.43 cm thick brick wall laid in cement sand mortar 1 : 4 without reinforcement, in foundation and plinth.	-do-	9.90	52.70
11.48	(a) 11.43 cm thick brick wall laid in cement sand mortar 1:4 in super-structure.	-do-	12.30	55.10
	(b) 11.43 cm thick brick wall laid in cement sand mortar 1:3 in super-structure.	-do-	12.30	59.40
11.49	11.43 cm thick brick wall laid in cement lime sand mortar 1:1:6 (one cement, one lime and six sand) in superstructure.	-do-	12.30	55.30
11.50	7.62 cm thick brick wall laid in cement sand mortar 1:4 with every alternate course reinforced with hoop-iron in superstructure.	-do-	12.90	51.00
11.51	11.43 cm thick brick wall with every fourth			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	course reinforced with hoop-iron laid in 1:4 cement stone dust (from crusher) mortar in superstructure.	Sqm	13.45	65.10
11.52	11.43 cm thick brick wall laid in cement stone dust (from crusher) mortar 1:4 without reinforcement in foundation and plinth.	-do-	9.90	54.95
11.53	11.43 cm thick brick wall laid in cement stone dust (from crusher) mortar 1:4 in superstructure.	-do-	12.30	57.35
11.54	7.62 cm thick brick wall laid in cement stone dust (from crusher) mortar 1:4 with every alternate course reinforced with hoop-iron, in superstructure.	-do-	12.90	52.50
(G)	Brick Tile Work			
11.55	First class brick tile masonry with 30.48 cm × 15.24 cm × 5.08 cm tiles laid in cement sand mortar 1:4 in first storey upto 4 metres above plinth level	Cum	101.85	555.60
11.56	First class brick tile masonry with 22.86 cm × 11.43 cm × 3.81 cm tiles laid in cement sand mortar 1:4 in first storey upto 4 metres above plinth level	-do-	118.25	805.30
11.57	First class brick tile masonry with 30.48 cm × 15.24 cm × 5.08 cm tiles laid in cement sand mortar 1:6 in first storey upto 4 metres above plinth level	-do-	101.35	524.45
11.58	First class brick tile masonry with 22.86 cm × 11.43 cm × 3.81 cm tiles laid in cement sand mortar 1:6 in first storey upto 4 metres above plinth level	-do-	118.25	751.55
11.59	First class brick tile masonry with 30.48 cm × 15.24 cm × 5.08 cm tiles laid in cement stone dust (from crusher) mortar 1:4 in first storey upto 4 metres above plinth level	-do-	101.35	575.65
11.60	First class brick tile masonry with 22.86 cm × 11.43 cm × 3.81 cm tiles laid in cement stone dust (from crusher) mortar 1:4 in first storey upto 4 metres above plinth level	-do-	118.25	837.45
11.61	First class brick tile masonry with 30.48 cm × 15.24 cm × 5.08 cm tiles laid in cement stone dust (from crusher) mortar 1:6 in first storey upto 4 metres above plinth level	-do-	101.85	544.50
11.62	First class brick tile masonry with 22.86 cm × 11.43 cm × 3.81 cm tiles laid in cement stone dust (from crusher) mortar 1:6 in first storey upto 4 metres above plinth level	-do-	118.25	783.65
11.63	Extra for brick tile masonry in additional storey upto 4 metres above the top of structural roof of lower storey.	-do-	11.00	11.00

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
11.64	Extra for brick tile masonry in square or rectangular pillars.	Cum	18.80	18.80
11.65	Tile facing with 22.86 cm × 11.43 cm × 3.81 cm tiles, laid in cement sand mortar 1:4 in first storey upto 4 metres above plinth level without steel reinforcement.	Sqm	18.55	49.95
11.66	Tile facing with 22.86 cm × 11.43 cm × 3.81 cm tiles laid in cement sand mortar 1:4 in first storey upto 4 metres above plinth level with steel reinforcement.	-do-	18.55	51.15
	<i>Note : In case tile facing is done in stone dust (from crusher), instead of sand; increase the through rate by Rs. 1.12 per sqm of Item Nos. 11.65 and 11.66.</i>			
11.67	Extra for tile facing in additional storey upto 4 metres above the top of structural roof of the lower storey.	-do-	1.60	1.60
(H)	Brick and-Tile Jali			
11.68	Brick and tile jali 11.43 cm × 15.24 cm thick alternate layers laid in cement sand mortar 1:4 using 22 number bricks and 18 No. tiles 30.48 cm × 15.24 cm × 5.08 cm	-do-	15.65	51.40
11.69	Tile jali 15.24 cm thick laid in cement sand mortar 1:4 using 46 number tiles 30.48 cm × 15.24 cm × 5.08 cm	-do-	17.70	63.05
11.70	Brick and brick tile jali with 22.86 cm × 11.43 cm thick alternate layers laid in cement sand mortar 1:4 using 30 number bricks and 30 number brick tiles 22.86 cm × 11.43 cm × 3.81 cm.	-do-	16.15	55.15
11.71	Brick jali with 22.86 cm × 11.43 cm thick alternate layers laid in cement sand mortar 1:4 using 58 numbers bricks.	-do-	18.35	60.45
11.72	V-Shape brick jali in 22.86 cm thick walls laid in cement sand mortar 1:6 finished with 12 mm thick cement sand plaster 1:6 including making straight edges with plaster.	-do-	36.15	101.35
11.73	Brick and tile jali with 22.86 cm × 30.48 cm thick alternate layers laid in cement sand mortar 1:4 using 31 number bricks and 48 number tiles 30.48 cm × 15.24 cm × 5.08 cm	-do-	27.32	114.75
11.74	Tile jali with 22.86 cm × 30.48 cm thick alternate layers laid in cement sand mortar 1:4 using 90 number tiles 22.86 cm × 11.43 cm × 3.81 cm and 37 number tiles 30.48 cm × 15.24 cm × 5.08 cm.	-do-	26.10	126.75
11.75	Tile-on-edge jali, 5.08 cm thick laid in cement sand mortar 1:4 reinforced with hoop-			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	iron 1.25 mm thick, 25 mm wide at every course using 19 number tiles 30.48 cm x 15.24 cm x 5.08 cm.	Sqm	31.35	62.30
(1)	Miscellaneous			
11.76	Dressed or moulded three brick cornice laid in cement sand mortar 1:4 including 12 mm thick cement plaster 1:4 or pointing, as required.	Metre	13.75	27.60
11.77	Dressed or moulded two brick cornice laid in cement sand mortar 1:4 including 12 mm thick cement plaster 1:4 or pointing, as required.	-do-	8.80	16.30
11.78	Dressed or moulded one brick cornice laid in cement sand mortar 1:4 including 12 mm thick cement plaster 1:4 or pointing, as required.	-do-	4.25	7.20
11.79	Corbelling around almirah including 12 mm thick cement plaster 1:6	-do-	3.90	10.25
11.80	7.62 cm thick brick architrave to windows and ventilators 11.43 cm projected laid in cement sand mortar 1:4 including 12 mm thick cement plaster 1:4.	-do-	2.90	8.30
11.81	Dressing, chamfering of bricks to required shape in masonry work.	100 Nos.	73.75	--
11.82	Marro-corners making from first class bricks and fixing in position, with cement mortar 1:4	Each	8.90	13.70
11.83	Replacing Kallar eaten bricks	-do-	0.90	1.70
11.84	Labour for brick work laid dry in walls.	Cum	23.60	--
11.85	Extra for specially moulded radiated work in arches of egg-shaped sewer, circular barrels and similar drainage works excluding cost of centring and moulds.	-do-	26.25	26.25
11.86	Extra for specially moulded brick work in circular work such as wells, shafts, circular sumps, pump chambers, etc. in which specially moulded or cut-bricks have to be used but for for which no centring or supports are required upto 4.5 metres internal diameter.	-do-	18.75	--
11.87	Chiselling sides of head regulators and other bricks works to increase gullet width.	Sqm.	19.50	--
11.88	Fire brick work in lining of fire places flues etc. (excepting chimney shafts)	Cum	134.50	2300.65
11.89	First class brick masonry in well steining of circular wells.	-do-	62.45	--
11.90	First class brick masonry in well steining of square, rectangular or polygonal wells.	-do-	60.35	--
11.91	First class 11.43 cm thick honey-comb brick work laid in cement sand mortar 1:4	Sqm	11.65	41.65

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
11.92	First class 22.86 cm thick honey-comb brick work laid in cement sand mortar 1:4	Sqm	19.90	82.45
11.93	Providing 7.62 cm first class brick drip course at junction of roof and walls laid in cement sand mortar 1:4 including dressing of bricks.	Metre	3.85	10.30
11.94	Providing first class brick-on-edge drip course at the junction of roof and walls, laid in cement sand mortar 1:4 including dressing of bricks.	-do-	5.75	15.50
11.95	Reinforced brick work, in lintels 1:3 (50 Kg. cement, 0.10 cum coarse sand) including shuttering but excluding reinforcement.	Cum	106.75	526.25
Note :	<i>Extra rate & note under item No: 11.41 will also be applicable to item No. 11.95</i>			
11.96	Extra for bailing/pumping out standing water of pond caused by springs, sub soil water, canal or river seepage and broken water mains or drains except rain water collected in the trenches or foundations before laying brick work.	Kilo litre	--	4.75
Note :	<i>The work for this item is to be done departmentally.</i>			
11.97	Extra for laying brick work in or under foul-position.	Cum	11.45	--
11.98	Providing 5.72 cm brick dalli facing with brick size 22.86 cm × 11.43 cm × 5.72 cm thick to be obtained after cutting of bricks laid in cement sand mortar 1:3 on RCC lintels beams fascia etc. including centering and shuttering complete.	Sqm	21.90	57.50
11.99	Extra for making tapered surface of brick masonry.	-do-	24.80	--
Note :	<i>The labour rate of this item includes the cost of wastage of bricks involved in tapering.</i>			
11.100	Brick edging 6.83 cm wide 11.43 cm deep to plinth protection with 1st class brick including grouting with cement sand mortar 1 : 4.	Metre	0.55	3.80

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CHAPTER NO. 12
STONE MASONRY

NOTES :

(I) The labour rates include the cost of dressing stones, according to the specifications of the item.

(II) The labour as well as through rates, for item No. 12.14 to 12.16, 12.22 to 12.30, 12.37 to 12.39, 12.43, 12.44 are applicable, when quarried stone is used. When the work is built with small Boulders, or with stone, obtained by breaking large boulders, the above rates will be increased by Rs. 26.00 per cum, on account of extra labour involved in dressing.

(III) The through rates, for stone masonry, include the cost of stone, at the site of work, irrespective of the distance from the source, but stone masonry will normally be constructed in such areas, where stone is available locally, or in the vicinity of the site of work. Variations in actual lead, in such cases, will be taken care of, by premium/abatment over the scheduled rates. Where, however stone is not available near at hand, but has to be brought from long distances, item of stone masonry should not be specified, and if, some work has to be constructed in stone, due to very special reasons, extra provision for carriage of stone should be made in the estimates. This difference, however, not payable to the contractor.

(IV) The labour and through rates include the cost of water and where the water is supplied by the department free of cost the rates shall be decreased accordingly.

(V) Unless specified to the contrary, the labour rates for various items of construction include handling of materials within 100 metres. Through rates include all rehandling of materials, at the site of work, and no payment is due to the contractors, on this account.

(VI) Unless specified to the contrary, the labour rates include the cost of water, tools and plants, labour and materials for scaffolding and centring and shuttering and cost of good earth for mud-mortar and mud-plaster, wherever required.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(A)	Ashlar Masonry			
12.1	Fine ashlar in cement mortar 1:3 upto 6 metre above plinth level.	Cum	977.90	1142.00
12.2	Fine ashlar in cement mortar 1:6 upto 6 metres above plinth level	-do-	977.90	1114.35
12.3	Rough tooled or bastard ashlar in cement mortar 1:3 upto 6 metres above plinth level.	-do-	691.15	897.00
12.4	Rough tooled or bastard ashlar in cement mortar 1:6 upto 6 metres above plinth level.	-do-	691.15	848.20
12.5	Rustic ashlar in cement mortar 1:3 upto 6 metres above plinth level	-do-	662.45	868.20
12.6	Rustic ashlar in cement mortar 1:6 upto 6 metres above plinth level.	-do-	662.45	819.50
12.7	Extra for above items for every additional storey of height upto 4 metres above the top of structural roof of lower storey.	-do-	18.80	18.80
12.8	Extra for arch work including centring and shuttering.	-do-	74.80	86.40
12.9	Cut stone work in cornices, string courses, etc., in cement mortar 1 : 3.	-do-	1456.65	1620.30

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
12.10	Cut stone work in cornices, string courses, etc., in cement mortar 1 : 4.	Cum	1456.65	1606.70
12.11	Extra for square or rectangular pillars.	-do-	230.00	--
12.12	Extra for circular pillars	-do-	700.00	--
12.13	Extra for curved masonry on plan for a mean radius not exceeding 6 metres.	-do-	165.00	--
(B)	Block-in-Course Rubble Masonry			
12.14	Block-in-Course upto 4 metres above plinth level in cement mortar 1:4	-do-	515.00	716.00
12.15	Block-in-Course upto 4 metres above plinth level in cement mortar 1:5	-do-	515.00	696.70
12.16	Block-in-Course upto 4 metres above plinth level in cement mortar 1:6	-do-	515.00	683.60
12.17	Extra for above items, for every additional storey, of height upto 4 metres above the top of structural roof of lower storey.	-do-	16.65	16.65
12.18	Add extra for arch work including centring and shuttering.	-do-	74.80	84.75
12.19	Extra for square or rectangular pillars.	-do-	21.25	--
12.20	Extra for circular pillar	-do-	64.55	82.20
12.21	Extra for curved masonry on plan for a mean radius not exceeding 6 metres.	-do-	24.25	30.30
(C)	Squared Rubble Masonry.			
12.22	Squared rubble masonry coursed (coursed rubble) in foundation and plinth in cement mortar 1:4.	-do-	160.35	370.80
12.23	Squared rubble masonry coursed (coursed rubble) in foundation and plinth in cement mortar 1:5.	-do-	160.35	346.50
12.24	Squared rubble masonry coursed (coursed rubble) in foundation and plinth in cement mortar 1:6.	-do-	160.35	330.65
12.25	Squared rubble masonry coursed (coursed rubble) in foundation and plinth in mud mortar.	-do-	133.35	202.30
12.26	Squared rubble masonry coursed (coursed rubble) in foundation and plinth and super-structure laid dry-			
(a)	Where building stone is specially arranged by the contractor.	-do-	103.55	172.50
(b)	Where stone is available within 100 metres from rock cutting already done.	-do-	96.40	--
(c)	Where stone is available within 100 metres from dismantled or failed structure.	Cum	74.35	--

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
12.27	Squared rubble masonry uncoursed or built to courses in foundation and plinth in cement mortar 1:4 to a pattern if specified.	Cum	174.75	379.20
12.28	Squared rubble masonry uncoursed or built to courses in foundation and plinth in cement mortar 1:5 to a pattern if specified.	-do-	174.75	354.85
12.29	Squared rubble masonry uncoursed or built to courses in foundation and plinth in cement mortar 1:6 to a pattern if specified.	-do-	174.75	339.00
12.30	Squared rubble masonry uncoursed or built to courses in foundation and plinth in mud mortar to a pattern if specified.	-do-	145.50	208.45
12.31	Add for work in superstructure upto 4 metres above plinth level	-do-	27.20	--
12.32	Extra for above items for every additional storey of height upto 4 metres above the top of structural roof of lower storey.	-do-	16.65	--
12.33	Extra for arch work including centring and shuttering.	-do-	74.80	82.25
12.34	Extra for square or rectangular pillars.	-do-	21.25	--
12.35	Extra for circular pillars.	-do-	64.55	82.20
12.36	Extra for curved masonry on plan for a mean radius not exceeding 6 metres.	-do-	24.25	30.30
(D)	Random Rubble Masonry			
12.37	Random rubble masonry or polygonal rubble masonry (kentish rag) or random or polygonal rubble, built to courses, in foundation and plinth in cement mortar 1:6.	-do-	128.25	308.80
12.38	Random rubble masonry or polygonal rubble masonry (kentish rag) or random or polygonal rubble, built to courses, in foundation and plinth in cement mortar 1:7.	-do-	127.00	294.55
12.39	Random rubble masonry or polygonal rubble masonry (kentish rag) or random or polygonal rubble, built to courses, in foundation and plinth in cement mortar 1:8.	-do-	127.00	283.20
12.40	Extra for square or rectangular pillars.	-do-	18.35	--
12.41	Extra for circular pillars.	-do-	56.20	70.60
12.42	Extra for curved masonry on plan for a mean radius not exceeding 6 metres.	-do-	22.25	27.20
12.43	Random rubble masonry or polygonal rubble masonry (kentish rag) random or polygonal rubble, built to courses, in foundation and plinth in mud mortar.	-do-	107.05	170.00
12.44	Random rubble masonry or polygonal rubble masonry (kentish rag) or random or polygonal rubble, built to courses, in foundation and plinth and superstructure laid dry-			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(a) Where building stone is specially arranged by the contractor.	Cum	86.60	149.50
	(b) Where stone is available within 100 metres from rock cutting already done.	-do-	86.55	--
	(c) Where stone is available within 100 metres from dismantled or failed structure.	-do-	78.85	--
(E)	Boulder Masonry			
12.45	Boulder masonry in cement mortar 1:6 in foundation and plinth.	-do-	128.25	316.90
12.46	Boulder masonry in mud mortar in foundation and plinth.	-do-	107.05	170.00
12.47	Extra for above items from 12.37 to 12.39, 12.43 to 12.46 for work in super-structure upto 4 metres above plinth level.	-do-	27.15	--
12.48	Extra for above items from 12.37 to 12.39, 12.43 to 12.46 for every additional storey of height upto 4 metres above the top of structural roof of lower storey.	-do-	16.65	16.65
(F)	Precast Stone Block Masonry			
12.49	Stone block masonry (including quoin-blocks jamb blocks, closer etc.) with precast solid concrete blocks of approved size laid in cement sand mortar 1:6 (1 cement : 6 fine sand) in foundation and plinth :			
	(a) precast cement concrete block made from medium size stone 15 to 20 cm 35% in volume at the face and cement concrete 1:4:8 (with stone aggregate of 20 mm and down gauge) 65% in volume.	-do-	124.40	360.70
	(b) precast cement concrete block made from medium size stone 15 to 20 cm, 35% in volume at the face and cement concrete 1:5:8 (with stone aggregate of 20 mm and down gauge) 65% in volume.	-do-	124.40	355.35
	(c) precast cement concrete block made from medium size stone 15 to 20 cm, 35% in volume at the face and cement concrete 1:5:10 (with stone aggregate of 20 mm and down gauge) 65% in volume.	-do-	124.40	345.15
12.50	Stone block masonry 15 cm thick (including quoin-blocks, jamb blocks, closer etc.) with precast solid concrete blocks of approved size laid in cement sand mortar 1:6 (1 cement : 6 fine sand) in foundation and plinth.			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(a) precast cement concrete block made from medium size stone 15 to 20 cm 35% in volume at the face and cement concrete 1:4:8 (with stone aggregate of 20 mm & down gauge) 65% in volume	Sqm	19.00	51.75
	(b) precast cement concrete block made from medium size stone 15 to 20 cm, 35% in volume at the face and cement concrete 1:5:8 (with stone aggregate of 20 mm & down gauge) 65% in volume.	-do-	19.00	50.45
	(c) precast cement concrete block made from medium size stone 15 to 20 cm 35% in volume at the face and cement concrete 1:5:10 (with stone aggregate of 20 mm & down gauge) 65% in volume	-do-	19.00	49.25
12.51	Stone block masonry 10 cm thick (including quoin-blocks; Jamb blocks closer etc.) with precast solid concrete blocks of approved size laid in cement sand mortar 1:6 (1 cement : 6 fine sand) in foundation and plinth. :			
	(a) precast cement concrete block made from medium size stone 15 to 20 cm, 35% by volume at the face and cement concrete 1:4:8 (with stone aggregate of 20mm and down gauge) 65% in volume.	-do-	14.00	37.25
	(b) precast cement concrete block made from medium size stone 15 to 20 cm, 35% by volume at the face and cement concrete 1:5:8 (with stone aggregate of 20mm and down gauge) 65% in volume.	-do-	14.00	36.30
	(c) precast cement concrete block made from medium size stone 15 to 20 cm, 35% by volume at the face and cement concrete 1:5:10 (with stone aggregate of 20mm and down gauge) 65% in volume.	-do-	14.00	35.60
12.52	Extra for work in superstructure upto 4 metres above plinth level :			
	(a) for items No. 12.49 (a), (b), (c)	Cum	21.00	--
	(b) for items No. 12.50 (a), (b), (c)	Sqm.	3.60	--
	(c) for items No. 12.51 (a), (b), (c)	-do-	2.40	--
12.53	Extra for every additional storey of height upto 4 metres above the top of structural roof of lower storey.			
	(a) for items No. 12.49 (a), (b), (c)	Cum	8.25	--
	(b) for items No. 12.50 (a), (b), (c)	Sqm.	1.50	--
	(c) for items No. 12.51 (a), (b), (c)	-do-	0.95	--
12.54	Extra for precast stone block masonry in square or rectangular pillars.	Cum	12.40	--

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(C)	Miscellaneous			
12.55	Rough hammer dressing of boulders :-			
	(a) quartzite stone 2--3 faces of masonry	Cum of masonry	45.30	--
	(b) quartzite 4--5 faces	-do-	74.40	--
	(c) sand stone 2--3 faces	-do-	35.00	--
	(d) sand stone 4 --5 faces	-do-	58.55	--
12.56	Hammer dressing of stone for face work.	Sqm of face area	14.25	--
12.57	Dry stone masonry for work of purely temporary nature (excluding dressing)	Cum	35.30	--
12.58	Stone filling behind retaining walls.	-do-	17.60	72.30
12.59	Extra for laying stone work in or under foul position.	-do-	11.45	--

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CHAPTER NO. 13
HOISTING AND ROOFING

NOTES :

(I) The rates, for item Nos. 13.1 to 13.4, 13.8 and 13.9 are for height, upto 4 metres, above plinth level. For additional height extra rates shall be paid as follows :-

- (a) For item Nos. 13.1 to 13.4, Note No. V of Chapter No. 10, "Concrete" shall apply.
(b) For item Nos. 13.8 and 13.9, Note No. 1 of Chapter No. 18, "Steel and Iron Work", shall apply.

(II) The rates, for hoisting, are not to be paid over and above the rates, for manufacture of beams, battens, etc., as given in other chapters; as these rates already include hoisting charges.

(III) The rates, for item Nos. 13.11, 13.13, 13.14, 13.15, 13.58, 13.65 and 13.66 are for work done in first storey. For every additional storey add Rs. 1.00 per Sqm to the labour, as well as the through rates of item Nos. 13.11, 13.13 and 13.15. For rates of item Nos. 13.14 and 13.58 add Rs. 0.50 per sqm to the labour, as well as the through rate; and for rate of item Nos. 13.65 and 13.66 add Rs. 3.00 per cum.

(IV) The labour and through rates include the cost of water and where the water is supplied by the department free of cost, the rates shall be decreased accordingly.

(V) Unless specified to the contrary, the labour rates for various items of construction include handling of materials within 100 metres. Through rate include all rehandling of materials, at the site of work, and no payment is due to the contractors, on this account.

(VI) Unless specified to the contrary, the labour rates include the cost of water, tools and plants, labour and materials for scaffolding and centring and shuttering and cost of good earth for mud mortar and mud plaster, wherever required.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(A)	Hoisting			
13.1	Hoisting R.C.C. lintels and placing in position.	Cum	95.40	--
13.2	Hoisting R.C.C. battens and placing in position.	-do-	110.00	--
13.3	Hoisting R.C.C. shelves and placing in position.	-do-	66.65	--
13.4	Hoisting R.C.C. bed plates and placing in position	-do-	103.90	--
13.5	Hoisting wooden battens and placing in position	-do-	75.20	
13.6	Hoisting wooden beams and placing in position.	-do-	57.80	
13.7	Hoisting wooden trusses and placing in position.	-do-	216.25	
13.8	Hoisting R.S. Joists and placing in position.	Quintal	21.45	
13.9	Hoisting steel roof trusses, plate girders of any span for buildings and plate and trussed girders of any span for bridges.	-do-	38.80	
13.10	Assembling at site and hoisting and placing in position tubular trusses, complete with accessories, such as purlins, bracings, longi-			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	other truss components, complete in all respects.	Quintal	73.15	--
(B)	Mud Roofing			
13.11	Second class mud roofing consisting of one layer of tiles 30.48 cm × 15.24 cm × 5.08 cm laid in cement mortar 1 : 3 including 6 mm thick cement plaster 1 : 4 on top with two coats of bitumen painting at 2.63 kg. per sqm covered with 10 cm of mud and two layers of 25 mm mud plaster with gobri leeping on top and cement plaster 1 : 4 on parapet between tiles and drip-course 1 : 2 cement pointing under side of tiles and filling of spaces between the battens.	Sqm	23.25	73.25
13.12	Third class mud roofing consisting of two layers of sirki and sarkanda, covered with 12.5 cm mud and mud plaster with gobri leeping on top.	-do-	9.85	31.50
(C)	Tile Terracing/Tile Roofing			
13.13	Terracing consisting of tiles 22.86 cm × 11.43 cm × 3.81 cm laid over 87.50 mm mud filling on a layer of 25 mm mud plaster and another layer of mud mortar for laying the tiles, including two coats of bitumen laid hot at 1.65 Kg. per sqm on top of R.C.C. slab including grouting with cement sand mortar 1:3 and top surface to be left clean etc.			
	OR			
	Terracing consisting of tiles 22.86 cm × 11.43 cm × 3.81 cm, laid over 87.50 mm mud filling, on a layer of 25 mm mud plaster and an other layer of mud mortar for laying the tiles over a polythene film of 100 micron (0.1 mm) thickness with 25 mm thick layer of fine sand, above and below the polythene film, laid on top of R.C.C. slab, including grouting with cement sand mortar 1:3 and top surface to be left clean.	-do-	16.75	52.95
13.14	Tile terracing with one layer of tiles, 22.86 cm × 11.43 cm × 3.81 cm laid dry over a layer of mud mortar including grouting with cement sand mortar 1:3 and top surface to be left clean.	-do-	7.45	36.40
13.15	Roofing consisting of 5 cm thick precast cement concrete 1:2:4 tiles laid in position with cement sand mortar 1:3 over R.C.C. battens 0.6 metre apart, excluding cost of R.C.C. battens, but including 4 cm thick screed of cement concrete 1:4:8 over tiles,			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	2 coats of bitumen at 2.34 Kg per sqm, 25 mm mud plaster, 75 mm mud another layer of 25 mm mud plaster, filling space between battens over beams with cement concrete 1:3:6 blocks in cement mortar 1:3 and cement pointing 1:2 on the underside of tiles.	Sqm.	28.95	90.10
(D)	Thatched Roofs			
13.16	Thatching 15 cm thick including bamboo frame and matting, but excluding the cost of purlins.	Sqm	6.00	40.35
13.17	Thatching 23 cm thick including bamboo frame and matting, but excluding the cost of purlins.	-do-	7.40	45.50
(E)	C.G.I & A.C.C. Sheet Roofing			
13.18	Corrugated G.I. sheet roofing 0.80 mm thick fixed with galvanised iron 'J' or 'L' hooks, 10mm dia G.I. limpet and bitumen washers complete, excluding the cost of purlins, rafters and trusses.	-do-	4.75	137.40
13.19	Corrugated asbestos sheet roofing 7 mm thick sheets fixed with G.I. hooks and bolts, limpet and bitumen washers complete, fixed in position, excluding the cost of purlins, rafters and trusses.	-do-	6.75	77.10
13.20	Corrugated asbestos sheet roofing 6 mm thick sheets fixed with G.I. hooks and bolts, limpet and bitumen washers complete, fixed in position, excluding the cost of purlins, rafters and trusses.	-do-	6.75	73.50
13.21	Semi-corrugated asbestos sheet roofing 7 mm thick sheets fixed with G.I. hooks and bolts, limpet and bitumen washers complete, fixed in position, excluding the cost of purlins, rafters and trusses.	-do-	6.75	74.70
13.22	Semi-corrugated asbestos sheet roofing 6 mm thick sheets fixed with G.I. hooks and bolts, limpet and bitumen washers complete, fixed in position, excluding the cost of purlins, rafters and trusses.	-do-	6.75	71.15
13.23	Ridges and valleys 45 cm overall in plain, G.I. sheets 0.80 mm thick fixed with galvanised iron, J and L hooks 10 mm dia G.I. limpet and bitumen washers, complete.	Metre.	11.25	62.40
13.24	G.I. Sheet gutters, 0.80 mm thick 45 cm over all semi circular, including fixing with clamps and making connections with rain water pipes.	-do-	10.85	71.20
13.25	Asbestos cement ridges fixed with galvanis-			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	ed iron J and L hooks 10 mm dia G.I. plain and bitumen washers, complete.	-do-	2.95	47.75
13.26	Asbestos cement valley gutter 45 cm × 12.5 cm × 15cm size fixed with galvanised iron J and L hooks 10 mm dia and flat iron clamps 25 mm × 3 mm size, G.I. Plain and bitumen washers including asbestos rope and plastic compound in joints complete.	-do-	4.05	89.55
13.27	Providing and fixing asbestos cement corrugated and semi-corrugated apron piece with crank bolts in position, etc., complete.	-do-	3.60	41.20
13.28	Providing and fixing asbestos cement corrugated ridge finial in the ridge.	Each	4.35	13.95
13.29	Providing and fixing asbestos cement Semi corrugated sheet ridge finial in the ridge.	-do-	4.35	13.95
13.30	Providing and fixing asbestos cement semi-corrugated sheet eaves filler piece in position etc. complete.	Metre	2.75	30.80
13.31	Providing and fixing asbestos cement semi-corrugated sheet eaves filler piece in position etc. complete.	-do-	2.75	22.75
13.32	Providing and fixing asbestos cement expansion joints for semi-corrugated sheets fixed complete in all respects.	-do-	2.15	48.35
13.33	Providing and fixing asbestos cement semi corrugated sheet North light curves with asbestos sheet roofing and purlins, etc.	-do-	2.70	50.45
13.34	Providing and fixing asbestos cement expansion joints for North light curves, etc. complete.	Each	3.30	37.50
13.35	Providing and fixing asbestos cement expansion joints for ridge etc. complete.	Pair	6.55	57.15
(R)	Spouts and Pipes			
13.36	Providing and fixing asbestos cement rain water pipe 100 mm dia with M.S. holder and clamps, fixed on wall face with cement mortar 1:4 complete.	Metre	7.30	22.70
13.37	Providing and embedding asbestos cement 100 mm dia rain water pipe in cement mortar during masonry work.	-do-	2.50	18.90
13.38	Providing and fixing asbestos cement plain bend 100 mm dia in position with gutter, etc.	Each	3.35	15.90
13.39	Providing and fixing asbestos cement swan neck 100 mm dia in position with asbestos cement pipe.	-do-	5.40	17.35
13.40	Providing and fixing asbestos cement hexagonal rain water head 33 cm × 24 cm for asbestos cement pipe in position.	-do-	6.65	24.95

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
13.41	Providing and fixing asbestos cement shoe for asbestos cement rain water pipe in position.	Each	4.60	16.55
13.42	Providing and fixing union clips in V. gutters 45 cm × 12.5 cm × 15 cm of asbestos cement sheet roofing etc. complete.	-do-	6.20	32.80
13.43	Providing and embedding 100 mm dia H.C.I rain water without ears I.S.I mark pipe in cement mortar during masonry work	Metre	2.60	93.35
13.44	Providing and laying 100 mm dia H.C.I pipe I.S.I mark including filling joints with lead and spun yarn, etc., complete fixed in position under floors.	-do-	1.50	93.05
13.45	Providing and fixing cast iron rain water non pressure pipe, I.S.I mark with ears with screw and wooden plugs fixed on wall face including filling joints with spun-yarn and cement mortar 1:2 excluding head and shoe, etc.			
	(a) 100 mm dia pipe	Metre	8.30	88.25
	(b) 150 mm dia pipe	-do-	9.20	176.05
Note:	<i>In case rain water pipe 100 mm dia and 150 mm dia with 14 kg. & 26 kg. weight for 1.80 metres length of pipe with ears respectively is used on the face of wall decrease, the through rate of item No. 13.45 @ Rs. 22.20 and Rs. 34.35 per metre respectively.</i>			
13.46	(a) Extra over rate of item Nos. 13.43 and 13.45 (a) in case lead joints are used instead of cement joints.	Per joint	3.30	24.30
	(b) Extra over rate of item No. 13.45 (b) in case lead joints are used instead of cement joints.	-do-	5.00	36.50
13.47	Providing and fixing cast iron head for rain water pipe on wooden plugs fixed on wall face including filling the joints with spun yarn and cement mortar 1:2.	Each	3.65	36.55
13.48	Providing and fixing cast iron shoe for 100 mm dia rain water pipe on wooden plugs fixed on wall face including filling the joints with spun yarn and cement mortar 1:2.	-do-	3.65	31.05
13.49	Providing and fixing C.I. plain bends in position with gutter etc.			
	(a) for 100 mm dia pipe	-do-	3.65	57.45
	(b) for 150 mm dia pipe	-do-	3.65	95.60
(G)	Khurras			
13.50	Top khurra 0.6 m × 0.6 m for rain water pipe in 25 mm thick cement concrete 1:2:4 over 50 mm thick cement concrete 1:8:16	-do-	3.00	12.30

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
13.51	Khurra on roof as per item No. 13.50 with C.I. spouts and fixing in position	Each	4.50	67.55
13.52	Khurra on roof as per item No. 13.50 with A.C. spouts and fixing in position.	-do-	4.50	22.05
13.53	Khurra on roof as per item No. 13.50 with G.I. spouts and fixing in position.	-do-	4.50	35.80
13.54	Khurra on roof as per item No. 13.50 with R.C.C. 1:2:4 precast rain water spouts.	-do-	18.60	36.65
13.55	Supplying and fixing in position G.I. pipe class 'B' spouts in chajjas and cantilevers.			
	(a) 15 mm internal dia, G.I. pipe	Metre	3.35	24.20
	(b) 20 mm internal dia, G.I. pipe	-do-	4.55	32.00
	(c) 25 mm internal dia, G.I. pipe	-do-	6.05	40.45
	(d) 40 mm internal dia, G.I. pipe	-do-	7.55	59.00
	(e) 50 mm internal dia, G.I. pipe	-do-	9.05	75.50
13.56	Khassi paranalas 12 mm thick in cement mortar 1:2, 35 cm outside width and upto 4.25 metre height.	-do-	4.75	10.40
13.57	Bottom khurra on ground 1.2 m x 0.6 m consisting of brick-on-edge laid in cement mortar 1:3 over 75 mm cement concrete 1:8 :16 including 12 mm thick cement plaster 1:3	Each.	9.90	64.30
13.58	Laying 10 cm earth and a coat of 25 mm mud plaster with gobri leeping on top including two coats of bitumen painting at 1.65 kg. per sqm.	Sqm	13.20	20.75
13.59	Applying bitumen on roofs including heating and carriage to roof.	Quintal	69.85	511.00
13.60	Extra for bitumen painting at 0.70 kg per sqm.	Sqm.	0.50	3.70
(H)	Water Proofing Treatments.			
13.61	Providing and laying four courses of water proofing treatment with bitumen felt over roofs consisting of first and third courses of blown type bitumen grade S5/25 applied hot at 1.20 kg per sqm of area for each course, second course on roofing felt type 3 grade-1 (Hessian base self finished bitumen felt) and fourth and final course of stone grit 6 mm and down size or pea sized grit spread at 0.006 cum per sqm including preparation of surface complete.	-do-	3.50	27.85
13.62	Providing and laying four courses of water proofing treatment consisting of first and third course of blown type bitumen grade S5/25 applied hot at 1.6 kg. per sqm for each course and second course of fibre glass R.P. Tissue and fourth and final course of stone			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	grit 6 mm and down size or pea-sized grit spread at 0.006 cum per sqm including preparation of surface.	Sqm	3.50	31.00
13.63	Reduction for omitting in water proofing treatment final course spreading stone grit 6 mm and down size or pea-sized grit at 0.006 cum per sqm.	-do-	0.40	1.25
13.64	Cement concrete 1:2:4 gola 10 cm × 10 cm quadrant along junction of roof with parapet wall finished smooth, where specially specified.	Metre	2.45	5.35
13.65	Supplying and filling cinder on roof (1st storey) including light ramming.	Cum	24.95	81.15
13.66	Providing and laying cinder concrete in cement 1:15 (1 cement and 15 cinder) on terraced roofs & (1st storey), laid to slope, including consolidating the same.	-do-	49.95	213.65
(1)	Ceilings			
13.67	Deodar wood beading 50 mm × 12 mm including fixing in position etc., complete.	Metre	1.75	9.90
13.68	Deodar wood beading 63 mm × 12 mm including fixing in position etc., complete.	Metre	1.75	12.20
13.69	Deodar wood beading 75 mm × 12 mm including fixing in position etc., complete.	-do-	1.80	13.90
Note :	<i>In case the edges of the beading are chamfered, increase the labour as well as through rate by Re. 0.87 per metre.</i>			
13.70	Teak wood beading 50 mm × 12 mm including fixing in position etc. complete (frame work to be paid separately).	-do-	2.10	14.40
13.71	Teak wood beading 63 mm × 12 mm including fixing in position etc. complete (frame work to be paid separately).	-do-	2.15	17.65
13.72	Teak wood beading 75 mm × 12 mm including fixing in position etc. complete	-do-	2.15	20.30
Note:	<i>In case the edges of the beading are chamfered increase the the labour as well as through rate by Rs. 1.05 per metre.</i>			
13.73	Teak wood plank ceiling 12 mm thick tongued and grooved planking.	Sqm.	21.50	260.30
13.74	Teak wood plank ceiling 20 mm thick tongued and grooved planking.	-do-	21.50	416.60
13.75	Deodar wood plank ceiling 12 mm thick tongued and grooved planking.	-do-	16.50	174.90
13.76	Deodar wood plank ceiling 20 mm thick tongued and grooved planking.	-do-	16.50	273.90
13.77	Kail wood plank ceiling 20 mm thick tongued and grooved planking.	-do-	16.50	192.35

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
13.78	Providing and fixing 'dusuty' cloth ceiling.	-do-	4.00	17.80
13.79	Providing and fixing hessian cloth ceiling.	-do-	4.00	11.50
13.80	Providing and fixing commercial plywood 4 mm thick 3 ply ceiling.	-do-	2.55	65.00
<i>Note:</i>	(i) In case BWR II grade ply wood is used in Item No. 13.80, increase the through rate by Rs. 22/- per sqm.			
	(ii) In case decorative plywood tenk faced, on one side 4 mm thick 3 ply is used in place of commercial ply, Item No. 13.80, increase the through rate by Rs. 42.80 per sqm.			
13.81	Providing and fixing 5 mm thick asbestos sheet ceiling.	-do-	4.35	69.80
13.82	Providing and fixing natural colour 12 mm thick insulation board (such as celotex, tree tex, etc.) ceiling.	-do-	3.25	104.80
13.83	Providing and fixing 12 mm thick white faced insulation perforated board (such as perforated celotex, etc.) ceiling.	-do-	4.80	120.65
13.84	Providing and fixing tiles of size 60 cm x 60 cm flat pressed single or 3 layers particle board (medium density) B.W.R. type of synthetic resin ceiling -			
	(a) 12 mm thick plain tiles.	Sqm	4.80	160.00
	(b) 12 mm thick perforated at random half and "through and through" tiles.	-do-	4.80	170.00
13.85	Providing and fixing hard board sheet ceiling of approved quality with necessary nails etc.-			
	(a) Standard quality board :-			
	(i) 3 mm thick	-do-	3.25	39.25
	(ii) 4.5 mm thick	-do-	3.25	52.45
	(b) design boards :-			
	(i) 3 mm thick	-do-	3.25	52.45
	(ii) 4.5 mm thick	-do-	3.25	59.60
<i>Note:-</i>	The rates for Item Nos. 13.73 to 13.85, exclude the cost of the heading and frame work for base, which is to be paid for separately.			
13.86	Plaster of paris ceiling 12 mm thick, consisting of 12 mm thick panels of plaster of paris reinforced with hessian cloth, fixed to underside of deodar wood cradling of specified design, solignum painted (two coats) including cost of fixing in position, all, materials, etc.,	-do-	76.15	392.55
13.87	Extra for circular cutting and waste in ceiling with -			
	(a) teak wood planks 12 mm thick	Metre	10.55	40.35

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(b)	teak wood planks 20 mm thick	Metre	10.55	59.85
(c)	deodar wood planks 12 mm thick	-do-	10.55	30.30
(d)	deodar wood planks 20 mm thick	-do-	10.55	42.65
(e)	Kail wood planks	-do-	10.55	32.50
(f)	Natural colour insulating board 12 mm thick.	-do-	10.55	23.20
(g)	White face insulating board 12 mm thick	-do-	10.55	25.00
(h)	Standard quality hard board sheet -			
(i)	3 mm thick	-do-	10.55	15.00
(ii)	4.5 mm thick	-do-	10.55	16.70
(i)	decorative hard board sheet -			
(i)	3 mm thick	-do-	10.55	16.70
(ii)	4.5 mm thick	-do-	10.55	17.55
13.88.	Extra for providing and fixing ceiling to curved surfaces in narrow width.	Sqm.	12.40	--

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CHAPTER NO. 14
FLOORING AND DADOS

NOTES :

- (I) The rates of items mentioned in this note, are for ground floor. For every additional storey, add Re. 0.30 per sqm to the rate of items from 14.4 to 14.10, 14.16 to 14.18, 14.25 to 14.27, 14.44 to 14.49, 14.52, 14.54 to 14.56, 14.59 to 14.63, 14.66, 14.73 and 14.74 and add Re. 0.55 per sqm from item Nos. 14.19 to 14.24, without base concrete and sand filling.
- (II) Sand for 1:2:4 concrete, in items of conglomerate, polished, terrazzo, bedding cement plaster/mortar under marble, Agra Red stone, Kota and precast terrazzo tile flooring and skirting, dado and wall lining of terrazzo, marble Agra red stone, Dholpur, Kota, precast terrazzo tiles and glazed tile shall be Badarpur, or of Ghaggar (from Chand Mandir or Mubarak Pur) or from any other sand quarry in a river, khud, canal bed, having a fineness modulus, from 2.50 to 3.50. In certain cases, where coarse sand of equivalent quality is available locally, it may be allowed to be used by the Executive Engineer, equivalent quality being deemed to mean having fineness modulus from 2.50 to 3.50.
- (III) For square and rectangular columns, enhance the labour rates, for item Nos. 14.26 by 33.1/3 percent. For round and elliptical columns, enhance the labour rates, for the item No. 14.26 by 100 percent. The through rates are to be increased correspondingly.
- (IV) Risers of stair case are to be paid as per rate of skirting or dado, while treads and landings, are to be paid, as per flooring rates of similar specifications.
- (V) For item Nos. 14.25 (a)(i), (b)(i), (c)(i), (d)(i) and (e)(i) and 14.26 (a)(i), (b)(i), (c)(i), (d)(i), and (e)(i) and 14.27 (a) increase the through rate by Rs. 1.60 per sqm if white Dehradun marble chippings are used, instead of white Makrana/Namraul marble chippings.
- (VI) For item Nos. 14.25 (a)(ii), (b)(ii), (c)(ii), (d)(ii), (e)(ii), 14.26 (a)(ii), (b)(ii), (c)(ii), (d)(ii), (e)(ii) and 14.27 (b) increase the through rate by Rs. 2.40 per sqm if white Dehradun marble chippings are used instead of white Makrana/Naumraul marble chippings.
- (VII) For item Nos. 14.25 (a)(iii), (b)(iii), (c)(iii), (d)(iii), (e)(iii), 14.26 (a)(iii), (b)(iii), (c)(iii), (d)(iii), (e)(iii) and 14.27 (c) increase the through rate by Rs. 3.20 per sqm if white Dehradun marble chippings are used instead of white Makrana/Naumraul marble chippings.
- (VIII) For item Nos. 14.25 (a)(iv), (b)(iv), (c)(iv), (d)(iv), (e)(iv), 14.26 (a)(iv), (b)(iv), (c)(iv), (d)(iv), (e)(iv) increase the through rate by Rs. 5.00 per sqm if white Dehradun marble chippings are used, instead of white Makrana/Naumraul marble chippings.
- (IX) The labour and through rates include the cost of water where the water supplied by the department free of cost, the rate shall be decreased accordingly.
- (X) Unless specified to the contrary, the labour rates for various items of construction include handling of material within 100 metres. Through rates include all rehandling of material at the site of work and no payment is due to the contractors on this account.
- (XI) Unless specified to the contrary, the labour rates include the cost of water, tools and plants, labour and materials for scaffolding and centring and shuttering.
- (XII) Unless specified to the contrary the labour rates of concrete in this chapter includes the cost of use of mechanical mixer and vibrator to be arranged by the contractor at his own expenses. However, no use of vibrator has been proposed in the items of cement concrete having depth below 10 cm..

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(A)	Base Course			
14.1	Base course of floors consisting of 100 mm thick cement concrete 1:8:16 and 100 mm sand or stone filling.	Sqm.	6.40	36.95
14.2	Base course of floors consisting of 100 mm thick lime concrete 1:2:8 and 100 mm sand or stone filling.	-do-	6.40	35.35
14.3	Floating coat of 1.50 mm thick neat cement laid in one operation to the topping.	-do-	1.15	3.70
(B)	Screed.			
14.4	Screed of 50 mm of thick cement concrete 1:8:16 to be laid below the topping.	-do-	3.35	15.35
14.5	Screed of 50 mm thick lime concrete 1:2:8 to be laid down below the topping.	-do-	3.35	14.55
14.6	Screed of 40 mm thick cement concrete 1:8:16 to be laid below the topping.	-do-	2.75	12.35
14.7	Screed of 40 mm thick lime concrete 1:2:8 to be laid below the topping.	-do-	2.75	11.70
(C)	Cement Concrete Flooring.			
14.8	Conglomerate floor 25 mm thick cement concrete topping 1:2:4.	-do-	8.60	22.40
14.9	Conglomerate floor 40 mm thick cement concrete topping 1:2:4.	-do-	9.50	31.50
14.10	Conglomerate floor 50 mm thick cement concrete topping 1:2:4.	-do-	10.05	37.60
14.11	Conglomerate floor 25 mm thick cement concrete 1:2:4 on 100 mm cement concrete 1:8:16 and 100 mm sand or stone filling.	-do-	15.00	59.30
14.12	Conglomerate floor 40 mm thick cement concrete 1:2:4 on 100 mm cement concrete 1:8:16 and 100 mm sand or stone filling.	-do-	15.85	68.45
14.13	Conglomerate floor 50 mm thick cement concrete 1:2:4 on 100 mm cement concrete 1:8:16 and 100 mm sand or stone filling.	-do-	16.45	74.50
14.14	25 mm thick conglomerate floor of cement concrete 1:2:4 over flat brick blocks 34.29 cm x 45.72 cm or 45.72 cm x 45.72 cm with second class bricks, grouted in cement sand mortar 1:6 with 25 mm wide open joints, allround filled with cement concrete 1:2:4 simultaneously with topping over 100 mm sand filling.	-do-	12.45	58.80
14.15	25 mm thick conglomerate floor of cement concrete 1:2:4 over flat bricks laid dry with 25 mm wide open joints, allround filled with cement concrete 1:2:4 simultaneously with topping over 100 mm sand filling.	-do-	11.80	61.30

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(D) Polished Cement Concrete Flooring.				
14.16	25 mm thick grey polished flooring cement concrete 1:2:4 topping finished with 3 mm thick neat coat of cement rubbed and polished.	Sqm	25.15	44.00
14.17	40 mm thick grey polished flooring cement concrete 1:2:4 topping finished with 3 mm thick neat coat of cement rubbed and polished.	-do-	26.00	53.10
14.18	18 mm thick grey polished skirting or dado consisting of bottom layer of 15 mm thick cement sand plaster 1:3 and finished with 3 mm thick topping of neat cement rubbed and polished including rounding off junction with floors.	-do-	29.25	46.30
(E) Brick Flooring.				
14.19	Flat brick paving laid dry over 25 mm thick mud mortar grouted with sand.	-do-	2.80	25.25
14.20	Dry brick-on-edge paving sand grouted over 50 mm thick earth and mud plaster.	-do-	4.80	38.70
14.21	Dry brick-on-edge paving sand grouted over 50 mm thick rammed brick aggregate 40 mm gauge.	-do-	4.45	43.60
14.22	Flat brick or tile flooring laid in cement sand mortar 1:4 on 100 mm thick cement concrete 1:8:16 and 100 mm sand filling and cement pointed 1:2 on top.	-do-	13.55	71.80
14.23	brick-on-edge or tile flooring laid in cement sand mortar 1:4 on 75 mm thick cement concrete 1:8:16 and 100 mm sand filling and cement pointed 1:2 on top.	-do-	16.70	85.55
14.24	Flat brick or tile flooring laid dry over a bed of 6 mm thick cement sand mortar 1:6 grouted with cement sand mortar 1:4 and top surface to be left clean after wirebrusing.	-do-	5.20	32.00
(F) Terrazzo Flooring.				
14.25	Terrazzo topping rubbed and polished to a granolithic finish under layer 34 mm thick cement concrete 1:2:4 and top layer as specified below :-			
	(a) with grey Cement.			
	(i) 40 mm thick with top layer 6 mm thick with white marble Makrana/ Narnaul chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3 : 1 (3 parts of cement and one part of marble powder) by weight in proportion of 4 : 7 (4 parts of cement marble powder mix : 7 parts			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	of white marble chips) by volume complete.	Sqm	41.80	73.20
(ii)	43 mm thick with top layer 9 mm thick with white marble Makrana/Namaul chipping of size above 4 mm but upto 7 mm laid in cement marble powder mix in the ratio of 3 : 1 (3 parts of cement and one part of marble powder) by weight in proportion of 4 : 7 (4 parts of cement marble powder mix : 7 parts of white marble chips.) by volume complete.	-do-	44.85	80.35
(iii)	46 mm thick with top layer 12 mm thick with white marble Makrana/Namaul chipping of size above 7 mm but upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix : 3 parts of white marble chips) by volume complete.	-do-	47.90	87.90
(iv)	54 mm thick with top layer 20 mm thick with white marble Makrana/Namaul chipping of size above 10 mm but upto 15 mm laid in cement marble powder mix in the ratio of 3 : 1 (3 parts of cement & one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix : 4 parts of white marble chips) by volume complete.	-do-	53.90	106.25
(b)	<i>with white cement.</i>			
(i)	40 mm thick with top layer 6 mm thick with white marble Makrana/Namaul chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	-do-	41.80	88.05
(ii)	43 mm thick with top layer 9 mm thick with white marble Makrana/Namaul chipping of size above 4 mm upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	-do-	44.85	102.60

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(iii)	46 mm thick with top layer 12 mm thick with white marble Makrana/Narnaul chipping of size above 7 mm upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix 3 parts of white marble chips) by volume complete.	Sqm	47.90	119.80
(iv)	54 mm thick with top layer 20 mm thick with white marble Makrana/Narnaul chipping of size above 10 mm upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix 4 parts of white marble chips) by volume complete.	-do-	53.00	164.45
(c)	<i>with black or red or chocolate pigment (grey cement mixed with pigment to give the required back ground)</i>			
(i)	40 mm thick with top layer 6mm thick with white marble Makrana/Narnaul chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 : parts of white marble chips) by volume complete.	-do-	42.40	85.10
(ii)	43 mm thick with top layer 9 mm thick with white marble Makrana/Narnaul chipping of size above 4 mm upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 : parts of white marble chips) by volume complete.	-do-	45.60	98.00
(iii)	46 mm thick with top layer 12 mm thick with white marble Makrana/Narnaul chipping of size above 7 mm upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix 3 : parts of white marble chips) by volume complete.	-do-	48.80	111.35

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(iv)	54 mm thick with top layer 20 mm thick with white marble Makrana/Narnaul chipping of size above 10 mm upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix 4 : parts of white marble chips) by volume complete.	Sqm	55.40	145.40
(d)	<i>with orange or buff or yellow or pink pigment (white cement mixed with pigment to give the required back ground)</i>			
(i)	40 mm thick with top layer 6 mm thick with white marble Makrana/Narnaul chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 : parts of white marble chips) by volume complete.	-do-	42.40	100.25
(ii)	43 mm thick with top layer 9 mm thick with white marble Makrana/Narnaul chipping of size above 4 mm upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 : parts of white marble chips) by volume complete.	-do-	45.60	120.75
(iii)	46 mm thick with top layer 12 mm thick with white marble Makrana/Narnaul chipping of size above 7 mm upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix 3 : parts of white marble chips) by volume complete.	-do-	48.80	143.90
(iv)	54 mm thick with top layer 20 mm thick with white marble Makrana/Narnaul chipping of size above 10 mm upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix 4 : parts of white marble chips) by volume complete.	-do-	55.40	204.65

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(e)	with blue or green pigment (white cement mixed with pigment to give the required background)			
(i)	40 mm thick with top layer 6 mm thick with white marble Makrana/Narnaul chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 : parts of white marble chips) by volume complete.	Sqm	42.40	100.90
(ii)	43 mm thick with top layer 9 mm thick with white marble Makrana/Narnaul chipping of size above 4 mm upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 : parts of white marble chips) by volume complete.	-do-	45.60	121.70
(iii)	46 mm thick with top layer 12 mm thick with white marble Makrana/Narnaul chipping of size above 7 mm upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix 3 : parts of white marble chips) by volume complete.	-do-	48.80	145.15
(iv)	54 mm thick with top layer 20 mm thick with white marble Makrana/Narnaul chipping of size above 10 mm upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix 4 : parts of white marble chips) by volume complete.	-do-	55.40	206.80
(G)	Terrazzo Skirting, dado and on face of wall			
14.26	Terrazzo skirting or dado or on wall face rubbed and polished to a granolithic finish under layer 12 mm thick cement coarse sand plaster 1:3 and top layer as specified below:-			
(a)	with grey cement.			
(i)	18 mm thick with top layer 6 mm thick with white marble Makrana/Narnaul chipping of size 1 mm to 4 mm laid in			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	Sqm	47.15	71.00
(ii)	21 mm thick with top layer 9 mm thick with white marble Makrana/Narnaul chipping of size above 4 mm but upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	-do-	50.10	78.05
(iii)	24 mm thick with top layer 12 mm thick with white marble Makrana/Narnaul chipping of size above 7 mm but upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix : 3 parts of white marble chips) by volume complete.	-do-	53.05	85.55
(iv)	32 mm thick with top layer 20 mm thick with white marble Makrana/Narnaul chipping of size above 10 mm but upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix : 4 parts of white marble chips) by volume complete.	-do-	60.90	105.80
(b)	<i>with white cement</i>			
(i)	18 mm thick with top layer 6 mm thick with white marble Makrana/Narnaul chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	-do-	47.15	85.85
(ii)	21 mm thick with top layer 9 mm thick with white marble Makrana/Narnaul chipping of size above 4 mm but upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	Sqm	50.10	100.30
(iii)	24 mm thick with top layer 12 mm thick with white marble Makrana/Namaul chipping of size above 7 mm but upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix : 3 parts of white marble chips) by volume complete.	-do-	53.05	117.40
(iv)	32 mm thick with top layer 20 mm thick with white marble Makrana/Namaul chipping of size above 10 mm but upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix : 4 parts of white marble chips) by volume complete.	-do-	60.90	164.00
(c)	<i>with black or red or chocolate (with grey cement mixed with pigment to give the required back ground)</i>			
(i)	18 mm thick with top layer 6 mm thick with white marble Makrana/Namaul chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	-do-	47.75	82.90
(ii)	21 mm thick with top layer 9 mm thick with white marble Makrana/Namaul chipping of size above 4 mm but upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	-do-	50.85	95.70
(iii)	24 mm thick with top layer 12 mm thick with white marble Makrana/Namaul chipping of size above 7 mm but upto 10 mm laid in cement marble			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix : 3 parts of white marble chips) by volume complete.	Sqm	53.95	109.00
(iv)	32 mm thick with top layer 20 mm thick with white marble Makrana/Narnaul chipping of size above 10 mm but upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix : 4 parts of white marble chips) by volume complete.	-do-	62.40	144.90
(d)	<i>with orange or buff or yellow or pink (white cement mixed with pigment to give the required back ground.</i>			
(i)	18 mm thick with top layer 6 mm thick with white marble Makrana/Narnaul chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	-do-	47.75	98.05
(ii)	21 mm thick with top layer 9 mm thick with white marble Makrana/Narnaul chipping of size above 4 mm but upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	-do-	50.85	118.45
(iii)	24 mm thick with top layer 12 mm thick with white marble Makrana/Narnaul chipping of size above 7 mm but upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix : 3 parts of white marble chips) by volume complete.	-do-	53.95	141.55
(iv)	32 mm thick with top layer 20 mm thick with white marble Makrana/Narnaul chipping of size above 10 mm			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	but upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix : 4 parts of white marble chips) by volume complete.	Sqm.	62.40	204.15
(e)	with blue or green (white cement mixed with pigment to give the required background)			
(i)	18 mm thick with top layer 6 mm thick with white marble Makrana/Narnaul chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	-do-	47.75	98.70
(ii)	21 mm thick with top layer 9 mm thick with white marble Makrana/Narnaul chipping of size above 4 mm but upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of white marble chips) by volume complete.	-do-	50.85	119.40
(iii)	24 mm thick with top layer 12 mm thick with white marble Makrana/Narnaul chipping of size above 7 mm but upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix : 3 parts of white marble chips) by volume complete.	Sqm	53.95	142.80
(iv)	32 mm thick with top layer 20 mm thick with white marble Makrana/Narnaul chipping of size above 10 mm but upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix : 4 parts of white marble chips) by volume complete.	-do-	62.40	206.30

Note:- In case Item No. 14.26 (a) to (e) are done on horizontal surfaces decrease the labour as well as through rates by Rs. 2.05 per sqm.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(H)	Crazy Flooring.			
14.27	Crazy marble stone flooring rubbed and polished with under layer 25 mm thick cement concrete 1:2:4 and top layer of crazy marble stone white, black or as specified including filling with marble chips of size upto 15 mm of Narnaul/Makrana laid in cement marble powder mix in the ratio of 3:1 (3 parts of grey cement and one part of marble powder) in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of marble chips) by volume including cement slurry complete.			
	(a) 20 mm thick	Sqm	49.00	98.45
	(b) 30 mm thick	-do-	53.15	115.90
	(c) 40 mm thick	-do-	58.50	134.55
Note :	<i>For item No. 14.27 (a), (b) & (c) increase the through rate by Rs. 11.70, Rs. 17.25 and Rs. 23.40 per sqm respectively in case pigment of any colour is used in the topping of crazy marble flooring of different thicknesses.</i>			
(I)	Extra for items covered under Sub-Head F to H			
14.28	Extra over item No. 14.26 if under layer 15 mm thick cement coarse sand plaster 1:3 instead of 12 mm thick cement coarse sand plaster 1:3 is provided.	-do-	1.10	4.15
14.29	Extra over item Nos. 14.25 (a)(i), 14.26(a)(i) and 14.27(a) for every part of 5 percent white cement in top layer is used, instead of grey cement.	-do-	--	0.75
14.30	Extra over item No. 14.25(a)(ii), 14.26(a)(ii) and 14.27 (b) for every part of 5 percent white cement in top layer is used, instead of grey cement.	-do-	--	1.10
14.31	Extra over item Nos. 14.25(a)(iii), 14.26(a)(iii) and 14.27 (c) for every part of 5 percent white cement in top layer is used, instead of grey cement.	-do-	--	1.60
14.32	Extra over item Nos. 14.25 (a)(iv) and 14.26 (a) (iv) for every part of 5 percent white cement in 20 mm thick top layer is used, instead of grey cement.	-do-	--	2.90
14.33	Extra over item Nos. 14.25 (c)(i),(d) (i), (e) (i) and 14.26 (c) (i), (d) (i), (e) (i), if red, chocolate and buff instead of white marble chipping are used in 6 mm thick top layer.	-do-	--	1.45
14.34	Extra over item Nos. 14.25 (c) (i), (d) (i), (e) (i) and 14.26 (c) (i), (d) (i), (e) (i); if green and blue instead of white marble chippings are used in 6 mm thick top layer.	-do-	--	1.65

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
14.35	Extra over item Nos. 14.25 (c) (ii), (d) (ii) (e) (ii), and 14.26 (c) (ii), (d) (ii), (e) (ii); if red, chocolate and buff instead of white marble chipping are used in 9 mm thick top layer.	Sqm	--	2.15
14.36	Extra over item Nos. 14.25 (c) (ii), (d) (ii), (e) (ii) and 14.26 (c) (ii), (d) (ii), (e) (ii); if green and blue instead of white marble chipping are used in 9 mm thick top layer.	-do-	--	2.45
14.37	Extra over item Nos. 14.25 (c) (iii), (d) (iii), (e) (iii) and 14.26 (c) (iii), (d) (iii), (e) (iii) if red chocolate and buff instead of white marble chipping are used in 12 mm thick top layer.	-do-	--	2.75
14.38	Extra over item Nos. 14.25 (c) (iii), (d) (iii), (e) (iii) and 14.26 (c) (iii), (d) (iii), (e) (iii) if green and blue instead of white marble chipping are used in 12 mm thick top layer.	-do-	--	3.10
14.39	Extra over item Nos. 14.25 (c) (iv), (d) (iv), (e) (iv) and 14.26 (c) (iv), (d) (iv), (e) (iv) if red chocolate and buff instead of white marble chipping are used in 20 mm thick top layer.	-do-	--	4.35
14.40	Extra over item Nos. 14.25 (c) (iv), (d) (iv), (e) (iv) and 14.26 (c) (iv), (d) (iv), (e) (iv) if green and blue instead of white marble chipping are used in 20 mm thick top layer.	-do-	--	4.90
14.41	Extra labour for projected nosing of stair case of any shape and design.	Metre	4.05	--
14.42	Extra for laying terrazzo flooring on stair case treads not exceeding 30 cm in width including nosing.	Sqm.	3.00	--
14.43	Extra for laying terrazzo in narrow bands not exceeding 7.5 cm in width.	Metre	0.20	--
(J)	Precast Terrazzo Tiles Flooring.			
14.44	Precast terrazzo tiles of 20 mm minimum thickness in cement as specified below with marble chips of size and colour as required laid on 20 mm thick bed of cement coarse sand mortar 1:3 with neat cement slurry, between joints and over the base in floors, treads of steps and landings including rubbing and polishing.			
	(a) in Ordinary grey cement	Sqm	28.25	129.70
	(b) in 50% white and 50% grey cement	-do-	28.25	148.50
	(c) in white cement	-do-	28.25	167.40
	(d) in white cement mixed with buff, yellow or orange pigment.	-do-	28.25	175.85

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(c) in grey cement with black, red or chocolate pigment.	Sqm	28.25	156.30
	(f) in white cement with green or blue pigment.	-do-	28.25	175.85
(K)	Precast Chequered Tiles Flooring.			
14.45	Precast chequered tiles of 20 mm thickness in ordinary grey cement without chips laid on 20 mm thick bed of cement coarse sand mortar 1:3 with neat cement slurry between joints and over the base in floors, treads of steps and landings.	-do-	9.60	101.35
	<i>Note:- In case colour chequered tiles in flooring are used, increase the through rate of item No. 14.45 by 10%.</i>			
14.46	Precast chequered terrazzo tiles 22 mm thick in cement with marble chips of size and colour as required, laid on 20 mm thick bed of cement coarse sand mortar 1:3 with neat cement slurry mixed with pigment to match the shade of tiles between joints and over the base in floors, treads of steps and landings, including rubbing and polishing.	-do-	28.25	138.15
	<i>Note:- If the bed of 20 mm thick lime-surkhi mortar 1:2 is used; instead of 20 mm thick bed of cement coarse sand mortar 1:3 the through rates of items Nos. 14.44 to 14.46 shall be decreased by Rs. 8.50 per sqm but the labour rates shall be increased by Rs. 0.45 per sqm.</i>			
(L)	Precast Terrazzo Tiles Skirting per Dado.			
14.47	Precast terrazzo tiles of 12.5 mm minimum thickness in cement as specified below with marble chips of size and colour as required laid on 10 mm thick cement coarse sand plaster 1:3 and jointed with neat cement slurry in skirting, dado and risers of steps, including rubbing and polishing complete.			
	(a) in ordinary grey cement.	-do-	36.45	108.05
	(b) in 50% white and 50% grey cement	-do-	36.45	118.45
	(c) in white cement	-do-	36.45	134.85
	(d) in white cement mixed with buff, yellow or orange pigment.	Sqm	36.45	142.10
	(e) in grey cement mixed with black, red or chocolate pigment.	-do-	36.45	127.40
	(f) In white cement mixed with green or blue pigment.	-do-	36.45	142.10
(M)	Glazed Tiles.			
14.48 (a)(i)	White glazed tiles 15 cm x 15 cm, 5 mm thick in skirting and dado on 12 mm thick cement coarse sand plaster 1:3 in base and jointed with white cement			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	slurry in joints, including bevelled corners.	Sqm	29.10	196.05
(ii)	White glazed tiles 10 cm × 10 cm, 5 mm thick in skirting and dado on 12 mm thick cement coarse sand plaster 1:3 in base and jointed with white cement slurry in joints including bevelled corners.	-do-	44.30	231.20
(b)(i)	Coloured glazed tiles 15 cm × 15 cm, 5 mm thick in skirting and dado on 12 mm thick cement coarse sand plaster 1:3 in base and jointed with white cement slurry in joints including bevelled corners.	-do-	29.10	209.80
(ii)	Coloured glazed tiles 10 cm × 10 cm, 5 mm thick in skirting and dado on 12 mm thick cement coarse sand plaster 1:3 in base and jointed with white cement slurry in joints, including bevelled corners.	-do-	44.30	251.35
(N)	Marble flooring, skirting, dado and wall lining.			
14.49	Marble stone flooring 20 mm to 25 mm thick slab including matching grains of marble laid in any pattern as specified over base of 12 mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of marble including rubbing and polishing (using marble stone slab of size more than 0.38 sqm each)			
(a)	White marble.			
(i)	White Makana marble (1st quality)	-do-	123.70	782.20
(ii)	Abu Plain, Abu panther and Abu veined.	-do-	123.70	706.30
(iii)	Makrana Doongri Adanga veined and Makrana chak doongri veined.	-do-	123.70	478.60
(b)	Black			
(i)	Abu Zebra, Bhainslana Zebra and Plain	-do-	123.70	530.30
(ii)	Kishan Garh Zebra, Makrana Dhobi Doongri Zebra.	-do-	123.70	403.85
(iii)	Namaul Zebra	-do-	123.70	656.85
(c)	Green marble			
(i)	Baroda green marble	Sqm	123.70	732.75
(ii)	Abu green marble	-do-	123.70	555.65
(iii)	Bundi green marble	-do-	123.70	403.85
(d)	Pink marble			
(i)	Pink plain marble	-do-	123.70	492.40
(ii)	Makrana pink Adanga marble	-do-	123.70	378.55

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(iii) Bundi Adanga pink marble	Sqm	123.70	396.25
	(e) Grey marble			
	(i) Kumari grey marble	-do-	123.70	396.25
	(ii) Bundi grey marble	-do-	123.70	441.80
	(f) Brown marble			
	(i) Bar-brown marble	-do-	123.70	549.30
14.50	Extra for nosing in marble stone for treads.	Metre	19.00	--
14.51	Extra for marble stone flooring in treads of step not exceeding 30 cm in width.	Sqm.	21.80	--
14.52	Marble stone 20mm to 25 mm thick in risers of step, skirting, dado, pillars and wall lining including matching the grains of marble slab in any pattern as specified laid on 12 mm thick cement coarsed sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of marble including rubbing and polishing, including labour for fixing cramps, pins and dowels etc. (using size of marble slab above 0.38 sqm each).			
	(a) White marble			
	(i) White Makrana marble (1st quality)	-do-	160.00	830.00
	(ii) Abu Plain, Abu panther and Abu veined	-do-	160.00	752.00
	(iii) Makrana, Doongri, Adanga, veined & Makrana chak doongri veined.	-do-	160.00	516.00
	(b) Black marble			
	(i) Abu Zebra, Bhaigslana Zebra & Plain	-do-	160.00	570.00
	(ii) Kishan Garh Zebra, Makrana Dhobi Doongri Zebra	-do-	160.00	439.00
	(iii) Narnaul Zebra	-do-	160.00	701.00
	(c) Green marble			
	(i) Baroda green marble	-do-	160.00	779.00
	(ii) Abu green marble	-do-	160.00	596.00
	(iii) Bundi green marble	-do-	160.00	439.00
	(d) Pink marble			
	(i) Pink plain marble	-do-	160.00	530.00
	(ii) Makrana pink Adanga marble	-do-	160.00	413.00
	(iii) Bundi Adanga pink marble	-do-	160.00	431.00
	(e) Grey marble			
	(i) Kumari grey marble	-do-	160.00	431.00
	(ii) Bundi grey marble	-do-	160.00	478.00
	(f) Brown marble			
	(i) Bar-brown marble	Sqm	160.00	589.00
Notes:-	(a) For Item No. 14.49(a) to (f) and 14.52(a) to (f) decrease the through rate by 20% if marble stone tiles of size above 0.27 sqm but up			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	<i>in 0.38-sqm each are used in place of marble stone slabs of size above 0.38 sqm each.</i>			
	<i>(b) For Item No. 14.49(a) to (f) and 14.52(a) to (f) decrease the through rate by 40% if marble stone tiles of size upto 0.27 sqm each are used in place of marble stone slabs of size above 0.38 sqm each.</i>			
	<i>(c) If the bed of 12mm thick lime surkhi mortar/plaster 1:2 is used instead of 12 mm thick bed of cement coarse sand mortar/plaster 1:3, the through rate of such items shall be decreased by Rs. 5.00 per sqm but the labour rates shall be increased by Re. 0.25 per sqm.</i>			
14.53	Reduction in through rate of Item No. 14.49 & 14.52 in case ordinary grey cement slurry is used instead of white cement slurry in joints.	Sqm	--	3.70
(O)	Agra Red Stone Flooring and Wall Lining/Facing			
14.54	Rough red sand stone (from Agra) 40 mm thick set in 12 mm thick cement coarse sand mortar.			
	(a) in cement coarse sand mortar 1:5	-do-	20.35	82.70
	(b) in cement coarse sand mortar 1:3	-do-	20.35	86.10
	(c) in cement coarse sand mortar 1:5 including pointing with cement mortar 1:2 with an admixture of pigment to match the shade of stone.	-do-	23.30	87.65
	(d) in cement coarse sand mortar 1:3 including pointing with cement mortar 1:2 with an admixture of pigment to match the shade of stone.	-do-	23.30	91.05
14.55	Fine dressed red sand stone (from Agra) 40 mm thick set in 12 mm thick cement coarse sand mortar.			
	(a) in cement coarse sand mortar 1:5	-do-	73.55	135.85
	(b) in cement coarse sand mortar 1:3	-do-	73.55	139.25
	(c) in cement coarse sand mortar 1:5 including pointing with cement mortar 1:2 with an admixture of pigment to match the shade of stone.	-do-	76.50	140.80
	(d) in cement coarse sand mortar 1:3 including pointing with cement mortar 1:2 with an admixture of pigment to match the shade of stone.	-do-	76.50	144.20
14.56	Fine dressed and rubbed red stone (from Agra) 40 mm thick, set in 12 mm thick cement coarse sand mortar.			
	(a) in cement coarse sand mortar 1:5	Sqm	86.35	148.65
	(b) in cement coarse sand mortar 1:3	-do-	86.35	152.05
	(c) in cement coarse sand mortar 1:5 inclu-			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	ding pointing with cement mortar 1:2 with an admixture of pigment to match the shade of stone.	Sqm	89.30	153.60
	(d) in cement coarse sand mortar 1:3 including pointing with cement mortar 1:2 with an admixture of pigment to match the shade of stone.	-do-	89.30	157.00
14.57	Extra for nosing in steps and treads of red rough dressed sand stone.	Metre	4.05	--
14.58	Extra for nosing in steps and treads of red fine dressed sand stone.	-do-	20.35	--
14.59	Fine dressed and machine rubbed red sand stone (from Agra) 25 mm to 30 mm thick on wall facing (lining) on wall, pillars, skirting, dado and riser of step laid in any pattern as specified on 12 mm thick cement coarse sand mortar 1:3 with neat cement with an admixture of pigment to match the shade of stone including labour for fixing cramps dowels and pins etc.	Sqm.	81.80	190.40
14.60	Dholpur stone 25 mm thick in wall facing (lining) laid in any pattern as specified on 12 mm thick cement coarse sand mortar 1:3 and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing including labour for fixing cramps, pins and dowels etc.	-do-	102.75	216.00
14.61	Butch work with rough dressed Dholpur stone 40 mm to 50 mm thick laid on 12 mm thick cement coarse sand mortar 1:3 including dressing and cutting the stone to required shape and size.	-do-	119.20	225.20
(P)	Kotah Stone Flooring, wall Lining/ Dado.			
14.62	Kotah stone flooring 34 mm to 40 mm thick in any pattern as specified over 12 mm thick base of cement coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing.	-do-	86.55	201.95
14.63	Kotah stone rough dressed 40 mm to 50 mm thick slabs, set to pattern in pavements over 20 mm thick base of cement coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone.	-do-	32.85	157.60
14.64	Extra for Kotah stone flooring in treads of steps not exceeding 30 cm in width.	-do-	1.15	--
14.65	Extra for nosing in treads of steps of Kotah stone slab.	Metre	6.10	--

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
14.66	Kotah stone 20mm thick in skirting risers of steps, dados pillars and wall facing (lining) in any pattern as specified 12 mm thick cement coarse sand plaster 1:3 laid and jointed with neat cement slurry, mixed with pigment to match the shade of stone including rubbing and polishing including labour for mixing cramps, dowels and pins etc.	Sqm	106.25	237.00
(Q)	Wooden Flooring			
14.67	Teak wood 25 mm planking tongued and grooved in flooring including fixing with screws complete.	-do-	22.65	452.60
14.68	Teak wood 40 mm planking tongued and grooved in flooring including fixing with screws complete.	Sqm	22.65	809.60
14.69	Deodar wood 25 mm planks tongued and grooved in flooring including fixing with screws complete.	-do-	16.95	343.25
14.70	Parquet flooring 40 mm thick consisting of first class well seasoned shisham wood in standard pattern, laid in flooring consisting of bitumen applied hot, at the rate of 4.86 kg. per sqm over 12 mm thick cement sand plaster 1:4 top surface rubbed smooth and wax polished to a fine finish.	-do-	86.45	437.70
(R)	Linoleum Flooring.			
14.71	Providing and laying plain coloured 3.20 mm thick linoleum covering to floors laid dry.	-do-	1.60	117.15
14.72	Extra on item No. 14.71, if linoleum of exact size is used.	-do-	--	12.00
(S)	Ironite Flooring.			
14.73	46mm thick ironite floor consisting of 40 mm thick cement concrete 1:2:4 base and top layer 6 mm thick laid with one part of ironite and grey cement mixed together in the ratio of 1:4 by weight to 2 parts of hard granite chippings 6 mm gauge by volume, finished smooth with hard rubbing.	-do-	18.80	59.20
14.74	50 mm thick ironite floor consisting of 40 mm thick cement concrete 1:2:4 base and top layer 10 mm thick laid with one part of ironite and grey cement mixed together in the ratio of 1:4 by weight to two parts of hard granite chipping 6 mm gauge by volume finished smooth with hard rubbing	-do-	19.10	71.80
(T)	P.V.C. Flooring			
14.75	P.V.C. (viny I) asbestos tiles as per I.S.3461-1961 coloured and marbled or mottled finish			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	Flooring on a smooth and damp proof base using adhesive as recommended by manufacturer including rolling with light wooden roller weighing about 5 kg. complete in all respect as desired by Engineer-in-Charge.			
	(a) 2mm thick	Sqm	10.35	123.20
	(b) 3 mm thick	-do-	10.35	170.55
14.76	P.V.C. sheet flexible type conforming to I.S 3462-1966 flooring plain coloured marble or mottled finish on a smooth damp proof base laid with adhesive recommended by manufacturer including pressing the sheet with a suitable tool to get a smooth surface all complete as directed by the Engineer-in-Charge.			
	(a) 1.5 mm thick	Sqm.	3.80	214.55
	(b) 2.00 mm thick	-do-	3.80	237.65
	(c) 2.5 mm thick	Sqm	3.80	249.20
	(d) 3.00 mm thick	-do-	3.80	257.30
	(e) 4.00 mm thick	-do-	3.80	288.45
	(f) 5.00 mm thick	-do-	3.80	319.65
(U)	Strips in Flooring			
14.77	Providing and fixing aluminium strips 1.6 mm thick complete with nails in floors.			
	(a) 40 mm wide	Metre	0.95	9.25
	(b) 32 mm wide	-do-	0.95	8.10
	(c) 25 mm wide	-do-	0.95	6.85
14.78	Providing and fixing glass strips, 3 mm thick in floors.			
	(a) 40 mm wide	-do-	0.85	2.65
	(b) 32 mm wide	-do-	0.85	2.30
	(c) 25 mm wide	-do-	0.85	2.05
14.79	Providing and fixing glass strips 4 mm thick in floors.			
	(a) 40 mm wide	-do-	0.85	3.50
	(b) 32 mm wide	-do-	0.85	3.15
	(c) 25 mm wide	-do-	0.85	2.65
14.80	Providing and fixing glass strips 5.5 mm thick 40 mm wide in floors.	-do-	0.85	4.45
14.81	Providing and fixing P.V.C strips, 40 mm wide in floors.			
	(a) 4 mm thick	-do-	0.85	4.75
	(b) 5.5 mm thick	-do-	0.85	7.50
(V)	Miscellaneous			
14.82	Stamping or making grooves on top of steps in stair case.	Sqm	2.30	--

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
14.83	Sand filling under floor and in wells of bridge foundation including handling within 100 metres.	Cum.	3.43	--
14.84	Providing and fixing flat iron strips 40 mm × 3 mm thick in flooring (in stepping of floors) including cutting, straightening and fixing with nails etc. complete fixed in position.	Metre	1.10	10.75
14.85	Supplying gun metal cramps 25 mm × 6 mm, 30 cm long as per design including cost of mortar.	Each	--	20.00
14.86	Providing gun metal cramps 15 mm × 6 mm, 16.5 cm long as per design including cost of mortar.	-do-	--	15.00
14.87	Providing copper pins 7.5 cm long of 6 mm diameter including cost of mortar.	-do-	--	3.00
14.88	Providing stone dowel 10 mm × 5 × 2.50 cm cut to double wedge shape as per design including cost of mortar.	-do-	--	2.50

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CHAPTER NO. 15
PLASTERING AND POINTING

NOTES :

(I) The rates of pointing and plastering, given below, are for the work in first storey. For every additional storey, above the first storey, add Re. 0.18 per sqm in labour as well as through rates of pointing and plastering of the storey, immediately below.

(II) The rates for plastering and pointing, given below, are for superstructure of overhead reservoirs and external walls of multistoreyed buildings upto 4 metres height. When the height of overhead reservoirs and external walls of multistoreyed buildings exceed 4 metres, the labour as well as through rates of plastering and pointing shall be increased by Re. 0.35 per sqm for every additional height of 4 metres, or part thereof.

(III) The labour rates for item Nos. 15.53 to 15.58 include the cost of earth, bhusha and gobi, etc.

(IV) The rates of lime plaster and pointing in this chapter have been worked out on the basis of lime putty.

(V) The labour and through rates include the cost of water where the water supplied by the department free of cost the rates shall be decreased accordingly.

(VI) Unless specified to the contrary, the labour rates for various items of construction include handling of materials within 100 metres. Through rates include all rehandling of materials at the site of work, and no payment is due to the contractors, on this account.

(VII) Unless specified to the contrary, the labour rates include the cost of water, tools and plants, labour and materials for scaffolding and centring and shuttering, and cost of good earth for mud mortar and mud plaster, wherever required.

(VIII) 15 mm thick plaster on rough side of single and half brick thick wall shall only be paid.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(A)	Plastering on walls			
15.1	6 mm thick cement plaster 1:3	Sqm	5.50	10.25
15.2	10 mm thick cement plaster 1:3	-do-	5.50	13.45
15.3	12 mm thick cement plaster 1:2	-do-	5.50	16.60
15.4	12 mm thick cement plaster 1:3	-do-	5.50	15.00
15.5	12 mm thick cement plaster 1:4	-do-	5.50	12.70
15.6	12 mm thick cement plaster 1:5	-do-	5.50	11.60
15.7	12 mm thick cement plaster 1:6	-do-	5.50	10.65
15.8	15 mm thick cement plaster 1:2 on the rough side of single or half brick wall	-do-	6.60	20.50
15.9	15 mm thick cement plaster 1:3 on the rough side of single or half brick wall	-do-	6.60	18.50
15.10	15 mm thick cement plaster 1:4 on the rough side of single or half brick wall	-do-	6.60	15.65
15.11	15 mm thick cement plaster 1:5 on the rough side of single or half brick wall	-do-	6.60	14.25
15.12	15 mm thick cement plaster 1:6 on the rough side of single or half brick wall	-do-	6.60	13.10
15.13	20 mm thick cement plaster 1:2 in 2 coats work	-do-	8.15	26.65
15.14	20 mm thick cement plaster 1:3 in 2 coats work	-do-	8.15	23.95

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
15.15	20 mm thick cement plaster 1:4 in 2 coats work	Sqm	8.15	20.15
15.16	20 mm thick cement plaster 1:5 in 2 coats work	-do-	8.15	18.30
15.17	20 mm thick cement plaster 1:6 in 2 coats work	-do-	8.15	16.75
15.18	Rough cast exterior cement plaster on walls with a mixture of sand and gravel or crushed stone graded from 2.36 mm to 12 mm nominal size dashed over and including fresh plaster in 2 coats, first coat 10 mm cement plaster 1:4 and finishing coat 10 mm cement plaster with cement mortar 1:3 (1 cement, 3 sand, mixed with 10% finely ground hydrated lime by volume of cement including arises, chamfers and/ or rounded angles not exceeding 80 mm in girth.	-do-	18.70	35.40
15.19	Pebble dash exterior plaster on walls with a mixture of washed pebble or crushed stone graded from 6 mm to 12 mm nominal size dashed over and including fresh cement plaster in 2 coats, first coat 10 mm thick cement plaster 1:4 (1 cement, 4 sand) and finishing coat 10 mm cement plaster 1:3, mixed with 10% finely ground hydrated lime by volume of cement including arises, chamfers and/ or rounded angles not exceeding 80 mm in girth.	-do-	18.35	35.10
15.20	18 mm cement plaster in 2 coats under layer 12 mm thick cement plaster 1:5 (1 cement, 5 coarse sand) and top layer 6 mm thick with cement mortar 1:3 (1 cement, 3 coarse sand) finished rough with sponge.	-do-	11.10	24.20
(B)	Lime Plaster			
15.21	12 mm thick cement lime sand plaster 1:1:6	-do-	5.60	12.35
15.22	15 mm thick cement lime sand plaster 1:1:6 on the rough side of single or half brick wall.	-do-	6.70	15.15
15.23	20 mm thick cement lime sand plaster 1:1:6 in two coats work.	-do-	8.30	19.50
15.24	12 mm thick cement lime sand plaster 1:2:9	-do-	5.60	11.35
15.25	15 mm thick cement lime sand plaster 1:2:9 on the rough side of single or half brick wall	-do-	6.75	13.95
15.26	20 mm thick cement lime sand plaster 1:2:9 in 2 coats work.	-do-	8.35	17.95
15.27	12 mm thick cement lime sand plaster 1:3:12	-do-	5.65	11.10
15.28	15 mm thick cement lime sand plaster 1:3:12 on the rough side of single or half brick wall.	-do-	6.80	13.60
15.29	20 mm thick cement lime sand plaster 1:3:12 in 2 coats work.	-do-	8.40	17.50
15.30	12 mm thick lime surkhi sand plaster 1:1:1	-do-	5.75	11.20
15.31	15 mm thick lime surkhi sand plaster 1:1:1 on the rough side of single or half brick wall	-do-	6.90	13.70

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
15.32	20 mm thick lime surkhi sand plaster 1:1:1 in 2 coats work.	Sqm	8.60	17.75
15.33	12 mm thick lime flyash sand plaster 1:1:1	-do-	5.75	10.85
15.34	15 mm thick lime flyash sand plaster 1:1:1 on the rough side of single or half brick wall.	-do-	6.90	22.70
15.35	20 mm thick lime flyash sand plaster 1:1:1 in 2 coats work.	-do-	8.60	17.10
15.36	12 mm thick lime surkhi plaster 1:2	-do-	5.75	11.50
15.37	15 mm thick lime surkhi plaster 1:2 on the rough side of single or half brick wall.	-do-	6.90	14.05
15.38	20 mm thick lime surkhi plaster 1:2 in 2 coats work.	-do-	8.60	18.15
15.39	12 mm thick lime surkhi plaster 2:3	-do-	5.80	12.00
15.40	15 mm thick lime surkhi plaster 2:3 on the rough side of single or half brick wall.	-do-	6.95	14.65
15.41	20 mm thick lime surkhi plaster 2:3 in 2 coats work.	-do-	8.65	18.95
15.42	12 mm thick lime flyash plaster 1:2	-do-	5.75	10.75
15.43	15 mm thick lime flyash plaster 1:2 on the rough side of single or half brick wall.	-do-	6.90	13.10
15.44	20 mm thick lime flyash plaster 1:2 in 2 coats work.	-do-	8.60	16.90
(C)	Plastering on Floors.			
15.45	10 mm thick cement plaster 1:2	-do-	4.75	14.05
15.46	10 mm thick cement plaster 1:3	-do-	4.75	12.70
15.47	12 mm thick cement plaster 1:2	-do-	5.00	16.10
15.48	12 mm thick cement plaster 1:3	-do-	5.00	14.50
(D)	Plastering on under side of Ceiling.			
15.49	6 mm thick cement plaster 1:3	-do-	6.60	11.35
15.50	6 mm thick cement plaster 1:4	-do-	6.60	10.20
15.51	10 mm thick cement plaster 1:3	-do-	6.60	14.55
15.52	10 mm thick cement plaster 1:4	-do-	6.60	12.65
(E)	Mud Plaster on Walls.			
15.53	15 mm thick water proof mud plaster in two coats first coat with 12 mm thick mud mortar consisting of 70 kg. of old bhusha and 60 kg. of bitumen cut back per cum & finishing coat with 3 mm thick gobri leeping mixed with 100 kg. of bitumen cut back per cum of soil on walls for interior plaster.	-do-	5.15	9.55
15.54	Mud plaster 12 mm thick with gobri leeping including all material.	-do-	4.00	--
15.55	Mud plaster 25 mm thick with gobri leeping including all material.	-do-	4.60	--
(F)	Mud Plaster on Floors and Roofs			
15.56	Mud plaster 12 mm thick with gobri leeping including all material.	-do-	3.05	--

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
15.57	Mud plaster 25 mm thick with gobi leeping including all material.	Sqm	3.65	--
15.58	Gobri leeping including materials.	-do-	0.60	--
(G)	Pointing			
15.59	Lime surkhi pointing 2:3 weathered and struck on brick and tile work.	-do-	7.20	8.25
15.60	Cement pointing 1:2 deep variety on brick and tile work.	-do-	7.20	9.90
15.61	Cement pointing 1:3 deep variety on brick and tile work.	-do-	7.20	9.25
15.62	Cement pointing 1:2 flush on brick & tile walls	-do-	4.75	7.45
15.63	Cement pointing 1:3 flush on brick & tile walls	-do-	4.75	6.80
15.64	Lime surkhi pointing 2:3 flush on brick and tile walls.	-do-	4.80	5.85
15.65	Cement pointing flush 1:2 on stone walls.	-do-	6.50	10.50
15.66	Cement pointing flush 1:3 on stone walls.	-do-	6.50	9.40
15.67	Cement pointing raised 1:2 on stone walls.	-do-	8.40	16.35
15.68	Cement pointing raised 1:3 on stone walls.	-do-	8.40	14.10
15.69	(a) Striking joints in lime or cement on brick and tile walls.	-do-	4.10	--
	(b) Striking joints in lime or cement on stone walls.	-do-	3.10	--
15.70	Cement pointing 1:2 flush on brick on-edge flooring.	-do-	4.75	7.45
15.71	Cement pointing 1:2 flush on flat brick flooring	-do-	3.75	5.90
15.72	Cement pointing 1:2 flush under side of roofs with brick tile 30.48 cm x 15.24 cm.	-do-	4.10	5.70
15.73	Cement pointing on stone slab pavement with cement mortar 1:2	-do-	2.95	4.30
(H)	Miscellaneous			
15.74	Extra for mixing Soap solution, 1 percent for cement plastering.	-do-	0.15	1.40
15.75	Cement rendering on plaster 1 mm thick.	-do-	2.90	4.25
15.76	12 mm thick cement plaster damp proof course 1:3 with 2 coats of bitumen at 1.65 kg per sqm laid hot and sanded:-			
	(a) vertical	-do-	7.15	23.90
	(b) horizontal	-do-	5.30	22.05
15.77	20 mm thick cement plaster damp proof course 1:3 with 2 coats of bitumen at 1.65 kg per sqm laid hot and sanded :-			
	(a) vertical	-do-	7.65	30.70
	(b) horizontal	-do-	5.90	28.95
15.78	12 mm thick raised or sunk cement mortar band/drip course in cement mortar 1:4	Per metre Per cm width	0.25	0.30

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
15.79	20 mm thick raised or sunk cement mortar band/drip course in cement mortar 1:4	per metre per cm width.	0.35	0.45
15.80	Extra for lining out in rough cast/pebble/cement plaster and terrazzo finish surfaces on walls to imitate stone or concrete block lining.	Sqm	3.30	--
15.81	Extra for plastering on circular work not exceeding 6 metres in radius :			
	(a) in one coat	-do-	1.45	--
	(b) in two coats	-do-	2.20	--
15.82	Extra for plastering spherical ceiling	-do-	5.40	--
15.83	6 mm thick cement plaster 1:3 with floating coat of neat cement 1.5 mm thick and one coat of white washing on bearing of R.C.C. slab.	-do-	6.25	14.90
15.84	6 mm thick cement plaster 1:3 with bitumen painted @ 1.65 kg./sqm along sides of R.C.C. slab and beam on bearing.	-do-	6.65	18.65

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CHAPTER NO. 16

PAINING, VARNISHING, WHITE WASHING & DISTEMPERING

NOTES :

(I) The through rates of painting, varnishing and distempering given in this chapter are for estimating purposes and not getting the work done through contractors/agencies. The work of items of painting, varnishing and distempering is to be done on labour rate basis only. The paint to be used on the work shall be issued direct chargeable to work and necessary provision in the N.I.T. is made accordingly. However, an exemption upto 100 sqm area for getting the work on through rate basis shall be allowed in exceptional/isolated works with the written approval of the Superintending Engineer.

(II) Two classes of rates of paint have been provided in this chapter for estimating purposes only. Firstly, for first quality paint of best quality of reputed firms such as Goodlass-Nerolac, Berger, Garware, Jenson Nicholson, Asian & Shalimar etc. in the trade name of Nerolac, Luxol, Eomite/Garcoat, Brolac, Apcolite and Superloc respectively or its equivalent are considered as first quality rate of paints and secondly second quality paints of reputed firms in the trade name of Glossokite, Parrot, Kinglac, Jensolin, Three mangoes and Duroloc or its equivalent and I.S.I marked are considered second quality rate of paints

(III) (a) The rates given in Items No. 16.68 to 16.70 and 16.73 to 16.76 are inclusive of painting letters also either in Hindi or in English or both as the case may be.

(b) The thickness of the letters of Item No. 16.66 and 16.67 to be painted shall be as per IRC No. 30-1968 for road structures.

(IV) The work against Item of filling i.e. Item No. 16.1, 16.24, 16.51 and 16.52 shall be got done only after written approval of the competent authority.

(V) Rates for distempering with dry and oil bound distemper have been provided in this chapter. These rates have been based on superior quality distempers, manufactured by standard firms like Shalimar, Jenson Necholson, British paints or its equivalent. The use of inferior distempers like country frisco shall not be permitted as they never give proper quality of lasting surface.

(VI) Unless specified to the contrary, the labour rates for various Items of construction include handling of material within 100 metres. Through rates include all re-handling of material at the site of work and no payment is due to the contractors on this account.

(VII) Unless specified to the contrary, the labour rates include the cost of water, tools and plants, labour and material for scaffolding and centring and shuttering.

(VIII) The rates for painting are also applicable for flat and curved surfaces.

Serial No.	Description	Unit	Labour Rate (Rs)	Through rate (Rs.)	
				with 1st quality paint	with 2nd quality paint
1	2	3	4	5	6
(A)	Painting on Wooden Surfaces etc.				
16.1	Preparation of ply wood surface for painting including sand papering the surface and applying filling with approved quality filler consisting of white lead, linseed oil, varnish and chalk mitti including finishing the surface to required finish complete.	Sqm	1.80	--	4.60

Serial No.	Description	Unit	Labour Rate (Rs)	Through rate (Rs.)	
				with 1st quality paint	with 2nd quality paint
1	2	3	4	5	6
16.2	Applying pink primer or aluminium priming coat on wood work including preparation of surface, knotting and stopping etc.	Sqm	1.35	3.75	3.60
16.3	Painting two coats excluding priming coat with synthetic enamel paint in all shades on new wood work or metallic or plastered or concrete surfaces to give an even shade.	-do-	2.40	9.40	8.05
16.4	Painting two coats excluding priming coat with ready mixed paint in all shades on new wood work.	-do-	2.40	6.55	6.05
16.5	Painting two coats with synthetic enamel paint in all shades on old wood work or metallic or plastered or concrete surfaces to give an even shade including rubbing down old paint.	-do-	2.55	8.25	7.15
16.6	Painting two coats with ready mixed paint in all shades on old wood work to give an even shade including rubbing down old paint.	-do-	2.55	5.85	5.50
16.7	Painting one coat with synthetic enamel paint in all shades on old wood-work or metallic or plastered or concrete surfaces to give an even shade including rubbing down old paint.	-do-	1.50	4.65	4.05
16.8	Painting one coat with readymixed paint in all shades on old wood work to give an even shade including rubbing down old paint.	-do-	1.50	3.35	3.10
(B)	Painting on Metallic Surfaces etc.				
16.9	Applying priming coat with metal primer on new steel or iron work including preparation of surface.	-do-	1.10	3.15	2.95
16.10	Applying priming coat on steel work consisting of genuine red lead mixed with linseed oil and turpentine oil in equal proportions.	-do-	1.20	5.25	3.80
16.11	Painting one coat with ready mixed paint for metallic surfaces in all shades on old steel or iron work.	-do-	1.50	3.50	3.10
16.12	Painting one coat on iron sheets with roofing red readymixed paint on old work to give an even shade.	-do-	1.70	3.60	3.35
16.13	Painting one coat on iron sheets with roofing white, grey or green readymixed paint on old work to give an even shade.	-do-	1.70	4.90	4.50

Serial No.	Description	Unit	Labour Rate (Rs)	Through rate (Rs.)	
				with 1st quality paint	with 2nd quality paint
1	2	3	4	5	6
16.14	Painting one coat with aluminium paint on old work to give an even shade.	Sqm	1.60	3.25	3.15
16.15	Painting one coat with anticorrosive bitumastic paint on old work to give an even shade on C.I. Pipes etc.	-do-	1.55	3.80	2.65
16.16	Painting one coat with anticorrosive odourless black bitumastic paint inside old steel water tanks.	-do-	1.70	3.25	--
16.17	Painting two coats excluding priming coat with ready mixed paint for metallic surfaces in all shades on new steel or iron work.	-do-	2.40	7.00	6.05
16.18	Painting two coats with ready mixed paint for metallic surfaces in all shades on old steel or iron work.	-do-	2.55	6.20	5.50
16.19	Painting two coats on iron sheets with roofing red ready mixed paint on new work to give an even shade.	-do-	2.85	5.85	5.45
16.20	Painting two coats on iron sheets with roofing white, grey or green readymixed paint on new work to give an even shade.	-do-	2.80	7.95	7.35
16.21	Painting two coats with aluminium paint on new work to give an even shade excluding priming coat.	-do-	2.65	6.05	5.85
16.22	Painting two coats with anticorrosive bitumastic paint on new work to give an even shade on C.I. pipes etc.	-do-	2.40	4.85	4.60
16.23	Painting two coats of anticorrosive odourless black bitumastic paint inside new steel water tanks.	-do-	2.70	5.85	--
(C)	Painting on Plastered or Concrete Surfaces etc.				
16.24	Preparation of plastered or concrete surfaces for painting, including sand papering the surface, applying one coat of linseed oil and filling with approved quality filler, consisting of white lead, linseed oil, varnish and chalk mixt including finishing surface to the required finish, complete.	-do-	3.80	--	11.15
16.25	Applying priming coat with cement primer in all shades on newly plastered or concrete exterior surfaces.	-do-	0.90	4.15	--
16.26	Painting two coats with ready-mixed exterior paint in all shades on newly plastered or concrete surface of walls.	-do-	2.40	13.45	--

Serial No.	Description	Unit	Labour Rate (Rs)	Through rate (Rs.)	
				with 1st quality paint	with 2nd quality paint
1	2	3	4	5	6
16.27	Painting two coats with ready-mixed, emulsion paint in all shades for interior use on bricks, plaster, cement, fibre-board etc.	Sqm	2.35	10.90	--
16.28	Floor painting two coats with floor paint in all shades on new work to give an even shade.	-do-	2.40	9.80	--
16.29	Floor painting one coat with floor paint in all shades on old work to give an even shade.	-do-	1.25	5.75	--
16.30	Painting two coats with plastic emulsion paint on walls on new work to give an even shade.	Sqm	2.55	10.70	--
16.31	Painting one coat with plastic emulsion paint on walls on old work to give an even shade.	-do-	1.50	6.40	--
(D)	Painting Solignum and Coal Tarring.				
16.32	Painting one coat with solignum	Sqm	0.80	--	1.55
16.33	Painting two coat with solignum	-do-	1.20	--	2.55
16.34	Painting one coat with creosote	-do-	0.80	--	1.15
16.35	Painting two coats with creosote	-do-	1.20	--	1.80
16.36	Coal tarring one coat.	-do-	1.00	--	2.95
16.37	Coal tarring two coats.	-do-	1.50	--	4.15
(E)	Varnishing and Oiling.				
16.38	Varnishing with copal varnish, one coat of sizing and two coats of varnishing on new wood work including stopping.	-do-	2.80	9.10	6.15
16.39	Varnishing with copal varnish, one coat including rubbing of previous coat.	-do-	1.40	4.35	2.85
16.40	Oiling wood work with raw linseed oil.	-do-	0.40	--	1.10
16.41	Oiling wood work with raw linseed oil and water.	-do-	0.50	--	0.85
(F)	Polishing				
16.42	Bee's wax polishing on new wood work.	-do-	5.45	--	9.05
16.43	Bee's wax polishing on old wood work.	-do-	2.00	--	3.80
16.44	Spirit polishing two coats including 2 coats of wood filler on new work.	-do-	8.40	--	11.15
16.45	Spirit polishing one coat on old work.	-do-	4.35	--	6.10
(G)	White Washing				
16.46	One coat or subsequent coat.	-do-	0.35	--	0.55
16.47	Two coats.	-do-	0.50	--	0.90
16.48	Three coats	-do-	0.70	--	1.25

Serial No.	Description	Unit	Labour Rate (Rs)	Through rate (Rs.)	
				with 1st quality paint	with 2nd quality paint
1	2	3	4	5	6
(H)	Colour Washing				
16.49	One coat or subsequent coat.	Sqm	0.45	--	0.60
16.50	Two coats	-do-	0.60	--	0.90
(I)	Distemping				
16.51	Preparation of plastered surfaces for distemping including sand papering the surface, applying filling with approved quality filler, consisting of plaster of paris and chalk mitti including finishing the surface to the required finish complete.	-do-	3.30	--	3.95
16.52	Preparation of plastered surfaces for oil bound distemper including sand papering the surface, applying one coat of linseed oil, and filling with approved quality filler consisting of white lead, linseed oil, varnish and chalk mitti including finishing the surface to the required finish complete.	-do-	3.80	--	11.15
16.53	Distemping with dry distemper (of approved manufacture) two coats excluding priming coat on new work.	-do-	2.00	--	4.45
16.54	Distemping with dry distemper (of approved manufacture) two coats over one priming coat on new work.	-do-	2.85	--	6.90
16.55	Distemping with dry distemper (of approved manufacture) one coat on old distemped work.	-do-	1.35	--	2.40
16.56	Distemping with dry distemper (of approved manufacture) two coats on old distemped work (when shade is changed)	-do-	2.30	--	4.40
16.57	Distemping with washable oil bound distemper (of approved manufacture) two coats excluding priming coat on new work.	-do-	2.55	--	6.30
16.58	Distemping with washable oil bound distemper (of approved manufacture) two coats over one priming coat on new work.	-do-	3.70	--	9.10
16.59	Distemping with washable oil bound distemper (of approved manufacture) one coat on old distemped work.	-do-	1.75	--	3.35
16.60	Distemping with washable oil bound distemper (of approved manufacture) two coats on old distemped work.	-do-	2.80	--	6.00

Serial No.	Description	Unit	Labour Rate (Rs)	Through rate (Rs.)	
				with 1st quality paint	with 2nd quality paint
1	2	3	4	5	6
16.61	Finishing walls with exterior decorative cement based paints such as snowcem Robbiacem etc. on new work, two coats to give an even shade.	-do-	2.30	--	7.25
16.62	Finishing walls with exterior decorative cement based paints, such as snowcem Robbiacem etc. on old work, one coat to give an even shade.	-do-	1.45	--	3.10
(J)	Miscellaneous				
16.63	Burning old paint with below lamp	-do-	2.55	--	3.10
16.64	Removing old paint with caustic soda solution and preparing surface.	-do-	1.85	--	2.35
16.65	Scraping, brushing to remove paint to bare metal surface.	-do-	5.45	--	--
16.66	Painting new letters and figures of any shade with synthetic enamel paint black or any other approved colour to give an even shade.				
	(a) hindi (matras, commas and the like not to be measured or paid for, half letters shall be treated as half)	Per cm height per letter.	0.16	--	0.18
	(b) (i) english and Roman (Hyphons and the like not to be measured and paid for)	-do-	0.12	--	0.13
	(ii) italic	-do-	0.16	--	0.17
	(c) borders and arrows upto 6 cm in width.	Metre	1.90	--	2.15
16.67	Repainting letters and figures of any shade with synthetic enamel paint black or any other approved colour to give an even shade.				
	(a) hindi (matras, commas and the like not to be measured or paid for, half letters shall be treated as half)	Per cm height per letter.	0.11	--	0.12
	(b) (i) english and Roman (Hyphons and the like not to be measured and paid for)	-do-	0.07	--	0.08
	(ii) italic	-do-	0.11	--	0.12
	(c) borders and arrows upto 6 cm in width.	Metre	1.40	--	1.55
16.68	Painting gauges 60 cm wide reading to centimetre with synthetic enamel paint (two coats work)	-do-	19.85	--	24.60

Serial No.	Description	Unit	Labour Rate (Rs)	Through rate (Rs.)	
				with 1st quality paint	with 2nd quality paint
1	2	3	4	5	6
16.69	Painting sounding rods and other gauges reading to centimetre with synthetic enamel paint :				
	(a) one coat work	Metre	4.00	--	5.10
	(b) two coats work	-do-	6.45	--	8.40
16.70	Painting levelling slaves with synthetic enamel paint :				
	(a) one coat work	-do-	17.10	--	18.50
	(b) two coats work	-do-	25.95	--	28.30
16.71	Painting canal gates with khanki mixture applied hot :				
	(a) one coat work	Sqm	0.70	--	2.00
	(b) two coats work	-do-	1.10	--	3.45
16.72	Extra over and above the rates in item No. 16.71 where scaffolding is used.	-do-	0.25	--	--
16.73	Painting distance marks with synthetic enamel paint :				
	(a) one coat work				
	(i) main canals.	Each	2.55	--	3.45
	(ii) distributaries	-do-	1.65	--	2.25
	(b) two coats work				
	(i) main canals	-do-	3.65	--	5.20
	(ii) distributaries	-do-	2.20	--	3.25
16.74	Painting furlong stones with synthetic enamel paint :				
	(a) one coat work	Each	2.95	--	3.75
	(b) two coats work	-do-	5.10	--	6.50
16.75	Painting kilometre stones with synthetic enamel paint :				
	(a) one coat work :				
	(i) 5th kilometre stone	-do-	32.15	--	39.10
	(ii) ordinary kilometre stone	-do-	17.25	--	20.80
	(iii) kilometre stone on village roads.	-do-	13.15	--	15.90
	(a) two coats work :				
	(i) 5th kilometre stone	-do-	55.80	--	67.30
	(ii) ordinary kilometre stone	-do-	29.95	--	35.75
	(iii) kilometre stone on village roads.	-do-	22.80	--	27.35
16.76	Painting village boards with synthetic enamel paint :				
	(a) one coat work	Each	9.95	--	13.50

Serial No.	Description	Unit	Labour Rate (Rs)	Through rate (Rs.)	
				with Ist quality paint	with 2nd quality paint
1	2	3	4	5	6
	(b) two coats work	Sqm	17.25	--	23.40
16.77	Painting lines, dashes, arrows, letters etc. on roads, air fields like in one coat with road marking paint brushing including cleaning the surface of all dirt, dust other foreign matter, demarcation at site and traffic control involved :				
	(a) over 10 cm in width (white and yellow spirit based paints)	Sqm	2.85	7.70	6.30
	(b) over 10 cm in width (black spirit based paint).	-do-	2.85	5.75	5.30
	(c) upto 10 cm in width (white and yellow spirit based paint)	Metre	0.30	0.80	0.65
	(d) upto 10 cm in width (black spirit based paint)	-do-	0.30	0.60	0.55
16.78	Painting lines, dashes, arrows etc. on roads air fields and like in two coats with ready-mixed road marking paint brushing, including cleaning the surface of all dirt, dust, other foreign matter demarcation at site and traffic control involved :				
	(a) over 10 cm in width (white and yellow spirit based paints)	Sqm	7.10	15.70	12.70
	(b) over 10 cm in width (black spirit based paints)	-do-	7.10	12.25	11.10
	(c) upto 10 cm in width (white and yellow spirit based paints)	Metre	0.75	1.65	1.35
	(d) upto 10 cm in width (black spirit based paints)	-do-	0.75	1.30	1.15

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CHAPTER NO. 17

WOOD WORK

NOTES :

(I) Unless otherwise stated, the labour and through rates include all wastage of timber in sawing and cutting and sawing charges including carriage to and from saw mills.

(II) Through rates for items requiring use of wire gauze, include the cost of 140 G or 120 G (Gauze designation) galvanised iron wire gauze.

(III) The rates for item No. 17.4 to 17.9 apply to simple wood work not involving any jointing, such as beams, battens, etc., where jointing is involved as in case of roof trusses, composite beams etc., increase the labour and through rates, by Rs. 200.00 per cum. In case of built-in fixture, involving jointing, increase the rates, by Rs. 150.00 per cum.

(IV) In case of wooden chowkats of doors and windows and composite section of doors and windows or openable and fixed glazing the wooden members abutting the wall shall be measured for full length of each member (but excluding horns) and paid at wood work in chowkat of doors and windows. Intermediate member, if any, in the chowkat shall be paid at the rate of wood work wrought and planed and fixed in position plus Rs. 400.00 per cum for extra labour involved for making rebates and jointing of these intermediate members. The additional rate as per Note No. (III) shall, however, not be payable extra for this item of work.

(V) If frosted glass is used instead of ordinary glass, the through rates of item No. 17.24, 17.36 and 17.42 shall be increased by Rs. 11.50 per sqm.

(VI) The rates for brass and aluminium fittings as provided in this chapter are only for the purpose of estimating; and not for purchasing the fittings through contractor. All brass and aluminium fittings shall be arranged by the department and supplied to contractors free of cost for fixing.

(VII) The wood work in chowkats of doors and windows shall be done at site strictly as per P.W.D. specifications. Nothing extra shall be paid for wastage or for dimensions, supplied beyond those specified and for horns. The length of each piece shall be measured overall, so as to include the projection for tenons. In case of mouldings, roundings, circular rebates, circular and varying sections, the sectional area of the piece shall be taken as the area of the least square or rectangle, from which such section can be cut, and nothing extra shall be paid for such mouldings and rebates.

(VIII) Unless specified to the contrary, the labour rates for various items of construction include handling of materials within 100 metres. Through rates include all rehandling of materials, at the site of work, and no payment is due to the contractor on this account.

(IX) Unless specified to the contrary, the labour rates include the cost of water, tools and plants, labour and materials for scaffolding wherever required.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(A)	Sawing			
17.1	Sawing of soft wood like deodar, kail and cheel (chir) etc., by band-saw including carriage to and from saw mill.	Sqm	2.95	--
17.2	Sawing of hard wood like teak, kikar, sal & shisham etc., by band-saw including carriage to and from saw mill.	-do-	4.60	--
17.3	Sawing timber at site of work by manual labour-	-do-	5.20	--
	(i) soft wood.	-do-	9.75	--
	(ii) hard wood			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(B)	Frame Work			
17.4	Deodar wood wrought, planed and fixed in position.	Cum	457.00	13548.00
17.5	Kail wood wrought, planed and fixed in position.	-do-	457.00	9401.00
17.6	Cheel (chir) wood wrought, planed and fixed in position.	-do-	457.00	6684.00
17.7	Saj wood wrought, planed and fixed and in position.	-do-	556.00	8889.00
17.8	Commercial hard wood such as hollock, champ, chikrassy and chaplash etc. (Non coniferous timber other than teak conforming to I.S. specification no. 1003 kiln seasoned) wrought, planed and fixed in position	-do-	556.00	8427.00
17.9	Teak wood wrought, planed and fixed in position.	-do-	556.00	20373.00
Note :-	<i>The frame work of false ceiling, partitions, etc. shall be payable at the rate of Item Nos. 17.4 to 17.9 according to the kind of wood used.</i>			
(C)	Chowkats.			
17.10	Deodar wood chowkats of doors and windows including iron hold fasts, corner straps screws, bolts for hold fasts etc. complete fixed in position.	-do-	1391.00	15970.00
17.11	Kail wood chowkats of doors and windows including iron hold fasts, corner straps, screws, bolts for hold fasts, etc. complete fixed in position.	-do-	1391.00	11821.00
17.12	Chowkats of commercial hard wood such as hollock, champ, chikrassy, and chaplash etc. (Non-coniferous timber other than teak conforming to I.S. specification no. 1003 kiln seasoned) of doors and windows including iron hold fasts, etc., complete fixed in position.	-do-	2202.00	11745.00
17.13	Teak wood chowkats of doors and windows including iron hold fasts, corner straps, screws, bolts for hold fasts, corner straps, screws, bolts for hold fasts, corner straps, screw, bolts for hold fasts etc. complete fixed in position.	-do-	2202.00	23687.00
(D)	Planking			
17.14	Deodar planking, planed on both sides, rebated and fixed in position, including nails and screws, etc., :			
(a)	50 mm thick	Sqm	20.00	665.70
(b)	45 mm thick	-do-	20.00	601.40
(c)	40 mm thick	-do-	20.00	537.05
(d)	30 mm thick	-do-	20.00	408.35
(e)	25 mm thick	-do-	20.00	344.00
(f)	20 mm thick	-do-	20.00	279.65
(g)	12.5 mm thick	-do-	20.00	183.60

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
17.15	Kail wood planking planed on both sides, rebated and fixed in position including nails and screws, etc.:			
	(a) 50 mm thick	Sqm	20.00	458.40
	(b) 45 mm thick	-do-	20.00	414.80
	(c) 40 mm thick	-do-	20.00	371.15
	(d) 30 mm thick	-do-	20.00	283.95
	(e) 25 mm thick	-do-	20.00	240.35
	(f) 20 mm thick	-do-	20.00	196.70
	(g) 12.5 mm thick	-do-	20.00	131.60
17.16	Planking of commercial hard wood, such as holloc, champ, chikrassy and chaplash etc.. (Non-coniferous timber other than teak conforming to I.S. specification no. 1003 kiln-seasoned) planed on both sides, rebated and fixed in position, including nails and screws, etc. :			
	(a) 50 mm thick	-do-	26.80	409.00
	(b) 45 mm thick	-do-	26.80	371.05
	(c) 40 mm thick	-do-	26.80	333.10
	(d) 30 mm thick	-do-	26.80	257.20
	(e) 25 mm thick	-do-	26.80	219.25
	(f) 20 mm thick	-do-	26.80	181.30
	(g) 12.5 mm thick	-do-	26.80	124.40
17.16 A	Planking of medium density fibre board (MDF) interior grade fixed in position including nails & screws.			
	(a) 25 mm thick	Sqm.	3.35	281.60
	(b) 19 mm thick	-do-	3.35	202.85
	(c) 12 mm thick	-do-	3.35	136.50
	(Note: Item No. 17.16A inserted vide A & C slip No. 9 dated 10-12-1992)			
17.16 B	Planking of unveneered teak wood particle board 3 layers flat pressed bonded with phenol formaldehyde/synthetic resins, rebated and fixed in position including nails and screws.			
	(a) 35 mm thick	Sqm	3.35	394.70
	(b) 25 mm thick	-do-	3.35	288.15
	(c) 19 mm thick	-do-	3.35	183.50
	(d) 12 mm thick	-do-	3.35	144.65
17.16 C	Planking of both side commercial veneered teak wood particle board, three layers, flat-pressed, bonded with phenol formaldehyde/synthetic resins planking rebated and fixed in position including nails and screws etc.			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(a) 25 mm thick	Sqm	3.35	310.00
	(b) 19 mm thick	-do-	3.35	232.35
	(c) 12 mm thick	-do-	3.15	192.50
	(Item No. 17.16B & 17.16C added vide A & C slip No. 13 dt. 7-9-93).			
17.17	Teak wood planking on both sides rebated and fixed in position including nails and screws, etc. :			
	(a) 50 mm thick	-do-	26.80	1006.30
	(b) 45 mm thick	-do-	26.80	908.60
	(c) 40 mm thick	-do-	26.80	810.90
	(d) 30 mm thick	-do-	26.80	615.60
	(e) 25 mm thick	-do-	26.80	517.90
	(f) 20 mm thick	-do-	26.80	420.20
	(g) 12.5 mm thick	-do-	26.80	373.70
(E)	Wooden Shutters			
17.18	Deodar wood door and window shutters including iron hinges, screws, chocks/cleats and stops, etc., complete fixed in position (excluding the cost of tower bolts and handles but including the labour for fixing the same) -			
	(a) panelled, glazed, or glazed and panelled-			
	(i) 40 mm thick (12 mm thick deodar wood panel)	-do-	37.35	404.90
	(ii) 35 mm thick (12 mm thick deodar wood panel)	-do-	37.30	374.15
	(iii) 30 mm thick (12 mm thick deodar wood panel)	-do-	37.25	343.35
	(b) battened and framed shutters -			
	(i) 50 mm thick	Sqm	33.15	598.85
	(c) battened and braced shutters -			
	(i) 50 mm thick	-do-	28.70	524.40
	(d) Deodar wood shutters with vertical styles and rails, as specified in the statement No.1 attached in the end of this chapter, with two Nos.plywood panels of the specified thickness mentioned below, tongued and grooved, including the cost of iron hinges, screws, chocks/cleats, stops etc. complete fixed in position (excluding the cost of tower bolts and handles, but including the labour for fixing the same)-			
	(i) 40 mm thick (12 mm thick commercial plywood panel)	-do-	28.10	389.90
	(ii) 35 mm thick (12 mm thick commercial plywood panel)	-do-	28.05	359.15
	(iii) 30 mm thick (12 mm thick commercial plywood panel)	-do-	28.00	328.35

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
<i>Note:-</i>	(i) <i>In case doors and windows shutters are housed in pressed steel or angle or T angle iron chowkats the through rate of this item shall be reduced by Rs. 11.85 per sqm.</i>			
	(ii) <i>In case BWR-II grade plywood is provided in item No. 17.18(d) (i), (ii) and (iii) the through rate shall be increased by Rs. 34.50 per sqm.</i>			
17.19	Wire gauze deodar wood door and windows shutters without springs housed in chowkats including chocks/cleats, iron hinges, and screw, etc. complete fixed in position (excluding the cost of tower bolts and handles but including the labour for fixing the same)-			
	(i) 35 mm thick	Sqm	31.40	305.05
	(i) 30 mm thick	-do-	31.40	274.35
<i>Note:-</i>	(i) <i>The unit of measurement of item No. 17.19 is area of clear shutter opening. In case wire gauze shutters are fixed with additional moulding on existing chowkats, payment will be made on overall measurement of masonry opening.</i>			
	(ii) <i>In case wire gauze of 85G designation is used in place of 140G or 120G designation reduce the through rate by Rs. 3.75 per sqm.</i>			
17.20	Deodar wood cup board shutters (excluding chowkat) with commercial plywood panels or faced on one side including iron hinges and screws fixed in position (excluding the cost of handles, tower bolts and hasps with staples, but including the labour for fixing the same) -			
	(i) 40 mm thick	Sqm	41.65	271.45
	(ii) 25 mm thick	-do-	41.65	216.50
<i>Note:-</i>	(i) <i>In case 3 ply 4 mm thick BWR II grade plywood is provided in item No. 17.20 increase the through rate by Rs. 23.00 per sqm.</i>			
	(ii) <i>In case decorative plywood with teak faced on one side in place of commercial plywood is used, then the through rate of this item shall be increased by Rs. 44.80 per sqm.</i>			
	(iii) <i>In case commercial plywood is faced on both sides of the cup board shutters, the labour and through rates of this item shall be increased by Rs. 9.00 and 73.55 per sqm respectively.</i>			
	(iv) <i>In case decorative plywood teak faced on one side of the cup board and commercial plywood on the other side, is faced;</i>			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	<i>increase the labour and through rates, by Rs. 9.00 and Rs.118.35 per sqm respectively.</i>			
	<i>(v) In case nickle-plated piano hinges 35 mm wide, 1 mm thick including necessary screws, are provided in place of iron butt hinges and screws, increase the through rates by Rs. 16.00 per sqm.</i>			
17.21	Wire gauze fixed on chowkats with 25 mm thick deodar wood cover moulding of full width.	Sqm	10.80	153.00
	<i>Note:- In case wire gauze of 85 G designation is used in place of 140 G or 120 G reduce the through rate by Rs.6.00 per sqm.</i>			
17.22	Expanded metal fixed on chowkats with 25 mm thick deodar wood cover moulding of full width (expanded metal to be 20 mm × 60 mm strands, 3.25 mm wide and 1.6 mm thick)	-do-	10.80	145.75
17.23	Providing and fixing hard drawn steel wire fabric 75mm × 25 mm rectangular mesh with 3.25 mm dia wire, fixed on chowkats with 25 mm thick deodar wood cover moulding of full width.	-do-	10.80	157.80
17.24	Supplying and fixing glass panes with deodar wood moulding -			
	(a) 2 mm thick (glazing area upto 9 sq dm of each pane)	-do-	9.80	148.90
	(b) 3 mm thick (glazing area above 9sq dm but upto 55 sq dm of each pane)	-do-	9.80	123.15
	(c) 4 mm thick (glazing area above 55 sq dm, but upto 84 sq. dm of each pane)	-do-	9.80	131.25
	(d) plate glass (Indian) 5.5 mm thick (glazing area exceeding 84 sq dm of each pane)	-do-	11.75	186.80
17.25	Kail wood door and window shutters, panelled, glazed, or glazed and panelled including iron hinges, serews, chocks/cleats and stops etc., complete fixed in position (excluding the cost of tower bolts and handles, but including the labour for fixing the same)-			
	(a) 40 mm thick (12 mm thick kail wood panel)	Sqm	37.35	293.25
	(b) 35 mm thick (12 mm thick kail wood panel).	-do-	37.30	272.40
	(c) 30 mm thick (12 mm thick kail wood panel).	-do-	37.25	251.55
	(d) Kail wood shutters with vertical styles and rails, as specified in the statement No. 1 (attached in the end of this chapter), with two Nos. plywood panels			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	of the specified thickness, mentioned below, tongued and grooved, including the cost of iron hinges, screws, chocks/cleats, stops, etc. complete, fixed in position excluding the cost of tower bolts and handles but including the labour for fixing the same-			
(i)	40 mm thick (12 mm thick commercial plywood panel)	Sqm	28.10	309.15
(ii)	35 mm thick (12 mm thick commercial plywood panel)	-do-	28.05	288.30
(iii)	30 mm thick (12 mm thick commercial plywood panel)	-do-	28.00	267.40
<i>Note :-</i>	<i>The notes No. (i) and (ii) under Item No. 17.18 are applicable to item No. 17.25 as well.</i>			
17.26	Wire gauze kail wood door and window shutters, without springs, housed in chowkets including chocks, iron hinges, screws, etc., complete fixed in position (excluding the cost of tower bolts and handles, but including the labour for fixing the same)-			
(a)	35 mm thick	-do-	31.40	234.25
(b)	30 mm thick	-do-	31.40	213.40
<i>Note:-</i>	<i>The note No.(i)and (ii) under item No. 17.19 are applicable to item No. 17.26 as well.</i>			
17.27	Wire gauze fixed on chowkets with 25 mm thick kail wood cover moulding of full width.	-do-	10.80	127.85
<i>Note:-</i>	<i>The note under item No. 17.21 is applicable to item No. 17.27 as well.</i>			
17.28	Expanded metal fixed on chowkats with 25 mm thick kail wood cover moulding of full width (Expanded metal to be 20 mm×60 mm strands, 3.25 mm wide and 1.6 mm thick)	-do-	10.80	120.60
17.29	Providing and fixing hard drawn steel wire fabric 75 mm × 25 mm rectangular mesh with 3.25 mm dia wire fixed on chowkats with 25 mm thick kail wood cover moulding of full width.	Sqm	10.80	132.65
17.30	Commercial hard wood such as hollock, champ, chikrassy and chaplash, etc. (non-coniferous timber other than teak conforming to I.S. specification No. 1003 kiln seasoned), shutters with vertical styles and rails, as specified in the statement No.1 (attached in the end of this chapter), with two Nos. plywood panels of the specified thickness, mentioned below, tongued and grooved including the cost of iron hinges, screws, chocks/cleats, stops, etc., complete fixed in position excluding the cost of tower bolts and handles but including the labour for fixing the same-			

Serial No.	Description	Unit	Labour Rate(Rs)	Through Rate (Rs)
(a)	35 mm thick (12 mm thick commercial plywood panel)	Sqm	54.35	295.05
(b)	30 mm thick (12 mm thick commercial plywood panel)	-do-	54.35	277.00
(c)	25 mm thick (12 mm thick commercial plywood panel)	-do-	54.35	258.95
<i>Note:- The notes no. (i) and (ii) under item No. 17.18 are applicable to item No. 17.30 as well.</i>				
17.30 A	Commercial hard wood such as hollock champ, chikrassy and chaplash etc. (Kiln seasoned) shutters with vertical styles and rails as specified in statement No. 1 (attached in the end of this chapter) with 2 No.s 12mm thick medium density fibre board (MDF) interior grade panels including the cost of iron hinges, screws chocks/cleats, stops etc. complete fixed in position excluding the cost of tower bolts and handles but including the labour for fixing the same.			
(a)	35 mm thick	Sqm	54.35	289.80
(b)	30 mm thick	-do-	54.35	271.75
(c)	25 mm thick	-do-	54.35	253.70
(Note: Item No. 17.30 A inserted vide A & C slip No. 9 dated 10-12-1992)				
17.30 B	Commercial hard wood such as hollock, champ, chikrassy and chaplash (kiln-seasoned) shutters with vertical styles and rails as specified in statement No.1 (attached in the end of chapter) with 2 Nos. panels made out of three layers, flat pressed teak wood particle board both sides commercial veneered with phenol formaldehyde/ synthetic resins of the specified thickness mentioned below tongued and grooved including cost of iron hinges fixed in position excluding the cost of tower bolts and handles but including labour for fixing the same, (with 12mm thick teak wood particle board commercial as panels)			
(a)	35 mm thick	Sqm	54.35	326.00
(b)	30 mm thick	-do-	54.35	308.00
(c)	25 mm thick	-do-	54.35	290.00
<u>Item No. 17.30B added vide A & C slip No. 15 dt. 7-9-93</u>				
17.31	Wire gauze commercial hard wood such as hollock, champ, chikrassy etc. (non-coniferous timber other than teak conforming to I.S. specification No. 1003 kiln seasoned) door and window shutters without springs housed in chowkats including chocks, iron hinges and screws, etc., complete fixed in position (excluding the cost of tower bolts, and handles but including the labour for fixing the same)-			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(a) 30 mm thick	Sqm	41.60	209.20
	(b) 25 mm thick	-do-	41.60	190.75
<i>Note:-</i>	<i>The notes nos (i) and (ii) under item No. 17.19 are applicable to item no. 17.31 as well.</i>			
17.32	Cup board shutter of commercial hard wood such as hollock, champ, chikrassy, chaplash etc., (non coniferous timber other than teak conforming to I.S. specification no. 1003 kiln seasoned) excluding chowkat but with commercial plywood panels or faced on one side including iron hinges and screws fixed in position (excluding the cost of handles, tower bolts, hasp with staple, but including the labour for fixing the same)-			
	(a) 40 mm thick	-do-	52.25	219.60
	(b) 25 mm thick	-do-	52.25	189.05
<i>Note:-</i>	<i>The notes under Item No. 17.20 are applicable to Item No. 17.32 as well.</i>			
17.33	Wire gauze fixed on chowkats with 25 mm thick cover moulding of full width of commercial hard wood such as hollock, champ, chikrassy and chaplash, etc., (non-coniferous timber, other than teak, conforming to I.S. specification No. 1003, kiln seasoned).	Sqm	13.65	125.40
<i>Note:-</i>	<i>The note under 17.21 is applicable to Item No. 17.33 as well.</i>			
17.34	Expanded metal fixed on chowkats with 25 mm thick cover moulding of full width of commercial hard wood such as hollock, champ, chikrassy and chaplash etc. (non-coniferous timber other than teak, conforming to I.S. specification no. 1003, kiln-seasoned), (expanded metal to be 20 mm x 60mm strands, 3.25 mm wide and 1.6 mm thick)			
		-do-	13.65	118.20
17.35	Providing and fixing hard drawn steel wire fabric 75mm x 25mm rectangular mesh with 3.25 mm dia wire fixed on chowkats with 25 mm thick cover moulding of full width of commercial hard wood such as hollock, champ, chikrassy and chaplash etc., (non coniferous timber other than teak conforming to I.S. specification no. 1003 kiln seasoned)			
		-do-	13.65	130.25
17.36	Supplying and fixing glass panes with moulding of commercial hard wood such as hollock, champ, chikrassy and chaplash etc. (Non coniferous timber other than teak, conforming to I.S. specification No. 1003, kiln seasoned)-			
	(a) 2 mm thick (glazing area upto 9 sq dm of each pane)	-do-	12.80	120.45

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(b) 3 mm thick (glazing area above 9 sq dm, but upto 55 sq. dm of each pane)	Sqm	12.80	114.05
	(c) 4 mm thick (glazing area above 55 sq dm but upto 84 sq. dm of each pane)	-do-	12.80	126.50
	(d) Plate glass (Indian) 5.5 mm thick (glazing area exceeding 84 sq. dm of each pane)	-do-	15.35	182.85
17.37	Teak wood door and window shutters, panelled, glazed, or glazed and panelled, including iron hinges, screws, chocks/cleats and stops etc., complete fixed in position (excluding the cost of tower bolts and handles, but including the labour for fixing the same)-			
	(a) 35 mm thick (12 mm thick teak wood panel)	-do-	65.25	565.10
	(b) 30 mm thick (12 mm thick teak wood panel)	Sqm	65.25	518.65
	(c) Teak wood shutter with vertical styles and rails, as specified in the Statement No. 1 (attached in the end of this chapter), with two Nos. teak decorative plywood with teak facing on both sides panels of the specified thickness mentioned below tongued and grooved, including the cost of iron hinges, screws chocks/cleats, stops, etc., complete fixed in position (excluding the cost of tower bolts and handles, but including the labour for fixing the same)-			
	(i) 35 mm thick (12 mm thick teak plywood panel)	-do-	54.35	558.90
	(ii) 30 mm thick (12 mm thick teak plywood panel)	-do-	54.35	512.45
Note :-	The note No. (i) under Item No. 17.18 is applicable to Item No. 17.35 as well.			
17.38	Teak wood wire gauze door and window shutters without spring housed in chowkets including chocks/cleats, iron hinges and screws etc., complete fixed in position (excluding the cost of tower bolts and handles but including the labour for fixing the same)-			
	(a) 30 mm thick	-do-	41.60	388.30
	(b) 25 mm thick	-do-	41.60	340.85
Note:-	(i) The notes Nos. (i) and (ii) under Item No. 17.19 are applicable to Item No. 17.38 as well.			
	(ii) In case brass hinges and screws are provided instead of iron hinges and screws the through rates of above Item No. 17.37 and 17.38 shall be increased by Rs. 44.20 per sq. m.			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
17.39	Wire gauze fixed on chowkats with 25 mm thick teak wood cover moulding of full width.	Sqm	13.65	179.40
	<i>Note:- The note under Item No. 17.21 is applicable to Item No. 17.39 as well.</i>			
17.40	Expanded metal fixed on chowkats with 25 mm thick teak wood cover moulding of full width (Expanded metal to be 20 mm x 60mm strands; 3.25 mm wide and 1.6 mm thick)	-do-	13.65	172.15
17.41	Providing and fixing hard drawn steel wire fabric, 75mm x 25mm rectangular mesh with 3.25 mm dia wire fixed on chowkats with 25mm thick teak wood cover moulding of full width.	-do-	13.65	184.20
17.42	Supplying and fixing glass panes with teak wood moulding -			
	(a) 2 mm thick (glazing area upto 9 sq dm of each pane)	Sqm.	12.80	186.80
	(b) 3 mm thick (glazing area above 9 sq dm but upto 55 sq dm of each pane)	-do-	12.80	139.85
	(c) 4 mm thick (glazing area above 55 sq dm, but upto 84 sq dm of each pane)	-do-	12.80	147.35
	(d) plate glass (Indian) 5.50 mm thick (glazing area exceeding 84 sq dm of each pane)	-do-	15.35	201.75
(F)	Plain Linings			
17.43	Providing and fixing teak wood, 50 mm x 50mm x 50 mm plugs including cutting brick work and fixing in cement mortar 1:3.	Each	0.70	1.80
17.44	Providing and fixing deodar wood, plain lining, tongued and grooved, including wooden plugs (Teak), placed at 45 cm to 60 cm centres, complete with necessary screws (frame work shall be payable extra)-	Sqm.	16.65	261.90
	(a) 20 mm thick	-do-	16.65	166.85
	(b) 12 mm thick			
17.45	Providing and fixing Kail wood, plain lining, tongued and grooved, including wooden plugs (Teak) placed at 45 cm to 60 cm centres, complete with necessary screws (frame work shall be payable extra)-	-do-	16.65	185.30
	(a) 20 mm thick	-do-	16.65	120.90
	(b) 12 mm thick			
17.46	Providing and fixing Teak wood, plain lining, tongued and grooved, including wooden plugs (Teak) placed at 45 cm to 60 cm centres, complete with necessary screws (frame work shall be payable extra)-	-do-	21.35	810.45
	(a) 40 mm thick	-do-	21.35	517.40
	(b) 25 mm thick	-do-	21.35	419.70
	(c) 20 mm thick			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
17.47	(d) 12 mm thick Providing and fixing plywood, plain lining, butt-jointed, including, wooden plugs (Teak) placed at 45 cm to 60 cm centres, complete with necessary nails (frame work shall be payable extra)-	Sqm	21.35	263.40
	(a) 4 mm thick 3 ply decorative ply wood with teak faced on one side.	-do-	8.70	124.65
	(b) 6 mm thick decorative ply wood with teak faced on one side.	-do-	8.70	170.65
	(c) 9 mm thick decorative ply wood with teak faced on one side.	-do-	8.70	197.25
	(d) 12 mm thick decorative ply wood with teak faced on one side.	-do-	8.70	257.75
	(e) 4 mm thick 3 ply commercial ply wood	-do-	8.70	80.00
	(f) 6 mm thick commercial ply wood	-do-	8.70	108.90
	(g) 9 mm thick commercial ply wood	-do-	8.70	124.65
	(h) 12 mm thick commercial ply wood	Sqm	8.70	160.95
Note:-	(i) In case ply of BWR II grade is provided in item No (e) and (f) the through rate shall be increased for these items by Rs. 23.00 per sqm and for item No; (g) and (h) the through rate shall be increased by Rs. 44.75 and Rs. 47.20 per sqm respectively.			
	(ii) In case ply wood lining is fixed with brass screws and cups, instead of nails; increase the labour and through rates, by Re. 0.90 and Rs.4.95 per sqm respectively.			
17.47 A	Providing and fixing three layers, flat pressed, teak wood particle board in plain lining butt-jointed, including hard wood plugs, placed at 45 cm to 60 cm centres complete with necessary nails (frame-work shall be payable extra).			
	(a) 12 mm thick teak wood particle-board one side teak veneered and other side commercial veneered.	Sqm	7.10	265.00
	(Item No. 17.47 A added vide A & C slip 14 dt. 7-9-73)			
17.48	Providing and fixing flat pressed single or 3 layers particle board of B.W.R. grade (medium density) in plain lining butt jointed including wooden plugs (Teak), placed at 45cm to 60 cm centres, complete with necessary nails (frame work shall be payable extra)-			
	(a) 25 mm thick	Sqm	7.10	262.15
	(b) 19 mm thick	-do-	7.10	177.45
	(c) 12 mm thick	-do-	7.10	143.60

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
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- Note:-
- (i) In case commercial veneered on one side particle board is used instead of unveneered particle board, increase the through rate by Rs. 22.60 per sqm.
 - (ii) In case commercial veneered on both sides particle board is used, instead of unveneered particle board, increase the through rate by Rs. 45.30 per sqm.
 - (iii) In case decorative teak veneered on one side particle board is used, instead of unveneered particle board increase the through rate by Rs. 88.30 per sqm.
 - (iv) In case decorative teak veneered on one side and commercial on the other side is used, instead of unveneered particle board, increase the through rate by Rs. 110.90 per sqm.
 - (v) In case flat pressed 3 layers commercial veneered (on both sides) teak wood particle board-bonded with D.M.P. type phenol Formaldehyde Synthetic Resin, conforming IS 3097-1980 Exterior grade (medium density) is used instead of unveneered particle board the through rate at serial No. 17.48 (a), (b), (c) shall be increased by Rs. 36.00, Rs. 54.00, Rs. 51.00 per Sqm respectively.

(Note (v) of S.N. 17.48 inserted vide A & C slip No. 3 dated 10-12-1992)

17.48A	Providing and fixing medium density fibre board (MDF) interior grade in plain lining but jointing including wooden plugs (hard wood), placed at 45 cm to 60 cm, complete with necessary nails (frame work shall be payable extra)			
	(a) 25 mm thick	Sqm.	7.10	300.00
	(b) 19 mm thick	-do-	7.10	217.50
	(c) 12 mm thick	-do-	7.10	148.00

(Item No. 17.48 A inserted vide A & C slip No. 9 dated 10-12-1992)

17.49	Providing and fixing commercial type block board, plain lining, butt jointed, including wooden plugs (teak) placed at 45 cm to 60 cm centres, complete with necessary nails (frame work shall be payable extra)			
	(a) 25 mm thick	-do-	7.10	264.60
	(b) 19 mm thick	-do-	7.10	218.60

Note:- In case decorative teak veneered on one side block board is used, increase the through rate by Rs. 85.30 per sqm.

17.50	Providing and fixing grounds (battens), 50 mm x 25mm of commercial hard wood such as hollock, champ, chikrassy and chaplash,			
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Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	fixed on wooden plugs (teak) etc., (non-coniferous timber other than teak conforming to I.S. specification No. 1003 and I.S. Specification No. 1141-1958, kiln-seasoned, including applying a coat with wood preservative, on all sides of battens, complete.	Cum	2826.50	13194.00
17.51	Providing and fixing teak wood grounds (battens) 50 mm x 25 mm fixed on wooden plugs (Teak), including applying a coat with wood preservative, on all sides of battens, complete.	-do-	2826.50	23191.00
(G)	Beadings			
17.52	Providing and fixing deodar wood beading to door and window chowkats with iron screws fixed in position, complete as per design and shape required -			
	(a) 50 mm x 12 mm	Metre	2.15	11.30
	(b) 40 mm x 12 mm	-do-	2.15	9.75
17.53	Providing and fixing beading to door and window chowkats of commercial hard wood such as hollock, champ, chikrassy and chaplash, etc., (non-coniferous timber other than teak, conforming to I.S. specification No. 1003, kiln-seasoned) iron screws fixed in position, complete as per design and shape required. -			
	(a) 50 mm x 12 mm	-do-	2.80	8.80
	(b) 40 mm x 12 mm	-do-	2.80	7.90
17.54	Providing and fixing teak wood beading to door and window chowkats, with iron screws, fixed in position complete as per design and shape required-			
	(a) 50 mm x 12 mm	-do-	2.80	15.95
	(b) 40 mm x 12 mm	-do-	2.80	13.65
17.55	Deodar wood plain or chamfered edges or curved additional moulding to door and window shutters, fixed in position complete as per design and shape required-			
	(a) 20 mm x 20 mm	-do-	1.25	6.65
	(b) 20 mm x 12 mm	-do-	1.25	4.60
17.56	Plain or chamfered edges or curved additional moulding to door and window shutters of commercial hard wood, such as hollock, champ, chikrassy and chaplash, etc., (non-coniferous timber other than teak, conforming to I.S. specification no. 1003, kiln-seasoned), fixed in position complete as per design and shape required-			
	(a) 20 mm x 20 mm	Metre	1.85	5.30
	(b) 20 mm x 12 mm	-do-	1.85	4.10

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
17.57	Teak wood plain or chamfered edges or curved additional moulding to door and window shutters, fixed in position complete, as per design and shape required-			
	(a) 20 mm x 20 mm	Metre	1.85	10.10
	(b) 20 mm x 12 mm	-do-	1.85	6.95
(H)	Pelmets			
17.58	Providing and fixing 12 mm thick and 100 mm wide pelmet with 25 mm diameter wooden curtain rod and brackets, including fixing with 25 mm x 3 mm M.S. flat 10 cm long and plugs (Teak) etc., complete-			
	(a) deodar wood	Metre	6.10	58.05
	(b) kail wood	-do-	6.10	42.10
	(c) commercial hard wood such as hollock champ, chikrassy and chaplash, etc., (non-coniferous timber other than teak, conforming to I.S. specification no. 1003 kiln-seasoned)-	-do-	6.85	38.40
	(d) teak wood	-do-	6.85	84.20
17.59	Providing and fixing 12 mm thick 150 mm wide pelmet, with 25 mm diameter wooden curtain rod and brackets, including fixing with 25 mm x 3 mm M.S. flat 10 cm long and plugs (Teak) etc., complete-			
	(a) deodar wood	-do-	7.10	67.50
	(b) Kail wood	-do-	7.10	48.85
	(c) commercial hard wood such as hollock champ, chikrassy and chaplash, etc., (non-coniferous timber other than teak, conforming to I.S. specification no. 1003 kiln-seasoned)-	-do-	8.10	44.70
	(d) teak wood	-do-	8.10	98.45
17.60	Providing and fixing 12 mm thick 100 mm wide pelmet, of flat pressed single or three layers particle board (medium density) of B.W.R. grade, with 25 mm diameter teak wood curtain rod and brackets, including fixing with 25 mm x 3 mm M.S. flat 10 cm long and plugs (teak) etc. complete.-	-do-	5.00	53.30

- Notes:-
- (i) In case commercial veneered on one side particle board is used, instead of unveneered particle board increase the through rate by Rs. 5.75 per metre.
 - (ii) In case commercial veneered on both sides particle board is used, instead of unveneered particle board, increase the through rate by Rs. 11.45 per metre.
 - (iii) In case decorative teak veneered on one side is used, instead of unveneered particle board, increase the through rate by Rs. 22.40 per metre.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(iv) In case decorative teak veneered on one side and other side commercial veneered particle board is used, instead of unveneered particle board, increase the through rate by Rs. 28.15 per metre.			
	(v) In case flat-pressed 3 layers-commercial veneered (on both sides) teak wood particle board bonded with B.W.P. type-phenol Formaldehyde Synthetic Resin, Conforming IS 3097-1980 Exterior Grade (medium density) is used instead of unveneered particle board, the through rate at serial No. 17.60 shall be increased by Rs. 13.50 per metre.			
	(Note No. (v) in Item No. 17.60 inserted vide A & C slip No. 4 dated 10-12-1992)			
17.60A	Providing and fixing 12 mm thick 100 mm wide pelmet of medium density fibre board (MDF) interior grade with 20 mm dia chromium plated iron curtain rod and brackets including fixing with 25 mm x 3 mm M.S. flat 10 cm long and plugs (hard wood) complete.	Rmt.	4.85	51.40
	(Item No. 17.60A inserted vide A & C slip No. 9 dated 10-12-1992)			
17.61	Providing and fixing 12 mm thick 150 mm wide pelmet of flat pressed single or three layers particle board (medium density), B.W.R. grade, with 25 mm diameter teak wood curtain rod and brackets including fixing with 25 mm x 3 mm M.S. flat, 10 cm long and plugs (teak) etc. complete.	Metre	5.70	61.05
Notes:-	(i) In case commercial veneered on one side particle board is used, instead of unveneered particle board increase the through rate by Rs. 6.90 per metre.			
	(ii) In case commercial veneered on both sides particle board is used, instead of unveneered particle board, increase the through rate by Rs. 13.75 per metre.			
	(iii) In case decorative teak veneered on one side is used, instead of unveneered particle board, increase the through rate by Rs. 27.20 per metre.			
	(iv) In case decorative teak veneered on one side and other side commercial veneered particle board is used, instead of unveneered particle board, increase the through rate by Rs. 34.10 per metre.			
	(v) In case flat pressed 3 layers-commercial veneered (on both sides) teak wood particle board bonded with B.W.P. type phenol Formaldehyde Synthetic Resin, conforming IS 3097-1980 Exterior Grade (medium-density) is used instead of un-			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	<i>venered particle board, the through rate at Serial No. 17.61 shall be increased by Rs. 16.00 per metre.</i>			
	(Note No. (v) in Item No. 17.61 inserted vide A & C slip No. 5 dated 10-12-1992)			
17.61A	Providing and fixing 12 mm thick 150 mm wide pelmet of medium density with grade with fibre board (MDF) interior grade 20mm dia-metre chromium plated iron rod and brackets including fixing with 25 mm x 3mm M.S. flat 10 cm long and plugs (Hard wood) complete.	Rmt.	5.55	60.00
	(Item No. 17.61 A inserted vide A & C slip No. 9 dated 10-12-1992)			
17.62	Providing and fixing 12 mm thick and 100 mm wide pelmet of commercial plywood with 25 mm diameter teak wood curtain rod and brackets, including fixing with 25 mm x 3 mm M.S. flat, 10 cm long and plugs (Teak) etc., complete.	Metre	5.00	57.25
Notes:-	(i) In case 12 mm thick commercial ply wood BWR II grade is provided in item No. 17.62 increase the through rate by Rs. 14.10 per metre.			
	(ii) In case decorative ply wood, teak faced on one side, is used, instead of commercial ply wood, increase the through rate by Rs. 24.50 per metre.			
17.63	Providing and fixing 12 mm thick and 150 mm wide pelmet of commercial ply wood with 25 mm dia teak wood curtain rod and brackets including fixing with 25 mm x 3 mm M.S. flat, 10 cm long and plugs (Teak) etc. complete.	-do-	5.70	65.20
Notes:-	(i) In case 12 mm thick commercial ply wood BWR II grade is provided in item No. 17.63 increase the through rate by Rs. 17.15 per metre.			
	(ii) In case decorative ply wood, teak faced on one side, is used, instead of commercial ply wood, increase the through rate by Rs. 29.80 per metre.			
17.64	Extra for providing and fixing aluminium curtain rail with rollers, stop ends, and brackets in pelmets, instead of teak wood curtain rod, 25 mm dia and brackets (actual length of rail to be measured)	Metre		10.20
(1)	Partitions			
17.65	Providing and fixing flat pressed single or three layers particle board of B.W.R. grade (medium density) in partitions, including fixing to frames, backing or studding with screws etc., complete (frame, backing or studding to be paid separately)			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
(a)	25 mm thick	Sqm	4.90	243.20
(b)	19 mm thick	-do-	4.90	162.35
(c)	12 mm thick	-do-	4.90	130.00

- Notes:-
- (i) In case commercial veneered on one side particle board is used, instead of unveneered particle board increase the through rate by Rs. 21.60 per sqm.
- (ii) In case commercial veneered on both sides particle board is used, instead of unveneered particle board, increase the through rate by Rs. 43.20 per sqm.
- (iii) In case decorative teak veneered on one side is used, instead of unveneered particle board, increase the through rate by Rs. 84.30 per sqm.
- (iv) In case decorative teak veneered on one side and other side commercial veneered particle board is used, instead of unveneered particle board, increase the through rate by Rs. 105.90 per sqm.
- (v) In case decorative teak, veneered on both sides particle board is used, instead of unveneered particle board, increase the through rate by Rs. 168.80 per Sqm.
- (vi) In case flat pressed 3 layers-commercial veneered (on both sides) teak wood particle board bonded with B.W.P. type phenol Formaldehyde Synthetic Resin, conforming IS 3097-1980 Exterior Grade (medium-density) is used instead of unveneered particle board, the through rate at Serial No. 17.65 (a), (b), (c) shall be increased by Rs.52.00, Rs. 51.00, Rs. 49.00 respectively.

(Note No. (vi) of Item No. 17.65 inserted vide A & C slip No. 6 dated 10-12-1992)

17.65A Providing and fixing medium density fibre board (MDF) interior grade in partitions including fixing to frames backing or studding with screws, complete.

(a)	25 mm thick	Sqm.	4.90	282.00.
(b)	19 mm thick	-do-	4.90	203.25
(c)	13 mm thick	-do-	4.90	186.96

(Item No. 17.65 A inserted vide A & C slip No. 9 dt. 10-12-1992)

17.66. Providing and fixing 4 mm thick hard board of approved quality in partitions, including fixing to frames with screws complete (beading and frame work to be paid separately).

Sqm.	4.90	52.60
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17.67 Providing and fixing decorative ply wood 4 mm thick 3 ply teak faced on one side in partitions, including fixing to frames with

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	brass screws complete (beading and frame work to be paid separately)	Sqm.	6.55	115.40
<i>Notes :- (i) In case commercial ply wood is provided with iron screw instead of 4 mm thick 3 ply decorative plywood teak face on one side, reduce the through rate by Rs. 3.40 per sqm.</i>				
<i>(ii) In case commercial ply wood BWR II grade is provided with iron screws, instead of 4 mm thick 3 ply decorative ply wood teak faced on one side, reduce the through rates by Rs. 21.95 per sqm.</i>				
17.68	Providing and fixing plain asbestos sheet, 6 mm thick partitions, including fixing to frames with screws complete (beading and frame work to be paid separately).	Sqm.	4.90	81.55
17.69	Providing and fixing wooden handrail of required shape and design, with necessary screws, including labour, for rounding, vertical and horizontal bends and curves complete fixed in position -			
	(a) deodar wood	Cum	1580.00	15805.00
	(b) commercial hard wood, such as hollock champ, chikrassy and chaplash, etc. (non coniferous timber other than teak, conforming to I.S. specification no. 1003, kiln- seasoned)	-do-	1823.00	10238.00
	(c) teak wood	-do-	1823.00	23379.00
(J)	Door and Window Fitting			
17.70	Cost of brass fittings complete for doors and windows, such as tower bolts, handles etc. and screws for these fitting (excluding sliding bolt)-			
	(a) for single leaf shutter	Sqm.	--	38.55
	(b) for double leaf shutter	-do-	--	59.55
17.71	Cost of iron fittings, complete for doors and windows, such as tower bolts, handles etc. and screws for these fittings (excluding sliding bolts)-			
	(a) for single leaf shutter	-do-	--	6.40
	(b) for double leaf shutter	-do-	--	10.15
17.72	Cost of aluminium fittings complete for doors and windows, such as tower bolts, handles, etc. and screws for these fittings (excluding sliding bolt)-			
	(a) for single leaf shutter	-do-	--	17.80
	(b) for double leaf shutter	-do-	--	27.45
17.73	Providing and fixing six-levers brass 10cm mortice latch and lock, and a pair of lever handles with necessary screws, etc. com-			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	plele (Indian make of reputed firm, such as Godrej or equivalent)	Each	9.05	134.45
17.74	Providing and fixing six levers brass 10 cm mortice latch, with one dead bolt and a pair of lever handles with necessary screws, etc. complete (Indian make of reputed firm, such as Godrej or equivalent)	-do-	6.80	119.00
17.75	Providing fixing 150 mm floor brass door stoppers, with rubber cushion, screws, etc. to suit shutter thickness complete.	-do-	0.35	31.75
17.76	Providing and fixing fan-light catch including necessary screws complete.			
	(a) brass	-do-	0.35	11.50
	(b) aluminium	-do-	0.35	4.50
	(c) iron	-do-	0.35	4.20
17.77	Providing and fixing 300 mm long chain with hooks for fan-light, including necessary screws, etc., complete.			
	(a) brass	-do-	0.40	6.00
	(b) aluminium	-do-	0.40	2.60
	(c) iron	-do-	0.40	2.00
17.78	Providing and fixing 150 mm hasps and staples with necessary screws, etc. complete.			
	(a) brass	-do-	0.40	18.55
	(b) aluminium	-do-	0.40	10.35
	(c) iron	-do-	0.40	4.30
17.79	Providing and fixing helical door spring 150 mm (superior quality) including necessary screws, complete.			
	(a) brass	-do-	3.15	77.45
	(b) iron	-do-	3.15	23.85
17.80	Providing and fixing M.S. single acting spring hinges with necessary screws, etc. complete.			
	(a) 100 mm	-do-	3.15	15.10
	(b) 125 mm	-do-	3.15	21.15
	(c) 150 mm	-do-	3.15	26.65
17.81	Providing and fixing M.S. double acting spring hinges with necessary screws, etc., complete.			
	(a) 100 mm	-do-	3.15	20.60
	(b) 125 mm	-do-	3.15	31.60
	(c) 150 mm	-do-	3.15	37.65
17.82	Supplying and fixing hydraulic door closer I.S.I mark, with necessary screws, etc. Complete.			
	(a) I.S.I designation No. I (size of door upto 700 mm)	-do-	8.20	192.30

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(b) I.S.I designation No. II (size of door 701 mm to 850 mm)	Each	8.20	204.40
	(c) I.S.I designation No. III (size of door 851 mm to 1000 mm)	-do-	8.20	216.50
17.83	Providing and fixing sliding bolt with nuts and screws, etc. complete-			
	(a) brass-			
	(i) size 300 mm x 16 mm	Each	3.15	90.40
	(ii) size 250 mm x 16 mm	-do-	3.15	80.75
	(b) aluminium			
	(i) size 300 mm x 16 mm	-do-	3.15	44.15
	(ii) size 250 mm x 16 mm	-do-	3.15	40.30
	(c) iron-			
	(i) size 300 mm x 16 mm	-do-	3.15	17.45
	(ii) size 250 mm x 16 mm	-do-	3.15	16.35
17.84	Providing and fixing 50 mm cup board or ward robe knob-			
	(a) brass	-do-	0.60	6.65
	(b) aluminium	-do-	0.60	4.55
17.85	Providing and fixing 65mmx35mm special quality brass cup-board locks, six levers, of reputed firms such as Godrej or equivalent, including necessary screws, etc. complete.	-do-	6.80	29.40
17.86	Providing and fixing 30 cm long aluminium finger plate, 65mmx1.6mm, including necessary screws, etc., complete.	-do-	0.40	36.90
17.87	Providing and fixing 0.50 mm thick aluminium sheet including cost of necessary screws, etc., complete.	Sqm.	10.45	90.55
17.88	Providing and fixing plastic laminated sheets thickness, not less than 1.5 mm (conforming to I.S. specification), including cost of approved adhesive complete-			
	(a) natural finish	-do-	16.40	310.40
	(b) glossy finish	-do-	16.40	298.85
17.89	Curtain rod 25 mm dia with brackets, fixed in position including nails and screws, etc. complete-			
	(a) deodar wood	Metre	8.25	19.85
	(b) commercial hard wood such as hollock champ, chikrassy and chaplash (non-coniferous timber other than teak, conforming to I.S. specification no. 1003, kiln seasoned)-	-do-	11.10	18.65
	(c) Teak wood	-do-	11.10	29.00
(K)	Factory Manufactured Shutter.			
17.90	Factory manufactured panelled door or glazed window, shutters of commercial hard			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	wood, such as hollock, champ, chikrassy & chaplash, etc. (non-coniferous timber other than teak, conforming to I.S. specification No. 1003, kiln-seasoned) with 100 mm wide vertical styles, 150 mm wide lock rail, 200 mm wide bottom rail and 100 mm wide other rails, with panels of 15 mm thick, tongued and grooved of commercial hard wood and including cost of iron hinges, screws, chocks/cleats, stops, nails etc., complete, fixed in position (excluding the cost of any fittings, other than specified above, but including labour for fixing the same in position)-			
	(a) 30 mm thick	Sqm	13.95	410.00
	(b) 35 mm thick	-do-	13.95	436.00
	(c) 40 mm thick	-do-	13.95	458.00
<i>Note :-</i>	<i>The rates of Item No. 17.90 shall also be paid for commercial hard wood glazed windows of corresponding thickness, with 75 mm wide styles, top and bottom rails, and including the cost of glazing of required thickness, as per P.W.D. specifications, and commercial hard wood beading of required size, iron hinges screws, chocks/cleats, stops and nails etc., complete in all respects.</i>			
17.91	Factory manufactured panelled and glazed door shutters of commercial hard wood, such as hollock, champ, chikrassy & chaplash, etc. (non-coniferous timber other than teak, conforming to I.S. specification No. 1003, kiln-seasoned) with 100 mm wide vertical styles, 150 mm wide lock rail, 200 mm wide bottom rail and 100 mm wide other rails, with panels of 12 mm thick, commercial veneered both side particle board or plywood of B.W.R. grade, hot pressed, including cost of iron hinges, screws, chock/cleats, stops and nails etc. complete fixed in position (excluding the cost of any fittings, other than specified above but including labour for fixing the same in position)-			
	(a) 30 mm thick	Sqm	13.95	388.00
	(b) 35 mm thick	-do-	13.95	414.00
	(c) 40 mm thick	-do-	13.95	436.00
<i>Note:-</i>	<i>The note No. i under item No. 17.18 is applicable to item no. 17.90 & 17.91 as well.</i>			
17.91A	Factory manufactured panelled & glazed door shutters of commercial hard wood such as hollock champ, chikrassy & chaplash etc. (Kiln seasoned) with 100 mm wide vertical styles, 150 mm wide lock rails, 200 mm wide			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	bottom rail and 100 mm wide other rails with panels of 12 mm thick medium density fibre board (MDF) exterior grade including cost of iron hinges, screws, chocks/cleats, stops and nails etc. complete fixed in position (excluding the cost of any fittings other than specified above but including labour for fixing the same in position)			
	(a) 30 mm thick	Sqm	13.95	364.00
	(b) 35 mm thick	-do-	13.95	390.00
	(c) 40 mm thick	-do-	13.95	411.00
	(Item No. 17.91 A inserted vide A & C slip No. 9 dated 10-12-1992)			
17.91A	Factory manufactured panelled and galzed door shutters of commercial Hard wood such as hollock, champ, chikrassy and chaplash etc. (kiln-seasoned) with 100 mm wide vertical styles, 150 mm wide lock rail, 200 mm wide bottom rail and 100 mm wide other rails, with panels of 12mm thick teak wood particle board both side commercial veneered bonded with phenol formaldehyde/synthetic resin, hot pressed including cost of iron hinges, screws, chocks/cleats, stops and nails etc. complete fixed in position excluding the cost of any fittings other than specified above including labour for fixing the same in position.			
	(a) 40 mm thick	Sqm	13.95	434.00
	(b) 35 mm thick	-do-	13.95	412.00
	(c) 30 mm thick	-do-	13.95	387.00
	(Item No. 17.91A Subsequently amended vide A & C slip No. 16 dt. 7-9-1993)			
17.92	Factory manufactured wire gauze door and window shutters of commercial hard wood such as hollock, champ, chikrassy and chaplash, etc. (non-coniferous timber other teak conforming to I.S. specification No. 1003, kiln seasoned) with 100 mm wide vertical styles, 150 mm wide lock rail 200 mm wide bottom rail, and wire gauze of 140 G or 120 G designation including cost of iron hinges, screws, chock/cleats, stops nails etc., complete fixed in position (excluding the cost of any fittings, other than specified above, but including labour for fixing the same in position)- (styles and rails of windows shutter shall be 75 mm wide)			
	(i) 30 mm thick	Sqm	13.95	322.25
	(ii) 35 mm thick	-do-	13.95	347.55
Note:-	The rates No. (i) and (ii) under Item No.17.19 are applicable to item No.17.92 as well.			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
17.93	Factory manufactured solid flush door shutters, with block board core as per I.S. No. 1659-1969 bonded with water proof type phenol formaldehyde synthetic resin, hot-pressed, conforming to I.S. 2202 part I and II, fixed in position, including iron hinges, screws, chocks/cleats and stops etc., (excluding the cost of any fittings other than specified above, but including labour for fixing the same in position)-			
	(a) commercial veneering with vertical grains or cross bands and face veneer on both sides commercial facing with laminated core and lipped edges :-			
	(i) 25 mm thick	Sqm	13.95	399.00
	(ii) 30 mm thick	-do-	13.95	423.00
	(iii) 35 mm thick	-do-	13.95	448.00
	(iv) 40 mm thick	-do-	13.95	473.00
	(b) decorative veneering with vertical grains or cross bands and face veneer one side teak face and on the other side commercial facing and edges lipped with commercial hard wood with laminated core :-			
	(i) 25 mm thick	-do-	13.95	493.00
	(ii) 30 mm thick	-do-	13.95	516.00
	(iii) 35 mm thick	-do-	13.95	540.00
	(iv) 40 mm thick	-do-	13.95	565.00
	(c) decorative veneering with vertical grains or cross bands and face veneer on both sides teak facing and edges lipped with commercial hard wood with laminated core :-			
	(i) 25 mm thick	-do-	13.95	581.00
	(ii) 30 mm thick	-do-	13.95	605.00
	(iii) 35 mm thick	Sqm	13.95	629.00
	(iv) 40 mm thick	-do-	13.95	654.00
Notes:	(i) In case lipping of teak wood battens, 25 mm minimum depth on all edges of the shutter is provided, increase the through rates of the above item by Rs. 26.50 per sqm.			
	(ii) In case rectangular/circular vision panels in commercial and decorative flush shutters are provided, the through rates of this item shall be increased by Rs. 31.50 and Rs. 42.00 per sqm for rectangular and circular vision panels respectively.			
	(iii) In case brass hinges and screws are provided, instead of iron hinges and screws, the through rates of this item shall be increased by Rs. 44.20 per sqm.			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(iv) In case nickle-plated M.S. piano hinges, 35 mm wide, 1 mm thick including screws are provided, instead of iron butt hinges increase the through rates of Item No. 17.93 (a) (i), (b) (i) and (c) (i) by Rs.9.00 per sqm. when 25 mm thick flush shutter is used as cup board shutter.			
	(v) In case louver of standard size 30 cm x 45 cm is provided in commercial and decorative solid flush shutters the through rates of this item shall be increased by Rs. 39.50 and 52.80 per sqm. respectively.			
17.94	Factory manufactured panelled door shutters, of teak wood, kiln-seasoned. as per I.S specification No.401, with 100 mm wide vertical styles, 150 mm wide lock rail, 200 mm wide bottom rail and 100 mm wide other rails, with panels of 12 mm thick veneered, particle board, or plywood of BWR grade hot-pressed including cost of iron hinges, screws, chocks/cleats, stops and nails etc., complete fixed in position (excluding the cost of any fittings, other than specified above but including labour for fixing the same in position)-			
	(a) panel of decorative plywood, one side teak faced, and other side commercial faced.			
	(i) 30 mm thick	Sqm	13.95	792.00
	(ii) 35 mm thick	-do-	13.95	828.00
	(iii) 40 mm thick	-do-	13.95	913.00
Note:-	The rates of Item No.17.94 (a) shall also be paid for factory manufactured teak wood kiln-seasoned as per I.S. specification no. 401 glazed window shutters of corresponding thickness with 75 mm wide styles, top and bottom rails, including the cost of glazing of required thickness, as per P.W.D. specification and teak wood beading of required size, including cost of iron hinges, screws, chocks/cleats stops, nails etc., complete in all respects-			
	(b) panels of decorative plywood, both sides teak faced.			
	(i) 30 mm thick	Sqm	13.95	843.00
	(ii) 35 mm thick	-do-	13.95	879.00
	(iii) 40 mm thick	-do-	13.95	964.00
Note:-	In case brass hinges and screws are provided instead of iron hinges and screws, the through rates of the above items shall be increased by Rs. 44.20 per sqm.			

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STATEMENT NO. 1

Table showing sizes of Chowkats, Frames and other parts of Joinery for Air-Seasoned Timber.

S.N	Particulars of type of doors & windows (a)	Deodar Wood/Kail Wood		Teak Wood Commercial hard Wood		Width of styles rails, ledges or braces (e)	Remarks
		Size of Chowkat in mm	Thickness in mm	Size of Chowkat in mm	Thickness of leaves in mm		
1	2	3	4	5	6	7	8
Panelled Glazed or Partly Glazed and Panelled Doors.							
1.	Double upto 120×205 cm	60×115	30	60×100	30	100	(a) Dimensions given, are out to out of the chowkat, containing the leaves, except where marked (x); where the dimensions of each leaf are given.
2.	Double exceeding 120×205 but upto 150×235 cm.	60×115	35	60×100	30	100	
3.	Double exceeding 150×235 cm	60×115	40	60×100	30	100	
4.	Single upto 90×205 cm	60×115	35	60×100	30	100	
5.	Single exceeding 90×205 cm	60×115	40	60×100	35	110	
Battened, Braced or Framed Doors.							
6.	Double upto 120×205 cm.	60×115	50(d)	--	--	100	(b) Dimensions given, are for a chowkat, carrying two sets of leaves.
7.	Double exceeding 120×205 cm	60×115	50(d)	--	--	100	
8.	Single upto 90×205 cm	60×115	50(d)	--	--	100	(c) Chowkat, to be the same as that for main door or window.
9.	Single exceeding 90×205 cm	60×115	50(d)	--	--	110	
Wire Gauzed Doors.							
10.	Double upto 120×205 cm	60×120(b)	30	60×120(b)	30	100	(d) 25 mm ledged & braced and 25mm battens.
11.	Double exceeding 120×205cm	60×120(b)	35	60×120(b)	30	100	
12.	Single upto 90×205 cm	60×120(b)	35	60×120(b)	30	100	(e) (i) Meeting styles may be three quarters of the dimensions given.
13.	Single exceeding 90×205 cm	60×120(b)	40	60×120(b)	35	110	
Windows							
14.	Glazed double upto 90×130cm	60×115	30	60×100	30	70	(ii) Width of lock rail, for all sizes of doors, shall be 160mm. and for doors, upto 205cm, 235 cm and above 235 cm in height; the width of bottom rail shall be 200mm, 225mm. and 250mm respectively.
15.	Glazed double exceeding 90×130 cm but upto 120×130 cm.	60×115	30	60×100	30	70	
16.	Glazed double Exceeding 120×130 cm.	60×115	30	60×100	30	80	
17.	Glazed single upto 60×130 cm	60×115	30	60×100	30	80	
18.	Glazed single exceeding 60×130 cm.	60×115	30	60×100	30	80	
19.	Fan lights	(c)	30	--	--	60	
20.	Clerestory windows	60×115	30	--	--	70	
21.	Battened double all sizes	60×115	50(d)	--	--	80	
22.	Battened single all sizes	60×115	50(d)	--	--	80	
23.	Wire-gauzed upto 60×130cm(x)	60×120(b)	30	60×120(b)	30	80	
24.	Wire gauzed exceeding 60×130cm (x).	60×120(b)	30	60×120(b)	30	80	
25.	Wire gauzed shutter (CS) Windows.	60×115	30	60×100	30	70	
26.	Cup board shutters	60×80	25, 40	60×80	25, 40	50	

STATEMENT NO. 2

SCHEDULE OF DOOR AND WINDOW FITTINGS

Sr. No.	Items	Fold fasts	Hinges (c) mm	Thickness of flaps mm	Handles mm (d)	Hinged chocks/cleats mm	Door stops mm	Tower bolts (c)			Sliding bolts mm (j)	Special fitting	Remarks
								Top of Master style mm	Bottom of Master style mm	Top of Under style mm			
1		3	4	5	6	7	8	9	10	11	12	13	14
1	Single leaf panelled or glazed door.	6	3-125	2.2±0.08	2-100*	1-100	1-150	1-200	1-150	—	1-300	—	—
2	Single leaf flush door.	6	3-125	2.12±0.08	—	1-100	1-150	1-200	—	—	—	—	(a) The first digit indicates the number of the fittings, and the second digit gives its size. One brass mortice lock 14 to 15 cm size, with handles and one 15 cm brass floor stoppers (i)
3	Double leaf panelled or glazed door.	6	6-100	1.90±0.06	3-100*	2-100	2-150	1-200	1-150	1-200	1-300	—	(b) The designated sizes shall be measured, as provided for in the respective Indian Standard
4	Double leaf flush door.	6	6-100	1.90±0.06	—	2-100	2-150	1-200	1-150	1-200	—	—	(c) Hinges for panelled or glazed joinery shall be mild steel pressed butt hinges, ordinary variety finished bright. Hinges for battened joinery shall be mild steel, Top Hinges, stove-enamelled black.
5	Single leaf, battened door.	6	3-300	—	2-100*	1-100	1-150	1-200	1-150	—	—	—	One brass mortice lock 14 to 15 cm size, with handles an two 15 cm brass floor stoppers
6	Double leaf, battened door.	6	6-300	—	3-100*	2-100	2-150	1-200	1-150	1-200	1-300	—	—
7	Single leaf wire-glazed door.	—	3-125	2.12±0.08	1-100*	1-100	—	1-200	1-150	—	—	—	(d) Handles shall be oval type, stove enamelled, black. 1-225 mm door spring (g)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	Double leaf wire-gauzed door.	6-100	1.90±0.06	2-100*	2-100	—	1-200	1-150	1-200	—	2-225 mm door spring (g)	—	—	—
9.	Single leaf, panelled or glazed or wire-gauzed window.	2-75(h)	1.70±0.06	1-100*	1-100	1-125	1-200	1-75	—	—	—	—	—	—
10.	Double leaf panelled or glazed or wire-gauzed window.	4-75(h)	1.70±0.06	2-75*	2-100	2-125	1-200	1-75	1-200	—	—	—	—	—
11.	Single leaf battered window.	2-250	—	1-75*	1-100	1-125	1-200	1-75	—	—	—	—	—	—
12.	Double leaf battered window.	4-250	—	2-75*	2-100	2-125	1-200	1-75	1-200	—	—	—	—	—
13.	Fan light.	2	2-75	1.70±0.06	—	—	—	—	—	—	—	—	—	—
14.	Clerestory window centre-hung.	2	2 sets of brass fan light	—	—	—	—	—	—	—	—	—	—	—
15.	Clerestory window bottom-hung.	2	2-75	—	—	—	—	—	—	—	—	—	—	—
16.	Cup board shutters	6	6-100	1.90±0.06	2-100*	—	—	1-100	—	—	—	—	—	—

* For bigger size of work door handles of 150 mm or any other size as advised by Chief Architect be adopted (column No. 6 of statement No.-11 of S.No. 1,3,5 to 12 & 16 amended vide A & C slip No. 17 dt. 27/5/1994)

(e) Tower bolts for panelled or glazed joinery shall be mild steel, barrel type with mild steel barrel and mild steel bolt with integral knob, bolts, bright finished and barrel and socket stove-enamelled, black Tower bolts for battered joinery shall be mild steel, semibarrel type with mild steel pressed barrel and mild steel forged bolt.

(f) Hasp & staple shall be mild steel, safety type stove enamelled, black.

(g) Door spring shall be helical type stove enamelled, black.

(h) the size of the hinges shall be increased to 100 mm, if height of window exceeds 90 cm.

(i) For lavatory flush doors, brass mortice latch, 10 cm size, shall replace the mortice lock.

(j) Sliding bolts shall be of mild steel hasp and bolt finish bright, and back plate, straps and staple stove enamellic black.

STEEL AND IRON WORK

CHAPTER NO. 18

NOTES :

(1) The labour and through rates, for item No. 18.1 to 18.9 and 18.14 are for a height upto 4 metre above pinth. For additional slabs of height 4 metres, or part thereof, the rates for item No. 18.1, 18.2 and 18.6 are to be increased by Rs. 6.00 per quintal, and the rates for item No. 18.3 to 18.5, 18.7 to 18.9 and 18.14 are to be increased by Rs. 12.00 per quintal.

(II) The cost of all rivets, bolts and nuts is included in the through rates.

(III) The labour rates given in this chapter, include the cost of tools and plants and scaffoldings (Labour and Material), wherever required. The labour rates also cover the cost of welding rods, electric and gas charges, where welding work is done.

(IV) The rates, given in Item No. 18.21 are also applicable for the item of 'rod' provided in the well steining. These rates also include the cost of flat steel, bond ring, threading and welding, wherever done, complete in all respects. Only bottle nuts are payable as per Item No. 18.15(a).

(V) The contractors under any circumstances should not be permitted to bring the structural steel as well as steel required for reinforcement and accordingly inviting tenders shall provide for the issue of steel from departmental store at specified stock issue rates.

(VI) Unless specified to the contrary, the labour rates for various items of construction include handling of materials within 100 metres. Through rates include all rehandling of materials at the site of work, and no payment is due to the contractors on this account.

(VII) Rolled steel sections to be adopted for opening for item No. 18.24 & 18.27 should be in accordance with B.I.S. specifications :

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
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(A)	Structural Steel			
18.1	Steel work, fixed independently without connecting plates, including cutting, hoisting and fixing in position in :-			
	(a) R.S. Joists	Quintal	71.70	1011.45
	(b) flats	-do-	62.00	955.75
	(c) tees, angles and channels	-do-	70.35	964.10
(B)	Riveted structural Steel			
18.2	Steel work in hip and jack rafters, common rafters, purlins etc., with angle iron cleats and other connecting plates.	-do-	82.40	976.15
18.3	Structural steel work in angles, tees and flats riveted including cutting fixing all gusset plates, bolts, nuts, rivets, etc., with hoisting and erecting in position :			
	for roof trusses, well kerbs, plates and trussed girders, etc., of any span for building and bridges.	-do-	278.00	1180.75
18.4	Structural steel work in girders or stranchions built up of one joist or channel section riveted including cutting and fixing all gusset plates, bolts, nuts, rivets, etc., complete with flange plates, heads, sole plates, angle, connections etc. with hoisting and erecting in position.			

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
18.5	Structural steel work in compound girders or stanchions built up from two or more R.S. Joists or channel Section or plates and angles etc. reverted including cutting and fixing all lattice bars, stiffeners, gusset plates, bolts, nuts, rivets etc, complete with range plates, heads, sole plates, angle connections, etc. with hoisting and erection in position.	(a) with one R.S. Joist. (b) with two or more R.S. Joists	86.65	980.40
		Quintal	86.65	1005.60
		-do-	148.65	1076.00
		-do-	148.65	1042.40
(C)	Welded Structural Steel			
18.6	Steel work in hip and jack rafters, common rafters, purlins, etc., with angle iron cleats and other connecting plates, welded including cost of cutting and welding rods.		77.85	971.60
18.7	Structural steel work in angles, tees and flats welded including cutting fixing all gusset plates, bolts, nuts, welding rod, etc, with hoisting and erecting in position :			
	For roof trusses, well kerbs, plates and trusses and girders, etc, of any span for buildings and bridges.		219.15	1122.00
18.8	Structural steel work in girders or stanchions built up of one joist or channel section welded including cutting and fixing all gusset plates, bolts, nuts welding rods, etc. complete with range plates, heads, sole plates, angle connections, etc. with hoisting and erecting in position :	(a) with one R.S. Joist. (b) with two or more R.S. Joists	71.65	990.60
		-do-	71.65	965.40
18.9	Structural steel work in compound girders or stanchions built up from two or more R.S. Joists or channel section or plates, angle etc. welded including cutting and fixing all lattice bars, stiffeners, gusset plates, bolts, nuts, welding rods, etc. complete with range plates, heads, sole plates, angle connections, etc. with hoisting and erecting in position :	(a) with two or more R.S. Joists (b) with two or more channels or plates or angle irons etc.	123.05	1050.40
		-do-	123.05	1016.80
(D)	Rivette Wrought Iron & Mild Steel			
18.10	Wrought iron and mild steel ladders, framed grills, gratings etc, with ends of bars rivetted or forged framed window guards, banded iron doors, etc, including fixing in position.	-do-	294.70	1197.45

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
18.11	Iron-graded doors, including pinle hinges and arrangements.	-do-	321.85	1224.60
(E)	Welded Wrought Iron & Mild Steel Grills.			
18.12	Wrought iron and mild steel (using angles, flats, square bars, tee and channels) ladders, grills, grating frames, window guards, iron doors openable or fixed stair case or parapet or any other type of railing, gates and tree guards etc., including cost of screws and welding rods or bolts and nuts complete fixed in position.	Quintal	147.70	1040.35
18.13	(a) Stair case railing of 40 mm internal dia G.I. pipe class 'B' as per I.S. No. 1239 as supporting members and base plate as hand rail using flats and square bars welded as per design specified including cutting, welding rods and complete fixed in position.	-do-	155.60	1157.00
	(b) Parapet railing of 40 mm internal dia G.I. pipe class 'B' as per I.S. No. 1239 as hand rail using flats and square bars as supporting members and base plate welded as per design specified including cutting, welding rods and fixed in position.	-do-	176.30	1231.00
(F)	Tubular Trusses			
18.14	Supplying, hoisting and placing in position tubular trusses including runners, pulleys, consisting of steel tubes conforming to I.S. specifications or tested quality welded with fillet welds 6 mm thick throughout including wind bracing. Open end of pipe sealed with 3 mm thick plate including the cost of nuts and bolts where bolts connections are specified at flange joints including one coat of ready mixed red oxide zinc chromate primer of approved quality assembling and fixed in position complete in all respect.	-do-	73.15	1283.15
(G)	Bolts and Nuts			
18.15	(a) Supplying M.S. Bolts of required sizes with nuts and washers complete.	Kg.	--	14.00
	(b) Supplying M.S. round holding down or Anchor bolts with nuts and washer plates complete.	-do-	--	11.00
(H)	Steel Shutters			
18.16	Providing and fixing G.I. sheet 0.80 mm thick garage doors, with 40mm x 40 mm x 6mm angle iron frame with diagonal braces, 3 mm thick gusset plates at the junctions, hooks at the top and 25 mm dia. pulleys, & T-iron 50 mm x 50 mm x 6 mm guides at bottom including locking arrangements with handles and pinles, etc. complete.	Sqm	75.65	424.00

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
18.17	Providing and fixing G.I. sheet 0.80 mm thick sliding shutters, with 40mm x 40mm x 6mm angle iron frame with diagonal braces, 3 mm gusset plates at the junctions, hooks at the top and 25 mm dia. pulleys, at the bottom and 40 mm x 40 mm x 6 mm angle iron top and bottom guides including locking arrangements with handles, etc. complete.	Sqm	94.20	487.40
18.18	Supplying and fixing rolling shutters, of approved make, M.S. Laths, interlocked together through their entire length, and jointed together at the end, by end locks mounted on specially designed pipe shaft, with braced side guides, 27.5 cm long wire spring grade no. 2, and arrangement for inside and outside locking, with push and pull operation complete, including top cover 0.80 mm thick (payment is to be made for the exact size of opening where rolling shutter is to be fixed): (a) with 80 mm x 1.00 mm M.S. Laths (b) with 80 mm x 1.25 mm M.S. Laths (c) Providing and fixing ball bearing, for push and pull type rolling shutters, from 9.20 to 12 sqm area.	Sqm	17.80	364.70
		-do-	17.80	401.75
18.19	Extra for providing mechanical device, chain and crank operation for operating rolling shutters, exceeding 11.20 sqm in areas of the rolling shutter.	Each	--	134.30
18.20	Providing and fixing in position collapsible steel shutters, with vertical channels 20 mm x 10 mm x 2mm and braced with flat iron diagonal 20 mm x 5 mm size, with top and bottom rails of T-iron 40 mm x 40 mm x 6 mm with 38 mm dia steel pulleys, complete with bolts, nuts, locking arrangements, stoppers, handles, etc, complete.	Sqm	--	65.00
(1) 18.21	Steel Reinforcement for R.C.C. works	-do-	8.20	305.45
18.22	Cold twisted deformed (ribbed/lor steel) bars placing in position complete.	Quintal	49.55	866.65
18.23	Providing and fixing cutting and bending in position high tensile reinforcement strands including making cables, binding wires, pins with 18.4 (tonne) for prestressed concrete work heavy duty spacers concrete cover blocks, heavy duty sheathing for strands, anchorage	-do-	49.55	917.05

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
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	Bearing plates wedges complete in all respects.	Quintal	--	2300.00
18.24	Supplying operable steel doors and windows, of standard steel sections, joints mitted and electrically flash welded including provision for arrangement of receiving handles, peg stay, catcher will also be welded with the frame and providing and fixing pressed steel projected hinges, iron lugs, glazing clips (excluding wooden shutters, glazing and fittings such as handles, peg stay and catcher etc.) and finished with one coat of ready mixed red lead non setting primer.	Kg.	--	14.30
18.25	Providing and fixing bright finished brass handles of minimum weight of 200 grams to side hung steel windows including fixing the same with necessary welding and machine screw or iron nut etc. complete.	Each	0.35	10.65
18.26	(a) Providing and fixing bright finished brass peg-stay 300 mm long of minimum weight 330 grams to side hung steel windows including fixing the same with necessary iron bolt and nut etc. complete.	-do-	0.35	18.90
	(b) Providing and fixing bright finished brass peg-stay 250 mm long weight 280 grams to steel ventilator with necessary iron bolt and nut etc. complete.	-do-	0.35	15.10
	(c) Providing and fixing bright finished brass peg stays 200 mm long weight 240 grams to ventilator with necessary iron bolt and nut etc. complete.	-do-	0.35	12.85
	(d) Providing and fixing 14 mm bright finished brass spring catch to steel centre hung ventilators with necessary iron bolt and nut etc. complete.	-do-	0.35	4.30
18.27	Supplying fixed steel windows, of standard rolled steel sections, joints mitted and electrically flash-welded, including iron lugs and glazing clips, complete (excluding glazing) and finished with one coat of ready mixed paint red lead non-setting primer.	Kg.	--	14.30
18.28	Fixing steel windows in walls with lugs, embedded in 15 cm x 11.43 cm x 7.5 cm cement concrete blocks, of 1:3:6 mix, excluding fixing of glass panes, and coat of cement concrete.	Sqm	11.50	--
18.29	As above but including cost of cement concrete for lugs.	-do-	11.50	15.35
18.30	Supplying and fixing glass panes including special metal sash putty of approved make.	-do-	--	--

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
18.31	(a) glass panes 3 mm thick upto 40 sq. dm area. (b) glass panes 4 mm thick, exceeding 40 sq. dm areas. Extra for providing and fixing steel beading of approved shape and section with screws instead of glazing clips and metal sash pulley. (a) for doors (b) for windows	Sqm	5.55	115.40
18.32	Wire gauze of 140 G or 120 G designation fixed on steel windows of standard rolled steel section with 3 mm thick flat iron cover moulding of 12.5 mm width, fixed with machine screws welded complete in all respects.	-do-	4.30	19.10
18.33	Providing and fixing hard drawn steel wire fabric 75 mm x 25 mm rectangular mesh with 3.25 mm dia wire fixed on steel windows of standard rolled section with 3 mm thick flat iron cover moulding of 12.5 mm width fixed with machine screws welded complete in all respects.	-do-	29.20	99.10
18.34	Pressed steel sheet frames (chowkats) consisting of 2 mm thick steel sheet of the specified section, including iron lugs (hold fasts) iron hinges, conforming to P.W.D. specifications, including bolts for fixing stops, catches, provision for receiving lower lockitch, and finished with one coat of ready-mixed paint red lead non-scuffing primer, of approved quality, fixed in position including the cost of cement concrete 1:3:6 for filling in the frame, and cement concrete 1:3:6 for lugs complete :-	-do-	22.60	104.10
	(K) Steel Chowkats	-do-		
	(a) door and window frame of size 89 mm x 50 mm with 40 mm wide single rebate.	Metre	2.20	71.55
	(b) door and window frame of size 76 mm x 38 mm with 35 mm wide single rebate.	-do-	2.20	58.60
	(c) door and window frame size 127 mm x 50 mm with 40 mm wide double rebate.	-do-	2.20	76.80
	(d) door and window frame of size 114 mm x 50 mm with 35 mm wide double rebate.	-do-	2.20	69.75
	(e) back plaster (back rebate) for receiving 12 mm thick plaster.	-do-	3.30	--

Note
The centre will be in any door & window frame will be counted and paid one and a half (1.5) times of outer section for its clear length.

(Note below item No. 18.34 inserted vide A & C slip No. 19 dated 24-11-1999)

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
18.35	Providing and fixing M.S. angle and T-iron frames for door, window and ventilator including iron hold fast, butt hinges of I.S.I. mark fixed in position with machine screws and duly welded including all other suitable locking arrangements provided and yielded with the frame and making holes and fixing glazing clips in the frame, filling the welds and finished with a coat of red lead non setting primer complete in all respects.	Quintal	120.00	1069.70
(1.)	Miscellaneous			
18.36	Welding by gas or by electric plant including cartage to and from workshop :-		--	0.30
	(a) by gas	Cm	--	0.25
	(b) by electric	-do-	--	
18.37	Supplying and fixing fan clamps with 50 mm x 6 mm flat iron 50 cm long and U-hooks of 16 mm diameter M.S. bars, of approved size with nuts including threading, etc. complete.	Each	7.30	27.55
18.38	Providing an fixing fan hooks 80 cm long, of required shape and size :	-do-	2.65	13.40
	(a) 16 mm dia	-do-	1.50	7.30
18.39	M.S. Angle iron nozing of specified section including cutting to size, welding of M.S. bars for embedding in flooring and steps etc. fixed in position complete.	Quintal	143.85	979.25
18.40	(a) Providing and fixing M.S. round or square bars, at required spacing in wooden frames of windows and storey windows.	Kg.	0.65	9.10
	(b) Providing and fixing M.S. round, or square bars, with M.S. flats, at required spacing, in wooden frames of windows.	-do-	1.05	9.80
18.41	Providing steel pipe I.S.I. mark in columns with 2 Nos. M.S. plates welded on both ends of the pipe including cutting etc; complete fixed in position.	Quintal	107.20	1205.35

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CHAPTER NO. 19

LINING

NOTES :

- (1) The cost of water is not included in the following rates, except item Nos. 19.25, 19.27 and 19.28, and the same shall be supplied by the department, free of cost.
- (ii) The rates for item Nos. 19.1 to 19.6 include the cost of fine dressing to exact level, watering and preparing subgrade. All basket earth work, to be paid extra, at the rates for tip cutting.
- (iii) Note No. 11 of chapter 10 'Concrete' will also be applicable to the items of concrete lining of this Chapter.
- (iv) The contractor shall arrange bailing out water in the bed, accumulated due to rains. The pumping out of water caused by springs, sub-soil water, canal or river seepage and broken water mains, or drains, for which the contractor is not responsible, shall be arranged by the department, and the cost for the same is not included in the rate.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
19.1	Dressing bed and preparation of sub-grade for lining.	Sqm.	0.65	--
19.2	Dressing side slopes and preparation of sub-grade for lining.	--	0.97	--
19.3	Dressing bed and preparation of sub-grade for lining in earth work, with admixture of single or kanjar.	--	0.93	--
	(a) upto 40 percent	-do-	0.93	--
	(b) above 40 percent	-do-	1.19	--
19.4	Dressing side slopes and preparation of sub-grade for lining in earthwork, with admixture of kanjar.	--	1.19	--
	(a) upto 40 percent	-do-	0.93	--
	(b) above 40 percent	-do-	1.57	--
19.5	Dressing bed and preparation of sub-grade for lining in mixed gravel and conglomerate reaches.	--	1.74	--
19.6	Dressing single slopes and preparation of sub-grade for lining in mixed gravel and conglomerate reaches.	--	2.01	--
19.7	Double layer tile lining for irrigation channels, consisting of- (i) 10mm thick cement mortar 1:5 in sub-grade. (ii) First layer of 5.08 cm thick tile 30.48 cm x 15.24 cm laid in 1:5 cement mortar as mentioned above. (iii) Sand-wiched plaster 1:3 cement mortar 15 mm thick. (iv) Second layer of tiles, laid in 1:3 cement mortar, with 6 mm thick layer of mortar, over sand-wiched plaster. (v) in bed (vi) on side slopes-	-do-	8.35	65.50

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
19.8	(a) upto 3.50 m height above bed level (b) above 3.50 m but upto 5.50 m height (c) above 5.50 m, but upto 7.50 m height	Sqm	11.05	68.15
	Single layer tile lining in bed only, consisting of-			
	(i) 10 mm thick cement mortar 1:5 on sub-grade.			
	(ii) First layer of 5.08 cm thick tiled, 30.48 cm x 15.24 cm, laid in 1:5 mortar,			
	(iii) 20 mm thick cement plaster 1:3 proportionally rendered and finished.			
19.9	Cement concrete lining 15 cm thick or less, for irrigation channels, using cement concrete 1:3:6 -			
	(a) concrete lining in bed	Cum	70.85	522.80
	(b) concrete lining on side slopes, for vertical height upto 3.50 m.	-do-	74.45	526.40
	(c) concrete lining on side slopes, for vertical height above 3.50 m, but upto 5.50 m.	-do-	83.25	535.20
	(d) concrete lining on side slopes for vertical height, above 5.50 m, but upto 7.50 m.	-do-	92.05	544.00
19.10	Excavating conglomerate for drains and bed sleepers, under the lining.	-do-	69.90	--
19.11	Making dry brick drains, behind lining, 7.5 cm brick around.	Metre	1.70	--
19.12	Pulling 1:3 cement sand slurry, 6 mm thick on prepared bed and side slopes, before laying concrete, on bed and side slopes.	Sqm.	0.27	5.10
19.13	Curing lining for 28 days :-	-do-	0.44	0.67
	(a) in bed	-do-	1.65	2.30
	(b) on side slopes	-do-	0.07	1.05
19.14	Extra allowance for providing templates in curved portion of lining;	Sqm of curved surface	0.07	1.05
19.15	Extra allowance for form work in concrete lining -	Cum	6.85	16.20
	(a) in bed	-do-	8.35	17.65
	(b) on side slopes	-do-	0.07	1.58
19.16	Extra allowance for scaffolding, in tile and concrete lining, for side slopes only.	Sqm.	0.10	0.35
19.17	Filling expansion joints, with special impervious hot pour, 12 mm wide.	Per metre per cm depth.		

(i) 10 mm thick cement mortar 1:5 on sub-grade.
 (ii) First layer of 5.08 cm thick tiled, 30.48 cm x 15.24 cm, laid in 1:5 mortar, mentioned above.
 (iii) 20 mm thick cement plaster 1:3 proportionally rendered and finished.

Note:-
The rates for item No. 19.16 are payable on area of side slopes only.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
19.18	Bending and fixing iron rings in lined slopes.	Each	3.75	69.45
19.19	Making temporary perforated French drain on top of coping of lining for curing, consisting of two tiles, laid on edge, in 1:7 mortar on each side of the drain.	Metre	0.78	7.10
19.20	Dismantling perforated French drain on top of lining.	-do-	0.55	--
19.21	Collecting katalas and brick-bats, from bed, including stacking of collected material, out side the canal. <i>Note:-</i> The rates for Item Nos. 19.19 and 19.20 are included in the rates of Item No. 19.13, for curing, and are not payable in addition. These rates are payable only when curing is done departmentally, and the work of French drain is got done through contractor.	Cum		
19.22	Cement pointing 1:2 on the lining - (a) in bed (b) on side slopes <i>Note:-</i> The work of Item No. 19.22 is to be done and paid for only when specially permitted, by the Superintending Engineer.	Sqm.	2.80	4.45
19.23	Earthwork for lip-cutting for lining of irrigation channels, inclusive of all allowances, lead and dressing - (a) 0 to 1.50 depth. (b) depth exceeding 1.50m but upto 3.00m (c) depth exceeding 3.00m but upto 4.50m (d) depth exceeding 4.50m but upto 6.00m (e) depth exceeding 6.00m but upto 7.50m <i>Note:-</i> (i) The depth in Item No. 19.23 is to be measured vertically. (ii) The rates for lip cutting are payable for the entire depth, including the bottom curve.	-do-	3.15	4.85
19.24	Double layer tile lining for water storage tanks as per specifications of Item No. 19.7 but including cost of dressing of sub-grade scaffolding and curing etc., complete in all respects - (a) in bed (b) on side slopes.	Sqm.	11.90	75.00
		Cum	10.00	--
		-do-	10.45	--
		-do-	11.35	--
		-do-	12.75	--
		-do-	14.10	--

Same rates as for carriage of materials by manual labour plus Rs. 1.00 per cum for collecting the scattered material.

Note:- In Item No. 19.21, lift shall be converted into horizontal lead, as laid down in Note (i) of Chapter No. 6

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
19.25	Lining of water storage tanks with 5 cm thick cement concrete 1:3:6 using stone aggregates 20 mm nominal size laid over 7.5 cm thick layer of cement concrete 1:6:12 using brick ballast 40 mm nominal size including dressing of sub-grade, curing form work and scaffolding etc. complete in all respects-	Sqm	10.65	54.85
19.26	Double layer tile lining for water storage tanks, consisting of - (a) concrete lining in bed (b) concrete lining on side slopes	Sqm	12.25	58.35
19.27	Lining of water storage tanks, with 5 cm thick cement concrete 1:3:6 using stone aggregates 20 mm nominal size, laid over 7.5 cm thick layer of cement lime sand concrete 1:2:9:24, (0.041 cum cement, 0.082 cum ground hydrated lime, 0.37 cum sand and 1.00 cum stone aggregate, 20 mm nominal size) including dressing sub-grade, curing, form work and scaffolding, etc. complete in all respects - (a) in bed (b) on side slopes	Sqm	14.90	86.60
19.28	Lining of water storage tanks, with 5 cm thick cement concrete 1:3:6 using stone aggregates 20 mm nominal size laid over 7.5 cm thick layer of cement lime sand concrete 1:2:9:24, (0.041 cum cement, 0.082 cum ground hydrated lime, 0.37 cum sand and 1.00 cum brick ballast, 40 mm nominal size) including dressing of sub-grade, curing, form work and scaffolding etc. complete in all respects - (a) concrete lining in bed (b) concrete lining on side slopes	Sqm	11.05	56.35
		-do-	12.65	59.85
		-do-	10.75	53.65
		-do-	12.35	57.20

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
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19.29	Double layer brick lining for water storage tanks consisting of :- (i) 10 mm thick cement mortar 1:5 in sub grade. (ii) First layer of 6.83 cm thick brick of 22.86cm x 11.11cm size laid in 1:5 cement mortar as mentioned above. (iii) Sand-wiched plaster 1:3 cement mortar 12 mm thick. (iv) Second layer of brick laid in 1:3 cement mortar with 6 mm thick layer of 1:3 cement mortar over sand wiched plaster, including cost of dressing sub grade, scaffolding and curing etc, complete in all respects. (a) In bed (b) On side slopes	Sq. metre	14.90	18.15
	(Item No. 19.29 added vide A & C slip No. 11 dated 7-9-93)			83.00
				88.20

19.30 Single layer brick lining for irrigation channels for discharge upto 150 cusecs, consisting of:

- (i) 10 mm thick cement plaster 1:6 on sub grade.
- (ii) 10 mm thick cement plaster 1:3 over first plaster.
- (iii) First layer of 68.3 mm thick brick layer (228.6x111.1 mm) laid in 1:3 mortar over 6mm thick 1:3 cement mortar.

(Total thickness of lining as 94.3 mm)
A. In Bed
B. On side slopes

19.31 Single layer brick lining for irrigation channels for discharge upto 150 to 1000 cusecs, consisting of:

- (i) 10 mm thick cement plaster 1:6 on sub grade.
- (ii) 12 mm thick cement plaster 1:3 over first plaster.
- (iii) First layer of 68.3 mm thick brick layer (228.6x111.1 mm) laid in 1:3 mortar over 6mm thick 1:3 cement mortar.

(Total thickness of lining as 94.3 mm)
A. In Bed
B. On side slopes

19.32 Single layer brick lining for irrigation channels for discharge above 1000 cusecs, consisting of:

Sqm	7.60	45.95
-do-	9.65	49.00

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
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i)	10 mm thick cement plaster 1 : 6 on sub grade.			
ii)	16 mm thick cement plaster 1 : 3 over first plaster.			
iii)	First layer of 68.3 mm thick brick layer (228.6 x 111.1 mm) laid in 1 : 3 mortar over 6mm thick 1 : 3 cement mortar.			
	(Total thickness of lining as 94.3 mm)			
A.	In Bed	Sqm	7.60	48.85
B.	On side slops	-do-	9.65	50.90

(Item No. 19.30 to 19.32 inserted vide A & C slip No.21 dated 21/5/2003)

CHAPTER NO. 20

OUTLETS

NOTES :

- (i) The terms 'discharge' wherever used in this chapter means, designed full supply discharge of the parent channel, opposite outlet.
 (ii) The rate of constructing, watching and removing bunds in running water, includes the cost of bags.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
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20.1	Earth work for outlets -			
(a)	Earth work for dismantling or constructing new pipe or barrel type outlets (including excavation, refilling, consolidation and dressing) :-			
(i)	channel discharge upto 1.5 cum per second,	Job.	33.45	
(ii)	channel discharge exceeding 1.5 cum/s but upto 3 cum/s	-do-	53.30	
(iii)	channel discharge, exceeding 3 cum/s but upto 6 cum/s.	-do-	83.50	
(iv)	channel discharge exceeding 6 cum/s but upto 10 cum/s.	-do-	132.00	
<i>Channels with discharge over 10 cum/s are classified as branches, and, therefore, their payment should be based on actual measurements.</i>				
(b)	Earth work, involved in dismantling open flume, A.P.M. or O.S.M. type outlets (including excavation, refilling, consolidation and dressing) -			
(i)	with 'H' upto 0.6 m	-do-	33.45	
(ii)	with 'H' more than 0.6m but upto 0.90 m	-do-	83.50	
(iii)	with 'H' more than 0.9m, but upto 1.10m	-do-	132.00	
(c)	Earth work, involved in dismantling gullet walls of outlets, for adjusting 'Y' or A.P.M. or 'B' of open flume outlets-			
(i)	with 'H' upto 0.6 m	-do-	10.00	
(ii)	with 'H' more than 0.6m but upto 0.9 m	-do-	31.15	
(iii)	with 'H' more than 0.9m, but upto 1.10m	-do-	49.85	
(d)	Earth work, involved in constructing new O.F., A.P.M. or O.S.M. type outlets-			
(i)	with 'H' upto 0.6 m	-do-	99.75	
(ii)	with 'H' more than 0.6m but upto 0.9 m	-do-	193.20	
(iii)	with 'H' more than 0.9m, but upto 1.10m	-do-	286.70	
<i>Outlets with 'H' more than 1.10m, will usually be located in main canal and branches. Payment for these should be based on actual measurements.</i>				

Serial No. Description Unit Labour Rate (Rs.) Through Rate (Rs.)

20.2	(iii) In case of dismantling, all earth work borrowed from outside for making up the deficiency in bank, if any, will be paid for separately in addition to above rate.		
	(iii) The job rates, given above, include all operations for excavation, refilling and watering in layers consolidation and dressing.		
	Dismantling outlets including removal of dismantled material, involving lead upto 100 metres -		
	(a) pipe or barrel type outlets -	Each	31.15
	(i) channel discharge upto 1.5 cum/s, but upto 3 cum/s.	-do-	41.55
	(iii) channel discharge above 3 cum/s, but upto 6 cum/s.	-do-	46.75
	(iv) channel discharge above 6 cum/s, but upto 10 cum/s.	-do-	49.85
	(b) Dismantling O.F., A.P.M., or O.S.M. type outlets, consisting of total dismantling i.e. R.C. concrete slab and cement masonry -	Job	174.50
	(i) with 'H' upto 0.6 m.	-do-	336.60
	(ii) with 'H' more than 0.6 m, but upto 0.9 m.	-do-	498.65
	(iii) with 'H' more than 0.9m, but upto 1.10m.	-do-	
	(c) Dismantling O.F., A.P.M., or O.S.M. type outlets, involving dismantling of cement masonry and removing of pre-cast R.C. concrete slab -	-do-	124.65
	(i) with 'H' upto 0.6 m.	-do-	268.00
	(ii) with 'H' more than 0.6 m, but upto 0.9 m.	-do-	411.40
	(iii) with 'H' more than 0.9m, but upto 1.10m.	-do-	
	(d) Dismantling tail cluster bifurcation -	-do-	299.20
	(i) Complete dismantling including concrete and masonry.	-do-	218.15
	(ii) cement masonry only.	-do-	417.60
	(e) Dismantling tail cluster bifurcation -	-do-	299.20
	(i) complete dismantling concrete as well as masonry.	-do-	542.30
	(ii) cement masonry only.	-do-	392.70
20.3	Making temporary A.P.M. block and fixing at site -		
	(a) in case of new outlets, where no dismantling and reconstructing of gutter walls is involved.	-do-	22.15
49.70			

Serial No.	Description	Unit	Labour Through	Rate (Rs.)	Rate (Rs.)
	(b) extra for dismantling and reconstructing gullet walls where temporary A.P.M. block is to be fixed, on an existing outlet without change in width of gullet, i.e. 'B' with upto 0.6 m	Job.	29.10	87.80	
	(ii) 'H' more than 0.6 m, but upto 0.9 m	-do-	42.85	145.50	
	(iii) 'H' more than 0.9 m, but upto 1.10 m	-do-	61.05	196.30	
	(c) extra over item No. 20.3 (a) in case of old outlets, where dismantling and reconstructing of gullet wall is involved, including change in width of gullet, i.e. 'B' of the outlet upto 30 mm-				
	(i) 'H' upto 0.6 m	-do-	41.65	137.15	
	(ii) 'H' more than 0.6 m, but upto 0.9 m	-do-	71.55	264.70	
	(iii) 'H' more than 0.9 m, but upto 1.10 m, Adjusting A.P.M. to the correct 'Y' and fixing in position -	-do-	106.65	388.55	
20.4	(a) in case of new outlet, where no dismantling and reconstructing of gullet walls is involved.				
	(b) extra over item No. 20.4(a) in case of old outlets, where dismantling and reconstructing of gullet walls is involved without change in width of gullet i.e., 'B' of the outlet.	-do-	5.00		
	(c) extra over item No. 20.4 (a) in case of old outlets, where dismantling and reconstructing of gullet wall is involved, including change in width of gullet, i.e. 'B' of the outlet upto 30 mm-	-do-			Same rates as for item No. 20.3 (c)
20.5	Adjusting check plates of open flume outlets to the correct 'B' and fixing at site, flush with the gullet walls-				
	(ii) in case of new outlet, where no dismantling and reconstructing of gullet walls is involved.				
	(b) extra over item No. 20.5(a) in case of old outlets, where dismantling and reconstructing of gullet walls is involved without change in width of gullet walls i.e. 'B' of the outlet.	-do-	5.00		Same rate as for item No. 20.3(b)
	(c) extra over item No. 20.5 (a) in case of existing outlets, where dismantling and reconstructing side walls is involved including change of 'B' upto 30 mm-	-do-			
	(i) with 'H' upto 0.6 m	-do-	46.00	148.65	
	(ii) with 'H' more than 0.6 m, but upto 0.9 m.	-do-	87.35	321.30	
	(iii) with 'H' more than 0.9m, but upto 1.10m.	-do-	126.95	476.50	
Notes:	(i) in case change in 'B' is more than 30 mm				
	current approval shall have to be discontinued				
	let considerably and, therefore, payments				
	may be made on the basis of actual meters				

reverts.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
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(ii) Rates for adjusting 'B' of an open flume outlet, without check plates, will be the same as for Item No. 20.5(c-i) in 20.5 (c-iii) as the case may be

20.6 Extra over Item Nos. 20.3, 20.4 and 20.5 as the case may be for adjusting of crest levels of O.F. and A.P.M. outlets, with 1:2:4 cement concrete, when lowering of the crest level is involved-

(a) 'H' upto 0.6 m
 (b) 'H' more than 0.6 m, but upto 0.9 m
 (c) 'H' more than 0.9 m, but upto 1.10 m

20.7 Extra over Item Nos. 20.3, 20.4 and 20.5 as the case may be, for adjusting of crest level of O.F., A.P.M. outlets, with 1:2:4 cement concrete, when raising of the crest level is involved-

(a) 'H' upto 0.6 m
 (b) 'H' more than 0.6 m, but upto 0.9 m
 (c) 'H' more than 0.9 m, but upto 1.10 m

20.8 Constructing, watching, and removing bound in running water outlets-

(a) for adjusting 'B', 'V', or crest level of the O.F. and A.P.M. types-
 (i) for channels with designed F.S. depth upto 0.6 m
 (ii) for channels with designed F.S. depth above 0.6 m, but upto 0.9 m
 (iii) for channels with designed F.S. depth above 0.9 m, but upto 1.10 m
 (b) for constructing complete O.F. or A.P.M. outlets in running water -
 (i) for channels with designed F.S. depth upto 0.6 m
 (ii) for channels with designed F.S. depth above 0.6 m, but upto 0.9 m
 (iii) for channels with designed F.S. depth above 0.9 m, but upto 1.10 m
 (c) for dismantling, or constructing pipe outlets -
 (i) for channels with designed F.S. depth upto 0.6 m
 (ii) for channels with designed F.S. depth above 0.6 m, but upto 0.9 m
 (iii) for channels with designed F.S. depth above 0.9 m, but upto 1.10 m

29.55	Job.	21.90		
44.35		32.85		
59.15		43.80		
24.10		16.40		
33.40		21.90		
48.20		32.85		
123.40		63.40		
228.00		112.70		
378.00		189.00		
275.00		131.00		
381.00		153.00		
630.00		294.00		
123.40		63.40		
157.40		74.90		
219.00		113.75		
64.90	Per outlet	20.00		

21.9 Adjusting 'B' of tail cluster by dismantling and rebuilding throat walls.
 Extra labour for dressing bricks on O.F. and A.P.M. type outlets -

21.10

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
	(a) 'H' upto 0.6 m	Per outlet	30.00	--
	(b) 'H' more than 0.6 m, but upto 0.9 m	-do-	60.00	--
	(c) 'H' more than 0.9 m, but upto 1.10 m	-do-	95.00	--
20.11	Repairing damaged reducing collar of home pipe outlets.	-do-	21.90	27.60
20.12	Laying iron pipes for outlets, upto 150 mm diameter.	-do-		
20.13	Laying reinforced cement concrete pipes for outlets and culverts, including joining ends, and fixing collar with cement mortar 1:2.	Metre	1.50	--
	(a) upto 150 mm inside diameter.	-do-	3.00	4.40
	(b) above 150 mm but upto 300 mm inside diameter.	-do-	6.40	9.10
	(c) above 300 mm, but upto 600 mm inside diameter.	-do-	12.00	17.80
	(d) above 600 mm but upto 900 mm inside diameter.	-do-	23.95	33.70
<p>Note:- The through rates for Item No. 20.13 are applicable when the joints are plugged with cement mortar 1:2.</p>				
20.14	Hosing and placing precast R.C. concrete slabs, or stones, in position on outlets or W.C. culverts.	per outlet or culvert.	10.00	--

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**CHAPTER NO. 21
PILE FOUNDATIONS**

NOTES :

(1) The rates given in this chapter are for the purpose of estimating only and not for letting out works on these rates. The work of piles shall be got done on rates to be determined, after inviting tenders.

(ii) In case any other designed richer mix of concrete is used in piles, the difference of the rate of that designed mix as shown in the below noted items and to be actually used shall be considered extra while preparing the estimates on the basis of difference of the rates from item No. 10.66 to 10.69 of chapter No. 10 "Concrete" for the total quantity of concrete involved in the work.

Serial No.	Description	Unit	Through Rate (Rs.)
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21.1 Under Reamed Piles with Bulb

- (i) Providing under reamed cast in situ piles using controlled concrete grade M-20 designed mix, 3.5 m deep including boring and getting out the soil and disposal upto a lead of 100 m including cost of steel reinforcement joining the ties with main bars with welding and also all T & P complete in all respects :-
- (a) 200 mm dia under reamed piles
 - (b) 250 mm dia under reamed piles
 - (c) 300 mm dia under reamed piles
 - (d) 375 mm dia under reamed piles
 - (e) 400 to 550 mm dia under reamed piles

- (ii) Extra for additional under reaming inside the bore holes for under reamed piles :-
- (a) 200 mm dia under reamed piles
 - (b) 250 mm dia under reamed piles
 - (c) 300 mm dia under reamed piles
 - (d) 375 mm dia under reamed piles
 - (e) 400 to 550 mm dia under reamed piles

- (iii) Extra for every additional 1 metre length of pile, over the length mentioned in Item No.21.1(i) :-
- (a) 200 mm dia
 - (b) 250 mm dia
 - (c) 300 mm dia
 - (d) 375 mm dia
 - (e) 400 to 550 mm dia

- (iv) Deduct for every 1 metre less length of pile below the length mentioned in Item No.21.1 (i) above :-
- (a) 200 mm dia
 - (b) 250 mm dia
 - (c) 300 mm dia
 - (d) 375 mm dia
 - (e) 400 to 550 mm dia

- (a) 200 mm dia
- (b) 250 mm dia
- (c) 300 mm dia
- (d) 375 mm dia
- (e) 400 to 550 mm dia

Serial	Description	Unit	Through	No.
	(v) Carrying out the initial loading test for under reamed piles.	Each	3000.00	
	(vi) Carrying out routine loading test for under reamed piles.	-do-	1500.00	
	(vii) Extra for bentonite slurry to be used under water conditions of the cost of pile as per item No.21.1 to 21.4 only.		25%	
21.2	Driven Piles			
	(i) Mobilisation of equipment for driving piles, pile driving rig to site assembly, dismantling and returning back, with leads to and for 40 km.	Job.	1,25,000.00	
	(ii) Constructing vertical cast in situ or precast R.C.C. driven piles using controlled concrete grade M-20 designed mixed 12 metre length from cut-off level including allowance for cut-off length 1.5 metre in all respect :-			
	(a) 400 mm dia	Each	4600.00	
	(b) 430 mm dia	-do-	4800.00	
	(c) 450 mm dia	-do-	4950.00	
	(iii) Extra for every additional 1 metre length of pile over the length mentioned in item No.21.2(ii) above:			
	(a) 400 mm dia	Metre	370.00	
	(b) 430 mm dia	-do-	380.00	
	(c) 450 mm dia	-do-	390.00	
	(iv) Deduct for every 1 metre less length of pile mentioned in item No. 21.2 (ii) above :-			
	(a) 400 mm dia	-do-	300.00	
	(b) 430 mm dia	-do-	320.00	
	(c) 450 mm dia	-do-	330.00	
	(v) Constructing vertical cast in situ/precast R.C.C. driven piles using controlled concrete grade M-20 including allowance for cut-off length 1.5 metres including steel reinforcement, rings etc. complete-			
	(a) 480 mm dia	-do-	5200.00	
	(b) 500 mm dia	-do-	5350.00	
	(c) 530 mm dia	-do-	5800.00	
	(vi) Extra for every additional 1 metre length of pile over the length mentioned in item No. 21.2(v) above -			
	(a) 480 mm dia	-do-	400.00	
	(b) 500 mm dia	-do-	410.00	
	(c) 530 mm dia	-do-	420.00	
	(vii) Deduct for every 1 metre less length of pile mentioned in item No. 21.2 (v) above :-			
	(a) 480 mm dia	-do-	350.00	
	(b) 500 mm dia	-do-	360.00	

Serial No.	Description	Unit	Through Rate (Rs.)
	(c) 530 mm dia	-do-	370.00
	(viii) Testing of piles in compression as per I.S.I specifications upto 1.5 times extra vertical load (cyclic).	Each	15000.00
	(ix) Testing of piles in routine load test 1.5 times.	-do-	8000.00
21.3	Bored Piles		
	(i) Mobilisation of equipment for boring piles, piles - boring rig assembly to site.	Job	75000.00
	(ii) Constructing R.C.C. bored piles using controlled concrete grade M-20 designed mix with 17 metre length with bentonite slurry with the following outer dia (O.D.) guide pipes excluding the cost of steel reinforcement complete (steel reinforcement will be payable extra at the rates of Chapter No. 18 'Steel and iron work' :-		
	(a) 510 mm O.D. guide pipe	Each	6000.00
	(b) 760 mm O.D. guide pipe	-do-	12800.00
	(c) 840 mm O.D. guide pipe	-do-	15800.00
	(d) 914 mm O.D. guide pipe	-do-	18600.00
	(e) 1000 mm O.D. guide pipe	-do-	22400.00
	(f) 1200 mm O.D. guide pipe	-do-	29000.00
	(iii) Extra for every additional 1 metre length of pile over the length in Item No.21.4 (ii) above:-		
	(u) 510 mm O.D. guide pipe	Metre	340.00
	(b) 760 mm O.D. guide pipe	-do-	753.00
	(c) 840 mm O.D. guide pipe	-do-	920.00
	(d) 914 mm O.D. guide pipe	-do-	1100.00
	(e) 1000 mm O.D. guide pipe	-do-	1310.00
	(f) 1200 mm O.D. guide pipe	-do-	1690.00
	(iv) Deduct for every 1 metre less length of pile below the length mentioned in Item No.21.4(ii) above :-		
	(a) 510 mm O.D. guide pipe	-do-	115.00
	(b) 760 mm O.D. guide pipe	-do-	260.00
	(c) 840 mm O.D. guide pipe	-do-	310.00
	(d) 914 mm O.D. guide pipe	-do-	365.00
	(e) 1000 mm O.D. guide pipe	-do-	435.00
	(f) 1200 mm O.D. guide pipe	-do-	560.00
	(v) Testing of piles in compression as per I.S.I. Specifications upto 1.5 times extra vertical load (cyclic):-		
	(a) Up to 760 mm dia	Tonne	50.00
	(b) Beyond 760 mm dia	Each	40000.00

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CHAPTER NO. 22
WELL SINKING

NOTES :

(1) Unless otherwise specified the rates cover the cost of all tools, plants, steam hoist, dredger, puzisometer, gentry and kentledge, etc., as well as loading, unloading, of kentledge, and hauling or pumping of water, where required, including removing the excavated soil to a distance of (ii) meters.

(ii) In case of running streams or rivers, the spring level will be taken as the low water level in the stream or river.

(iii) The rates given below, also cover the cost of false masonry, and nothing is payable extra on this account.

(1V) (a) The rates of item Nos. 22.8 to 22.11 are applicable, when the spring level is upto 7.5 m below ground level. In case depth of spring level is more than 7.5 m, but upto 15 m below ground level, increase the above rates of item Nos. 22.8 to 22.11 by 50 percent. If depth of spring level is more than 15 m but upto 30 m, below ground level, increase the rates of item Nos. 22.8 to 22.11 by 100 percent.

(b) Where due to presence of boulders, the well sinking is likely to be more difficult and costly, special rates will be framed by the Superintending Engineer, keeping in view the results of trial bore.

(V) The rates of Well Sinking in this chapter are on the basis of soils Classification as contained in I.S. 1498-1970 and are grouped for providing rates of items of well sinking as under:-

Group	Sub Division	Symbol	Typical Names.	
I.	Gravels	GW	Well graded gravels, gravel-sand mixture, little or no fines.	
	Gravels	GP	Poorly graded gravels or gravel sand mixture, little or no fines.	
		GC	Clayey gravels, poorly graded gravel-sand-clay mixtures.	
II.	Gravels	CH	Inorganic clays of high plasticity, fat clays	
		GM	Silly gravels, poorly graded amount of fines)	
	Gravels with fines (Appreciable amount of fines)	GI	Silt and clays with medium compressibility and liquid limit greater than 35 and less than 50	
III	Sands	MH	Inorganic silts of high compressibility and liquid limit greater than 50	
		OH	Organic clays of medium to high plasticity.	
	Clean sands (Little or no fines)	SW	Well graded sands, little or no fines.	
		Sands	SI	Silt and clays with high compressibility and liquid limit greater than 50
				Silt and clays with medium compressibility and liquid limit greater than 35 and less than 50

Group	Sub Division	Symbol	Typical Names.	Serail No.	Description	Unit	Rate (Rs.)
Sands	IV	Sands	SP	Poorly graded sands or gravelly sands, little or no fines.	(A)	Earth work for Digging Wells	897.50
			SC	Clayey sands, poorly graded sand-clay mixtures.	22.1	Earth work for digging well in dry excavation from ground level upto the level where well kerb is placed including depositing spoil within 60 metres radius, and filling space outside the well after completion - (a) from N.S. level to 1.5 m depth, (b) exceeding 1.5 metre but upto 4.5 metres depth, (c) exceeding 4.5 metres, but upto 7.5 metres depth, (d) exceeding 7.5 metres but upto 12 metres depth.	1097.00
			CL	Inorganic clays, gravelly clays, sandy clays, sily clays, lean clays of low plasticity.			1396.00
			OL	Organic silts and organic sily clay of low plasticity.			1795.00
			SM	Silly sands, poorly graded sand silt mixtures.			
			M1	Inorganic silts, sily or clayey fine sands or clayey silts of medium plasticity.			
			ML	Inorganic silts and very fine sands rock flour, sily billy and liquid limit less than 35			
				Sils and clays with medium compressibility and liquid limit greater than 35 and less than 50			
				Sils and clays with low compressibility and liquid limit less than 35			
				Sils and clays with appreciable amount of fines)			
Sands					(B)	Dry Sinking of Wells.	12.00
					22.2	Extra over item No. 22.1 where excavation is done by picks (such as in soils, having admixture of shingle, gravel, moorum (kanhar, etc.) -	380.00
					22.3	Lowering steel well kerb in the pit and assembling in position when depth is more than 4.5 metres from ground level.	
					22.4	Dry sinking of wells in soil of GW or GP or GC or CH type-	

Serial No.	Description	Unit	Rate (Rs.)
	(a) from 4.5 metres to 7.5 metres below ground level	Cum.	46.85
	(b) exceeded 7.5 metres but upto 10.5 metres below ground level.	-do-	59.35
	(c) exceeded 10.5 metres but upto 13.5 metres below ground level.	-do-	89.55
	(d) add for every additional 3 metres depth or part thereof.	-do-	20.00
22.5	Dry sinking of wells in soil of GM or CI or MH or OH type -		
	(a) from 4.5 metres to 7.5 metres below ground level	-do-	40.40
	(b) exceeded 7.5 metres but upto 10.5 metres below ground level.	-do-	51.25
	(c) exceeded 10.5 metres but upto 13.5 metres below ground level.	-do-	78.60
	(d) add for every additional 3 metres depth or part thereof.	-do-	16.00
22.6	Dry sinking of wells in soil of SW or SF or SC or CL or OI or OL type -		
	(a) from 4.5 metres to 7.5 metres below ground level	-do-	33.00
	(b) exceeded 7.5 metres but upto 10.5 metres below ground level.	-do-	41.75
	(c) exceeded 10.5 metres but upto 13.5 metres below ground level.	-do-	61.90
	(d) add for every additional 3 metres depth or part thereof.	-do-	14.00
22.7	Dry sinking of wells in soil of SM or MI or ML type -		
	(a) from 4.5 metres to 7.5 metres below ground level	-do-	22.60
	(b) exceeded 7.5 metres but upto 10.5 metres below ground level.	-do-	29.20
	(c) exceeded 10.5 metres but upto 13.5 metres below ground level.	-do-	39.70
	(d) add for every additional 3 metres depth or part thereof.	-do-	9.00
(C)	Wet Sinking of Wells		
22.8	Wet sinking of wells in soils of GW or GP or GC or CH type -		
	(a) from spring level to 1.5 metres below spring level.	-do-	208.10
	(b) exceeded 1.5 metres but upto 3 metres below spring level.	-do-	231.35
	(c) exceeded 3 metres, but upto 6 metres below spring level.	-do-	272.55
	(d) exceeded 6 metres, but upto 9 metres below spring level.	-do-	361.10

Serial No.	Description	Unit	Rate (Rs.)
	(e) exceeding 9 metres, but upto 12 metres below spring level.	Cum	452.75
	(f) exceeding 12 metres, but upto 15 metres below spring level.	- do -	558.00
	(g) exceeding 15 metres but upto 18 metres below spring level.	- do -	656.00
	(h) add for every additional 3 metres depth or part thereof.	- do -	75.00
22.9	Well sinking of wells in soil of GM or CI or MH or OH type -		
	(a) from spring level to 1.5 metres below spring level.	- do -	163.15
	(b) exceeding 1.5 metres but upto 3 metres below spring level.	- do -	182.50
	(c) exceeding 3 metres, but upto 6 metres below spring level.	- do -	215.20
	(d) exceeding 6 metres, but upto 9 metres below spring level.	- do -	306.00
	(e) exceeding 9 metres, but upto 12 metres below spring level.	- do -	401.80
	(f) exceeding 12 metres, but upto 15 metres below spring level.	- do -	492.25
	(g) exceeding 15 metres but upto 18 metres below spring level.	- do -	584.25
	(h) add for every additional 3 metres depth or part thereof.	- do -	67.00
22.10	Well sinking of wells in soil of SW or SP or SC or CL or OI or OL type -		
	(a) from spring level to 1.5 metres below spring level.	- do -	124.65
	(b) exceeding 1.5 metres but upto 3 metres below spring level.	- do -	148.30
	(c) exceeding 3 metres, but upto 6 metres below spring level.	- do -	173.75
	(d) exceeding 6 metres, but upto 9 metres below spring level.	- do -	264.75
	(e) exceeding 9 metres, but upto 12 metres below spring level.	- do -	368.00
	(f) exceeding 12 metres, but upto 15 metres below spring level.	- do -	456.60
	(g) exceeding 15 metres but upto 18 metres below spring level.	- do -	531.70
	(h) add for every additional 3 metres depth or part thereof.	- do -	60.00
22.11	Well sinking of wells in soil of SM or MI or ML type -		
	(a) from spring level to 1.5 metres below spring level.	- do -	96.05
	(b) exceeding 1.5 metres but upto 3 metres below spring level.	- do -	104.40

Serial No.	Description	Unit	Rate (Rs.)
	(c) exceeding 3 metres, but upto 6 metres below spring level.	Cum	132.20
	(d) exceeding 6 metres, but upto 9 metres below spring level.	-do-	192.15
	(e) exceeding 9 metres, but upto 12 metres below spring level.	-do-	280.00
	(f) exceeding 12 metres, but upto 15 metres below spring level.	-do-	364.80
	(g) exceeding 15 metres but upto 18 metres below spring level.	-do-	424.00
	(h) add for every additional 3 metres depth or part thereof.	-do-	54.00
22.12	Cleaning of silt from wells, with bed level upto 15 metres, below ground level including bailing out water and dredging.	Per cum of the volume cleared inside the well	276.25

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CHAPTER NO. 23
RIVER AND CANAL PROTECTION WORKS

NOTES :

(1) The rate of item No. 23.5 for making pitchi, farash or sarkanda rolls, exclude supply of materials. This item is only to be paid if pitchi, farash and sarkanda is supplied in loose form according to item No. 23.1. When supply of this material is taken as compacted in rolls of required diameter and length, no payment over and above item No. 23.1(b) shall be made. Item No. 23.8, 23.9 and 23.10 involve the use of pitchi, farash and sarkanda, made into rolls, of 15 cm diameter, and 1.5 metres long. These rates include the cost of making rolls of pitchi farash and sarkanda. No payment for making rolls shall be made over and above the rate of these items, as given in this chapter.

(1) The through rates, of item No.23.38, include the cost of stone, at site of work, irrespective of the distance from the source. Variations in actual lead, in such cases, will be taken care of by premium/abatement over the scheduled rates. Where, however, stone is not available within the lead specified, but has to be brought from long distance, extra provision for carriage of stone shall be made in the estimates and for calculating the financial implications on tenders. This difference, however, is not payable to the contractor.

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
23.1	Cutting pitchi, farash and sarkanda, and cartage to work-site, lead 2 km, including loading and unloading :-	Cum	7.10	--
	(a) loose			
	(b) Compacted in rolls of required diameter and length.		29.65	--
23.2	Loading pitchi, farash and sarkanda in boats within 15 metres.		1.60	--
	(a) loose			
	(b) Compacted in rolls		3.60	--
23.3	Carriage of pitchi, farash and sarkanda, by boats, including loading and unloading :-			
	(a) Loose :-		3.05	--
	(i) 1 km			
	(ii) 2 km		4.70	--
	(iii) 3 km		6.10	--
	(iv) 4 km		7.30	--
	(v) 5 km		8.20	--
	(vi) subsequent km (per km)		0.70	--
	(b) Compacted :-			
	(i) 1 km		7.75	--
	(ii) 2 km		11.75	--
	(iii) 3 km		15.25	--
	(iv) 4 km		18.35	--
	(v) 5 km		20.55	--
	(vi) subsequent km (per km)		1.90	--
23.4	Unloading pitchi, farash and sarkanda, from boats, and cartage to yard, upto 1 km :-			
	(a) loose		4.40	--
	(b) compacted		10.70	--

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
23.5	Making pitchi, farash or sandanda rolls, excluding supply of materials :-			
	(a) 20 cm or 23 cm dia, and 9 m long;	Each	6.25	--
	(b) 15 cm dia, and 9 m long	-do-	4.15	--
	(c) 15 cm dia and 1.5 m long	-do-	0.50	--
<p>Note: The payment under item No. 23.5 is not to be made, in addition to those of item Nos. 23.1(h), 23.8, 23.9 and 23.10.</p>				
23.6	Making 0.75 m dia and 5.5 m long pitchi rolls for permeable spurs.	-do-	28.00	Pitchi rolls 1.5 m dia 1.5 m long.
23.7	Launching the above, and plying in position.	-do-	20.00	--
23.8	Pitchi, farash or sarkanda pitchi, on slope with rolls, 15 cm dia, and 1.5 m long including supply of pitchi, involving carriage within 2 km and labour for making rolls.	Sq. m	25.60	--
<p>Note: For above item pitchi shall be of 15 cm dia, layers of pitchi, laid as a header, and 1.5 m in length alternating with 15 cm covering of earth for consolidation, including pgs and tying with wire (wire is to be supplied by the department free of cost).</p>				
23.9	Extra for carriage, beyond 2 km of pitchi rolls, 15 cm dia and 1.5 m long (vide item No. 23.8) -			
23.10	(b) subsequest km (per km) Pitchi, farash or sarkanda pitchi (1 m depth)	-do-	--	1.40
	(a) area of mattress upto 200 sqm. floating after unrolling:-	-do-	2.30	--
	(b) area of mattress exceeding 200 sq. m. but upto 250 sq. m.	-do-	3.20	--
	(c) area of mattress above 250 sq. m.	-do-	3.60	--
23.15	Laying kahi mattress, lead upto 2 km.	-do-	8.30	--
23.16	Special kahi revemint double, lead upto 2 km.	-do-	15.60	--
23.17	Each pitchi with average thickness of 30 cm (joins to be broken).	-do-	7.50	--
23.18	Each pitchi (done with sill clearance and herm dressing) with thickness of 30 cm (joins to be broken).	-do-	7.10	--

80% of rates of item No. 23.8 and 23.9.

Sq m of pitch- ing surface

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
23.19	Fixing-floating spurs, in channels, with material from canal-plantation, within 2 km.	Each	0.14	
	(a) F.S. depth upto 0.5 m			
	(b) F.S. depth exceeding 0.5 m but upto 1.0 m.		0.28	
	(c) F.S. depth exceeding 1.0 m but upto 1.25 m.		0.47	
	(d) Above 1.25 m F.S. depth.		0.60	
23.20	Stacking and bushing with canal plantation within 1 km -			
	(a) (i) pegs 1 m long, 5 cm dia	100 Nos.	20.80	
	(ii) driving pegs 1 m long 5 cm dia		12.50	
	(iii) waiting brush-wood between stakes and interwinning.	Metre of one row	0.35	
	(b) (i) pegs 1.25 m long, 7.5 cm dia, sharpened at one end.	100 Nos.	22.00	
	(ii) driving pegs 1.25 m long 7.5 cm dia.		16.60	
	(iii) waiting brush-wood between stakes and interwinning.	Metre of one row	0.35	
	(c) (i) pegs 1.5 m long, 7.5 cm dia, sharpened at one end.	100 Nos.	23.00	
	(ii) driving pegs 1.5 m long 7.5 cm dia.		17.80	
	(iii) waiting brush-wood between stakes and interwinning.	Metre of one row	0.40	
	(d) (i) pegs 2 m long, 7.5 cm dia, sharpened at one end.	100 Nos.	32.80	
	(ii) driving pegs 2 m long 7.5 cm dia.		22.20	
	(iii) waiting brush-wood between stakes and interwinning.	Metre of one row	0.55	
23.21	Filling brush wood only	Cum	2.00	
23.22	Filling cement bags with sand or earth, and sewing, including cost of strings.	Each	0.30	
23.23	Loading cement bags filled with sand or earth, into trucks or boats, with in 3 chains lead (per chain of 30 metres)		0.40	
23.24	Carriage of sand, filled in bags, by boats -			
	(a) 1st chain of 30 metres	100 Nos.	2.35	
	(b) 2nd to 4th chain (per chain of 30 metres).		1.40	
	(c) 5th and subsequent chains (per chain of 30 metres)		0.95	
23.25	Unloading from boats, bags filled with sand and -			
	(a) placing in dry.	-do-	31.20	
	(b) placing in water	-do-	62.30	

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
23.26	Filling cement bags with sand, sewing and laying in position within 30 metres, in dry, including cost of strings.	Each	0.60	--
23.27	Filling cement bags with sand, sewing and laying in position within 30 metres in water, including cost of strings.	-do-	0.90	--
23.28	Sewing empty cement bags into sheets.	100 Nos.	19.00	--
23.29	Weaving wire-netting for wire crates, including binding sides, and partition to make crate of 15cm x 15cm, or 25cm x 7.5cm mesh.	Sq. m	3.50	--
23.30	Filling brick-bats in crates, and hand packing	Cum	5.90	--
23.31	Filling bricks in crates and hand packing	-do-	11.10	--
23.32	Filling stones or spalls into crates, and hand packing.	-do-	15.35	--
23.33	Tipping wire crates including equipment.	-do-	11.10	--
23.34	Opening out old wire crates, and remarking after filling.	Sq. m	1.30	--
23.35	Labour for dismantling existing portion of old protection work including cutting old cranes and stacking old stones for re-use.	Cum	13.20	--
23.36	Filling spaces and foundations with old stones, obtained from dismantling, including labour for dismantling.	-do-	29.90	--
23.37	Spreading wire crates over pitching connecting with side protective walls, inclusive of wire etc.	Sq m	3.20	--
23.38	Wire crates 1.20m x 1.20m from all directions of G.I. Wire, filled with boulders with square-cut faces, against the wire.	-do-	27.90	166.70
(a)	4.00mm dia G.I. Wire 25cm x 7.5cm mesh (diagonal wise)	Cum	27.90	285.70
(b)	4.00mm dia, G.I. Wire 15cm x 15cm mesh (diagonal wise)	-do-	27.90	215.70
(c)	4.75mm dia, G.I. wire, 25cm x 7.5cm mesh (diagonal wise)	-do-	27.90	367.65
(d)	4.75mm dia, G.I. wire, 15cm x 15cm mesh (diagonal wise)	-do-	27.90	271.00
(e)	3.25mm dia, G.I. wire, 25cm x 7.5cm mesh (diagonal wise)	-do-	27.90	211.50
(f)	3.25mm dia, G.I. wire, 15cm x 15cm mesh (diagonal wise)	-do-	27.90	166.70
23.39	Dumping stone	-do-	8.00	--
23.40	Extra for anchoring boat for dumping in position.	-do-	1.15	--
23.41	Dismantling brush-wood boulder bund.	-do-	22.20	--
23.42	Stone or kankar block pitching-	-do-	27.20	--
(a)	horizontal	-do-	27.20	--
(b)	on slopes of guide banks and protection works.	-do-	35.60	--

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
23.43	Stone pitching, top coping only;	Cum	56.50	--
23.44	Filling stone or spalls-	-do-	8.00	--
	(a) on level	-do-	8.80	--
23.45	Grouting stone filling or pitching-	-do-	3.60	--
	(a) with half or shingle	Sqm	6.00	--
	(b) with mortar	-do-	2.80	--
23.46	Grouting masonry joints, of floors, including finishing -	-do-	1.80	--
	(a) when stones are upto 23 cm square	-do-	0.45	--
	(b) when stones are more than 23 cm square	-do-		--
23.47	Sand grouting stone apron, with high pressure hose.	-do-		--

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CHAPTER NO. 24
ROAD WORK

NOTES :

- (1) Two classes of labour rates have been provided :
- (a) With only running charge of Road Roller as applicable for State Govt. budgeted work.
- (b) With hire and running charges of Road Roller applicable for Central and works under other heads.
- (ii) (a) The rates of items, in this chapter, include the cost of water.
- (b) - In case the water is taken free of cost at the source of water then reduce the rate of item Nos. 24.3 to 24.5 and 24.7 at Rs. 0.35 per cu m and for item Nos. 24.8 to 24.10 at Rs. 0.80 per cu. m.
- (iii) Unless specified to the contrary, the labour rates for various items of construction include handling of materials within 100 meters. Through rates include all rehandling of materials, at the site of work, and no payment is due to the contractors on this account.
- (iv) The labour rates of item Nos. 24.24, 24.25 and 24.26 do not include the extra cartage from dumping place to site of work. If extra cartage of pre-coated aggregate is involved the same will be payable as per rates of ball given in item No. 5.2 of Chapter No. 5 including loading unloading and stacking as per Chapter No. 4.

Serial No.	Description	Unit	Labour Rate (a)	Labour Rate (b)	Through Rate
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24.1	Preparation of sub grade including trenching, rough dressing of spoil, final dressing of earth, to given levels and camber, watering, rolling with road roller, and compacting the bed.	100 Sq m.	83.00	92.45	--
(B)	Sub base and soling coat.				
24.2	Laying inverted choke (Screening type 'B') from stacks and spreading to templates and rolling it with Road roller in proper camber.	Cu m	8.35	8.75	--
24.3	Laying and consolidation of lime treated stabilized soil sub-base, with admixture of any percentage of lime, by weight of soil, including digging earth, pulverization, leveling and watering of soil stacks, and wet mixing, manually or by tractor, with disc-harrow including pouring of soil mixture, and spreading to camber, including rolling and curing, complete with all other allowances but excluding the cost of lime.	-do-	17.40	19.45	--
24.4	Laying and consolidation of stabilized soil sub-base or wearing course, with admixture of any percentage of lime by weight including 10 to 50 percent brick ballast including digging of earth, stacking of soil, pulverization, dry mixing leveling and watering, wet mixing of soil, lime and brick				

Serial No. Description Unit Labour Rate (a) (b) Through Rate

24.5	(ii) Laying brick soling to an approved, bond, with brick-on-end edging, on approved sub-grade, filling joints with sand and earth, spreading 25mm thick layer of earth over brick soling, watering and rolling the same with road roller but excluding the cost of preparing sub-grade.	-do-	22.10	25.15	18.25	20.75	Cum	Laying and consolidation of soling cost of pit gravel with 5 to 15 percent good earth with admixture of any percentage of lime by weight, including digging of earth, stacking of soil, including dry mixing, manually or by tractor with disc-harrow and pouring and bringing to camber, rolling with road roller, including curing with water, complete all operations but excluding the cost of pit gravel and lime.
24.6	(b) Laying brick on end edging lengthwise 22.86 cm deep and 6.53 cm wide including excavation of earth and rolling the excavated soil and compacting along brick edging complete in all respect with other than brick soling.	-do-	16.85	17.65				Laying and consolidation of stone metal, soling coal to water bound macadam specification, carrying the metal from stacks, and spreading to templates, screening and spreading the binding material and consolidating the stone metal and binding material to proper camber, with road roller, excluding the cost of templates, barriers and lighting arrangement and Chowkidars.
24.7	Laying and consolidation of stone metal, soling coal to water bound macadam specification, carrying the metal from stacks, and spreading to templates, screening and spreading the binding material and consolidating the stone metal and binding material to proper camber, with road roller, excluding the cost of templates, barriers and lighting arrangement and Chowkidars.	Cum	20.00	23.40				Laying and consolidation of stone metal base/base in two layers to wet mixed macadam specification including mixing of aggregate with requisite quantity of water, mixing with mechanical mixer and unloading from mixer and loading into paver including cartage of mixed material to paver and laying with paver in proper camber and consolidation with road roller etc. complete.
24.8	Laying and consolidation of stone metal sub-base/base in two layers to wet mixed macadam specification including mixing of aggregate with requisite quantity of water, mixing with mechanical mixer and unloading from mixer and loading into paver including cartage of mixed material to paver and laying with paver in proper camber and consolidation with road roller etc. complete.	-do-	32.10	36.20				Laying and consolidation of stone metal base/base in two layers to wet mixed macadam specification including mixing of aggregate with requisite quantity of water, mixing with mechanical mixer and unloading from mixer and loading into paver including cartage of mixed material to paver and laying with paver in proper camber and consolidation with road roller etc. complete.
24.9	(C) Wearing Coat.	-do-						Laying and consolidation of stone metal base/base in two layers to wet mixed macadam specification including mixing of aggregate with requisite quantity of water, mixing with mechanical mixer and unloading from mixer and loading into paver including cartage of mixed material to paver and laying with paver in proper camber and consolidation with road roller etc. complete.

Serial No.	Description	Unit	Labour Rate (a)	Rate (b)	Through
24.10	wearing coal, to water-bound macadam specification, including making side doves carrying the metal from stacks and spreading to temporary, screening and spreading the binding material, and consolidating the stone metal and binding material, to proper camber, with road roller, excluding the cost of temporary, barriers and lighting arrangement of temporary, barriers and lighting arrangement and chowkidars.	-do-	24.65	28.75	--
24.11	Laying and consolidation of stone metal wearing coal, to built up spray gravel specification, including making side doves carrying the metal from stacks and spreading to temporary in the first layer and consolidating the same, with road roller, to proper camber, giving first spray of binder and again, laying second layer of stone metal, including consolidating with road roller to proper camber, and second spray of binder including spreading the key aggregate, and rolling with road roller, excluding the cost of temporary, barriers and lighting arrangement, and chowkidars and also the cost of thick coat.	-do-	37.20	41.10	--
24.12	Water allowance for item Nos. 24.3 to 24.5 and 24.7 payable in 200 metres stretch, where water is not available within 1 km of the nearest point of the 200 metres stretch.	For 100 cum metre lead, in excess of 1 km.	8.00	8.00	--
24.13	Water allowance for item Nos. 24.8 to 24.10 payable in 200 metres stretch, where water is not available, within 1 km of the nearest point of the 200 metres stretch.	-do-	20.00	20.00	--
(D) 24.14	Scarifying stone metal, 50 mm to 100 mm thick, by pick-axes, along with the tarred/ bituminous crust including picking up scarified material, screening and stacking old useful metal and baji.	100 sqm	252.60	252.60	--
24.15	Scarifying stone metal, 50 mm to 100 mm thick, by road roller, along with the tarred/ bituminous crust including picking up scarified material, screening and stacking old useful metal and baji.	100 sqm	158.70	202.45	--

Serial No. Description Unit Labour Rate (a) Through Rate (b)

24.16	Scarfing kankar metallised crust, upto 150 mm thick, with pick-axes, including picking up scarfed material, screening and stacking old useful metal.	-do-	164.75	164.75
24.17	Scarfing old kankar metallised crust, upto 150 mm thick, with road roller, including picking up scarfed material, screening and stacking old useful metal.	-do-	91.00	110.45

(E)

24.18	Painting road surface with bitumen, first coat.	-do-	144.25	163.65
24.19	Painting road surface with bitumen, second coat.	-do-	103.20	117.75
24.20	Painting road surface with bitumen and stone chipping renewal coat/subsequent coat.	-do-	97.00	110.40
24.21	Painting road surface with tar, first coat.	-do-	133.40	150.90
24.22	Painting road surface with tar, second coat.	-do-	97.00	110.40
24.23	Painting road surface with tar and stone chippings renewal/subsequent coat.	-do-	91.60	104.10

(F)

24.24	Painting road surface using precasted aggregate with bitumen first coat & rolling with road roller etc, complete.	-do-	189.35	208.85
24.25	Painting road surface using precasted aggregate with bitumen second coat & rolling with road roller etc, complete.	-do-	133.25	147.85
24.26	Painting road surface using precasted aggregate with bitumen renewal/subsequent coat and rolling with road roller etc, complete.	-do-	123.25	136.65

Note:-

The rate of item No. 24.24 to 24.26 are when precasted aggregates are done manually. In case precasted aggregates are done with the use of mixer 6-10 tonne capacity extra over and above the rate of item Nos. 24.24 to 24.26 shall be payable at Rs. 28.00 per cum of the aggregates precasted.

(G)

24.27	Laying tack coat on existing black top surface with bitumen 50 kg. per hundred sqm.	-do-	32.50	32.50
24.28	Laying tack coat on new water-bound macadam surface with bitumen 75 kg. per hundred sqm.	-do-	63.50	63.50

Serial No.	Description	Unit	Labour Rate (a)	Labour Rate (b)	Through Rate
24.29	Laying tack coat on new water bound macadam surface with bitumen 100 kg. per hundred sqm.	-do-	75.30	75.30	--
24.30	(a) Laying premix carpet, using tar or bitumen as binder, for all operations, binder and aggregate heated and mixed with mechanical mixer, laying and rolling it with road roller including cost of lighting arrangements, sign boards and night watch, but excluding the cost of laying tack coat and seal coat-	-do-	282.95	316.60	--
	(ii) 20 mm thick	-do-	329.60	368.50	--
	(iii) 25 mm thick	-do-			--
	(b) Laying premix patch work, using tar or bitumen as binder, for all operations, binder and aggregate heated and mixed with mechanical mixer, laying and rolling it with road roller including cost of lighting arrangements, sign boards and night watch, but excluding cost of laying tack coat and seal coat-	-do-			--
	(i) 20 mm thick	-do-	213.80	247.45	--
	(ii) 25 mm thick	-do-	252.35	291.25	--
24.31	(a) Laying seal coat type 'A' (Liquid seal coat), including heating bitumen, cleaning road surface and cost of fuel and rolling with road roller complete.	-do-	103.20	117.75	--
	(b) Laying premix 'B' type seal coat, with bitumen and fine aggregate mixed and heated with mechanical mixer including rolling with road roller etc. complete.	100 sqm	102.80	116.40	--
(H) 24.32	Dense Bitumen work				
	Laying bituminous macadam on road with coarse aggregate and bitumen mixed and heated with a mechanical mixer, in the proportion as per design for criteria specified carriage of the premixed material from plant site to site of work and laying the same, with paver and rolling it, with road roller to achieve specified value of compaction, strength and surface accuracy complete including the cost of establishment and setting up field laboratory, for quality control, plant transport, lighting arrangements, sign boards and chivdars etc. complete, but excluding the cost of tack coat and seal coat-				
	(i) with lead upto 1 kilometre	Tonne	95.15	101.40	--
	(ii) for every 1 kilometre additional lead from km 2 and above.	-do-	1.20	1.20	--

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
24.33	Laying bituminous concrete on road including mixing and heating bari and bitumen, with mechanical mixer in the proportion as per design for criteria specified including carriage of premixed material from plant site to site of work and laying the same with paver and rolling it with road roller, to achieve specified value of compaction, strength and surface accuracy complete, including the cost of establishment, and setting up field laboratory, for quality control plant transportation, lighting arrangement, sign boards and chowkidars etc. complete but excluding the cost of tack coat and seal coat-	Tonne	97.10	103.35
--	(a) with lead upto 1 kilometre	--	--	--
--	(b) for every 1 kilometre additional lead from km 2 and above.	--	1.20	1.20
24.34	Making and filling expansion joints, with bituminous filler (bitumen 40 percent, asbestos 5 percent and sand 55 percent), 12 mm wide,	Per metre	0.10	0.35
24.35	Providing and fixing premoilded-bituminous joint filler, for expansion joints, including the cost of sealing compound and primer	Per metre	0.05	2.45
--	coal-	--	--	--
--	(a) 12 mm wide	--	0.05	3.75
--	(b) 25 mm wide	--	0.05	3.75
24.36	(1) Fencing	--	--	--
24.36	1.20 metres high fencing, with 1.65 metres posts, placed at every 2.5 metres to 3 metres apart embedded in cement concrete blocks and every tenth post, to be studded, provided with 4 horizontal lines of G.I. barbed wire, weighing 9.34 kg. per 100 metres (minimum) and fixed with G.I. staples, tied to 6 mm bar nib, with binding wire or by providing cut, including drilling holes, in the post complete (excluding the cost of posts, struts, earth work and concrete which is payable extra).	Metre	0.65	5.25
24.37	Miscellaneous	--	--	--
24.37	Dismantling of road including solving and wearing coal, screening and stacking of old serviceable material, complete in all respects.	100 sq. m	296.70	--
24.38	Restoring the road cut, in level with the existing road surface, including preparation of subgrade laying and relaying of solving and laying and consolidation of wearing coats	100 sq. m	296.70	--

(Rate of Item No. 24.33 (a) amended vide A & C slip No. 18 dated 27-3-1996)

Serial No.	Description	Unit	Labour	Rate (Rs.)	Through	Rate (Rs.)
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to water bound macadam specification, and laying 20 mm thick premix carpet, on top including cost of tack and seal coat complete in all respect.

Notes: (i) The rate given for item Nos. 24.37 and 24.38 include the cost of all watching fencing and lighting arrangements of the works.

(ii) The width of the works, described in item Nos. 24.37 and 24.38 shall be measured by the same rates, as those laid down in PWD specification No. 38.8 Para 2.

(iii) All other demolition work in connection with pipe lines, shall be paid for, at the rates, laid down for demolition of various classes of work, under relevant chapters.

(iv) The rate provided for item No. 24.38 is for guidance and for rough estimating purposes only and not for raising claim against other departments.

(v) The cost of restoration of road cut is chargeable on actual valuation as per site requirement viz specifications and road safety measures.

Note (iv) & (v) below item No. 24.38 added vide A & C Slip No. 12 dated 7-9-93.

24.39	Screening brick-ballas, stone mela, buri shingle and kanakar.	Cum		4.65		
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CHAPTER NO. 25

MAINTENANCE OF FURNITURE

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
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25.1 Spirit or Wax Polishing

(a) Tables- ordinary

(i) office, with caned back

(ii) pedestal type

(iii) T'epoy

(iv) Peg table

(v) centre table

(vi) side board

(b) Chairs-

(i) office, with caned back

(ii) office, with wooden back

(iii) dining with caned back

(iv) dining with wooden back

(v) easy chair

(vi) Sofa with wooden arms

(vii) Sofa chair with wooden arms

(viii) cane sofa

(ix) cane sofa chair

(c) Almira or chest or drawers

(e) hat and coat stand

(d) office side rack

(f) book case or almira with glazed shutters

(g) Comod

(h) towel stand

(i) dressing table

(j) bed seats

(k) hat pegs

25.2 Recaning of Chairs with Indian Cane

(a) office chair seat only (double variety) and back (single variety)

(b) office chair, seat (double variety) and back (single variety)

(c) easy chair, seat (double variety) and back (single variety)

(d) easy chair, back and seat in one piece (single variety)

26.60

33.50

9.60

4.90

9.60

20.15

10.50

11.80

11.15

13.10

22.05

21.20

22.50

14.40

24.60

9.85

15.25

14.75

6.25

5.50

23.75

15.60

2.60

14.70

21.60

20.70

24.55

Serial No.	Description	Unit	Labour Rate (Rs.)	Through Rate (Rs.)
25.3	Recovering of Chairs with Artificial (Plastic) Cane	Each	18.10	18.10
	(a) easy chair, back and seat (single variety)	Each	--	18.10
	(b) office chair, back and seat (single variety)	-do-	--	16.20
	(c) office chair seat only (single variety)	-do-	--	10.00
25.4	Washing			
	(a) durries	Sqm	--	3.25
	(b) mixer of beds (cotton)	Each bed	--	14.10
	(c) bed covers and bed sheets-			
	(i) single	Each	--	2.70
	(ii) double	-do-	--	5.20
	(d) Linen	100 pieces	--	48.10
25.5	Up holstering			
	(a) restoring easy or sofa chairs	Each	34.15	59.35
	(b) restoring sofa	-do-	81.65	135.00
	(c) recovering easy or sofa chair with cloth.	-do-	65.00	--
	(d) recovering sofa with cloth.	-do-	132.50	--
	(e) recovering and restoring easy or sofa chair.	-do-	57.50	--
	(f) restoring and recovering sofa	-do-	107.50	--
	<i>Note:- Cloth for above items to be purchased and supplied departmentally.</i>			
25.6	Weaving Charpoy (String or Mung) including Devans			
	(a) string (sun ban)	-do-	12.80	67.60
	(b) mung	-do-	13.20	55.00

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CHAPTER NO. 26
MISCELLANEOUS

NOTES :

(1) The rates, given below, are labour rates, unless otherwise stated.

Serial No.	Description	Unit	Rate (Rs.)
26.1	Laying, linking and packing tramway track	Metre	1.20
26.2	Linking B.C. track, including packing, straightening and levelling.	-do-	3.10
26.3	Linking point and crossing, complete with level fastenings.	Each	141.00
26.4	Bending and straightening B.C. rails with Jim-Crow	Metre	0.60
26.5	Cutting girders with hack saw-		
	(i) upto 300 mm depth	Cut	20.00
	(ii) above 300 mm to 450 mm depth	-do-	33.75
26.6	Drilling holes in girders	Each	0.75
26.7	(a) Cutting of copper sheels, 1.50 mm thick into flashings.	Metre	6.50
	(b) fixing copper flashing into position.	-do-	2.60
26.8	Assembling 40 mm pressure pipes	-do-	0.50
26.9	Boring and fixing 40 mm pressure pipes.	-do-	3.50
26.10	Boring for hand-pump in clay, filling strainer and pipe-		
	(i) upto 75 mm dia bore-	-do-	7.55
	(ii) from 0 to 15 metres.	-do-	11.50
	(iii) exceeding 15 metres, but upto 30 metres	-do-	14.50
	(b) above 75 mm dia bore, but not exceeding 100 mm dia-	-do-	10.40
	(i) from 0 to 15 metres.	-do-	22.20
	(ii) exceeding 15 metres, but upto 30 metres	-do-	27.40
	(iii) exceeding 30 metres	-do-	26.11
	Boring hand-pump in soil, with admixture of shingle-		
	(a) upto 75 mm dia bore-	-do-	15.00
	(i) from 0 to 15 metres	-do-	21.00
	(ii) exceeding 15 metres, but upto 30 metres	-do-	26.75
	(b) above 75 mm dia, but not exceeding 100 mm dia bore-	-do-	19.00
	(i) from 0 to 15 metres	-do-	31.25
	(ii) exceeding 15 metres, but upto 30 metres	-do-	38.75
	(iii) exceeding 30 metres	-do-	2.35
26.12	Hand Pump	Metres	
	(ii) Pulling out pipe and filters		

Serial No.	Description	Unit	Rate (Rs.)
26.13	(b) lowering pipe in the hole, upto 40 mm dia	Metre	2.35
	(c) fixing head including clamps and handle.	Each	13.50
26.13	Fixing E.L. gauges, flush with masonry, including cost of L-hooks	Metre	8.25
26.14	Fixing handles to iron rammers, including cost of handle.	Each	6.30
26.15	Cutting down trees, filling holes and leveling off ground, topping branches, trimming, removal not exceeding 100 metres, stacking, clearing site-		
	(a) girth upto 60 cm	-do-	18.75
	(b) girth more than 60 cm, but upto 120 cm	-do-	32.50
	(c) girth more than 120 cm, but upto 180 cm	-do-	56.25
	(d) girth more than 180 cm, but upto 250 cm	-do-	82.50
<p>Note:- (i) The girth is to be measured 1.00 metre above ground level.</p> <p>(ii) When stumps are grubbed upto in addition, take rates as double the above rates, for trees cut and grubbed. Payment for grubbing will only be made, when specially ordered by the Sub-Divisional Engineer, in cases where it is essential to remove the stumps.</p> <p>(iii) Trees requiring to be cut, will normally be sold as they stand, the purchase price, including the purchaser's liability to cut, or grub, and remove the tree, from Government land.</p> <p>(iv) Where these have not been sold, the trees, cut and removed, will be the property of the Govt.</p>			
26.16	Felling trees, cutting and stacking fuel wood from plantation.	-do-	7.25
26.17	Splitting fuel wood.	-do-	9.70
26.18	Burning firewood for making charcoal, including loading unloading, and repairs to kiln.	Per quintal of charcoal	21.65
26.19	Supply of wooden pegs, for levelling work 40 mm to 50 mm dia and 15 cm to 23 cm long.	100 Nos.	39.60
26.20	Supply of wooden pegs, for alignment work, 40 cm long, 75 mm dia.	-do-	88.00
26.21	Supply of bamboo handles, 3 metres to 3.50 metres long, including iron shoes and flags, 40 cm square painted black and white.	Each.	18.80
	(a) Supplying flags, 40 cm square, for handles	-do-	3.90
	(b) Shoes for handles including fixing	-do-	3.20
26.23	Supplying tripod handles, with flags, including iron shoes, and flags, 40 cm square, and bamboo, painted black and white.	-do-	29.00
26.24	Sweeping chimney flue	-do-	4.40
26.25	Fixing glass pieces, on top of walls.	Metre	5.60
26.26	Making a Chullah in cooking range (Indian styles)	Each	15.00
26.27	Supplying and fixing clerestory window cotton cord upto 6 metres height.	-do-	8.00
26.28	Making sarki sarkanda temporary, godown 3m x 3m with walls 2.5 metres height, 1 1/2 bricks thick, burnt bricks laid dry, excluding the cost of bricks but including the cost of other material.	-do-	300.00

Serial No.	Description	Unit	Rate (Rs.)
26.29	Water allowance (a) for concrete, brick masonry in lime or cement mortar-	Cum	3.35
	(i) where lead involved is 1 km to 1.50 km		
	(ii) where lead involved, is above 1.50 km but upto 2.50 km		5.75
	(b) for plastering in lime or cement mortar pointing flooring-		
	(i) where lead involved is 1 km to 1.50 km	Sqm	0.45
	(ii) where lead involved, is above 1.50 km but upto 2.50 km		0.85
	Note:- The above rates are payable only, where water is not available locally, and where fixing of hand pumps is neither feasible nor practically possible, due to small amount of work, and where water is actually carried by carts or by mechanical transport.		
26.30	Making temporary culverts.	Each	156.00
26.31	Digging pits and fixing distance marks, or boundary stones.	-do-	2.85
26.32	Ploughing two times.	Hectare	300.00
26.33	Filling 200 litres drums with diesel oil (Not payable to diesel dealers)	Each	2.10
26.34	Jungle clearance	Hectare	47.00 to 211.50
	The rates are applicable in areas, acquired for new canals and drains, extension of channels and for construction of roads and buildings.		
	(iii) The rate is to be decided by the Executive Engineer, according to the density of jungle, in the cleared.		
	(iii) The rules of item Nos. 26.31 to 26.36 are for estimating purposes only. The work will be not done departmentally.		
26.35	Ordinary jungle clearance of both banks, of running distributaries, minors and drains, with discharge upto 9 cu m/s including boundary road-	Kilometre	28.75 to 94.00
	(a) discharge upto 1.50 cu m/s		
	(b) discharge exceeding 1.50 cu m/s but upto 4.50 cu m/s.	-do-	94.00 to 122.20
	(c) discharge exceeding 4.50 cu m/s	-do-	122.20 to 155.10
26.36	Jungle clearance on running canals and branches and drains, with discharge more than 9 cu m/s.		
	(a) light	-do-	376.00
	(b) medium	-do-	470.00
	(c) heavy	-do-	940.00
26.37	Filling loose cement in empty cement bags weighing, sewing and stacking within 30 metres, including cost of strings.	Bag	0.60
26.38	Filling cement bags with steam coal or kanjar lime sewing including cost of strings.	Cu m	22.00
26.39	Stacking and bundling empty cement bags.	100 Nos.	8.60

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CHAPTER NO. 27

QUANTITIES OF MATERIALS

NOTES :

- (1) One cement bag weight 50 kg. and measures 0.03472 cum.
- (ii) These consumption factors are for the purpose of estimating and preparing consumption accounts.
- (iii) Where the work is done on through rate basis and the actual consumption of cement works out to be less upto 5% than the theoretical consumption the cement so saved shall be returned in good condition by the contractor to the stores and recovery of cost of cement shall be refunded to the contractor after deducting storage charges, subject to the condition that the use of cement less than the prescribed norms will not effect the specifications, quality and strength. It has also to be certified by the J.E., S.D.E. and Xen that the work has been carried out strictly in accordance with the relevant specification. The remaining provisions for recovery due to short or excess use of cement will be same as provided in the chapter No. 27 of the Haryana P.W.D. specifications.

Serial	Description	Unit	Quantities		
			Cement	Fine aggregate	Coarse aggregate
			(Bags)	gate (cu m)	gate (cu m)

Serial	Description	Unit	Quantities		
			Cement	Hydrated Sulphate	Sand Ballast
			(Bags)	(cu m)	(cu m)

Serial	Description	Unit	Quantities		
			Cement	Hydrated Sulphate	Sand Ballast
			(Bags)	(cu m)	(cu m)

Serial	Description	Unit	Quantities		
			Cement	Hydrated Sulphate	Sand Ballast
			(Bags)	(cu m)	(cu m)

Serial	Description	Unit	Quantities		
			Cement	Hydrated Sulphate	Sand Ballast
			(Bags)	(cu m)	(cu m)

27.5 Brick work in cement, with 22.86 cm x 11.43 cm x 3.81 cm tiles-

Serial	Description	Unit	Quantities	Cement (Bags)	Sand (cu m)	Tiles Nos.
(i)	Brick work in cement with lime sand mortar with half brick of size 11.43 cm thick.	Sqm.	0.137	0.0045 (3.20 Kg.)	0.0286	55
(v)	Brick work in cement 1:3:12	-do-	0.61	0.063 (44 Kg.)	0.25	480
(iv)	Brick work in cement 1:2:9	-do-	0.80	0.055 (39 Kg.)	0.25	480
(iii)	Brick work in cement 1:1:6	Cu m	1.20	0.041 (29 Kg.)	0.25	480

27.4 Brick work in lime surkhi mortar with bricks of size 22.86cm x 11.11cm x 6.83cm-

Serial	Description	Unit	Quantities	Hydrated Lime (Cu m)	Surkhi (Cu m)	Sand (Cu m)	Bricks Nos.
(i)	Brick work in lime surkhi mortar with bricks of size 22.86cm x 11.11cm x 6.83cm-	Cu m	0.12	0.12 (84 Kg.)	0.12	0.12	480

27.3 Bricks work in cement with 11.11 cm x 6.83 cm x 3.81 cm tiles-

Serial	Description	Unit	Quantities	Hydrated Lime (Cu m)	Surkhi (cu m)	Bricks Nos.
(i)	Bricks work in cement with half brick size 11.43 cm thick-	Sq m	0.19	0.028	0.028	55
(c)	Brick work in cement with brick size 7.62 cm thick -	-do-	0.13	0.019	0.019	38
(ii)	Bricks work in cement with 1:3	-do-	0.266	0.028	0.028	55
(b)	Bricks work in cement with half brick size 11.43 cm thick-	Cu m	3.45	0.24	0.24	480
(vi)	Bricks work in cement with 1:7	-do-	1.00	0.25	0.25	480
(v)	Bricks work in cement with 1:6	-do-	1.20	0.25	0.25	480
(iv)	Bricks work in cement with 1:5	-do-	1.45	0.25	0.25	480
(iii)	Bricks work in cement with 1:4	-do-	1.75	0.25	0.25	480
(ii)	Bricks work in cement with 1:3	-do-	2.40	0.25	0.25	480
(i)	Bricks work in cement with 1:2	Cu m	3.45	0.24	0.24	480

27.3 Bricks work in cement with 11.11 cm x 6.83 cm x 3.81 cm tiles-

Serial	Description	Unit	Quantities	Cement (Bags)	Sand (cu m)	Bricks Nos.
(a)	Bricks work in cement with 11.11 cm x 6.83 cm x 3.81 cm tiles-	Cu m	3.45	0.24	0.24	480

Sr.No. Description Unit Quantities

Cement (Bags) Sand (cu m) Tiles Nos.

(i)	1 : 4	Cu m	2.85	0.40	780
(ii)	1 : 5	-do-	2.30	0.40	780
(iii)	1 : 6	-do-	1.90	0.40	780

Sr.No. Description Unit Quantities

Cement (Bags) Sand (Cu m) Bricks (Nos.)

27.6	Girafi masonry with jibi face (1 : 5) Mortar.	Cu m	0.25	0.044	240
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Sr.No. Description Unit Quantities

Cement (Bags) Sand (cu m) Bricks (Nos.)

27.7	(a) Bricks work laid in mud mortar, with jibi face, 1 : 5 mortar.	Cu m	0.32	0.054	480
	(b) R.B. Work in linels (50 kg cement, 0.10 cu m coarse sand) 1 : 3 mortar.	-do-	3.05	0.032	440

Sr.No. Description Unit Quantities

Cement (Bags) Sand (cu m) Stone (cu m)

27.8	Stone masonry-				
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(i) Fine ashlar, 1 : 3 Cum 0.96 0.10 1.33

(ii) Fine ashlar, 1 : 6 -do- 0.48 0.10 1.33

(iii) Rough-tooled ashlar, 1 : 3 -do- 1.72 0.18 1.25

(iv) Rough-tooled ashlar, 1 : 6 -do- 0.86 0.18 1.25

(v) Block-in-course, 1 : 4 -do- 1.72 0.24 1.20

(vi) Block-in-course, 1 : 5 -do- 1.38 0.24 1.20

(vii) Block-in-course, 1 : 6 -do- 1.15 0.24 1.20

(viii) Squared rubble masonry, 1 : 4 -do- 2.15 0.30 1.10

(ix) Squared rubble masonry 1 : 5 -do- 1.72 0.30 1.10

(x) Squared rubble masonry 1 : 6 -do- 1.44 0.30 1.10

(xi) Random or polygonal rubble 1 : 6 -do- 1.67 0.35 1.10

(xii) Boulder masonry, 1 : 6 -do- 1.90 0.40 1.10

27.9 Hoisting and Roofing :-

(i) Cinder concrete in cement 1 : 15 (cement and 15 cinder) Cu m 1.92

1.00

Sr.No.	Description	Unit	Cement (Bags)	Sand (cu m)	Brick Ballast (cu m)
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Sr.No.	Description	Unit	Hydrated Lime (Bags)	Surkhi (cu m)	Sand (cu m)	Brick Ballast (cu m)
27.10	Flooring and Dados :- (i) Base course of floors, consisting of 100 mm thick cement concrete 1 : 8 : 16 and 100 mm sand or stone filling (complete as per item No.14.1)	Sqm.	0.18	*0.15	0.10	
	(ii) Base course of floors, consisting of 100 mm thick lime concrete 1:2:8 and 100 mm sand or stone filling (complete as per item No.14.2)	Sq m	0.013	0.026	0.10	0.10

Sr.No.	Description	Unit	Cement Sand (Bags)	Brick Ballast (cu m)
(iii)	25 mm thick cement concrete topping 1 : 2 : 4	Sq m	0.1575	0.011
(iv)	40 mm thick cement concrete topping finished with 3 mm thick neat coat of cement (complete as per item No. 14.16).	-do-	0.2475	0.011
(vii)	40 mm thick grey polished flooring cement concrete 1:2:4 topping finished with 3 mm thick neat coat of cement (complete as per item No.14.17)	-do-	0.342	0.0176
(viii)	18 mm thick grey polished skirting or dado, consisting of bottom layer of 15 mm thick cement plaster 1:3 and finished with 3mm thick topping of neat cement (complete as per item No.14.18)	-do-	0.28	0.019

Sr.No.	Description	Unit	Cement (Bags)	Sand (cu m)	Bricks (Nos)	Brick Ballast (cu m)
(iii)	25 mm thick cement concrete topping 1 : 2 : 4	Sq m	0.1575	0.011		0.022
(iv)	40 mm thick cement concrete topping 1 : 2 : 4	-do-	0.252	0.0176		0.0352
(v)	50 mm thick cement concrete topping 1 : 2 : 4	-do-	0.315	0.022		0.044
(vi)	25 mm thick grey polished flooring cement concrete 1:2:4 topping finished with 3 mm thick neat coat of cement (complete as per item No. 14.16).	-do-	0.2475	0.011		0.022
(vii)	40 mm thick grey polished flooring cement concrete 1:2:4 topping finished with 3 mm thick neat coat of cement (complete as per item No.14.17)	-do-	0.342	0.0176		0.0352
(viii)	18 mm thick grey polished skirting or dado, consisting of bottom layer of 15 mm thick cement plaster 1:3 and finished with 3mm thick topping of neat cement (complete as per item No.14.18)	-do-	0.28	0.019		--
(ix)	Flat brick or tile flooring laid in cement sand mortar 1:4 on					

Sr.No.	Description	Quantities		
		Cement (Bags)	Sand (cu m)	Bricks (Nos.)
(x)	100 mm thick cement concrete 1:8:16 and 100 mm sand filling and cement pointed 1:2 on top (complete as per Item No. 14.22)	0.335	0.17	33
	Brick-on-edge flooring laid in 14.22)			0.10
	dry over a bed of 6 mm thick cement sand mortar 1:6 grouted with cement sand mortar 1:4 (complete as per Item No. 14.23)	0.3734	0.168	53
	75 mm thick cement concrete 1:8:16 and 100 mm sand filling and cement pointed 1:2 on top (complete as per Item No. 14.23)	-do-	0.3734	0.075

Sr.No.	Description	Quantities		
		Cement (Bags)	Sand (cu m)	Bricks (Nos.)
(xi)	Flat brick or tile flooring laid with cement sand mortar 1:6 grouted with cement sand mortar 1:4 (complete as per Item No. 14.24)	0.07	0.013	40
(xii)	Terrazzo topping rubbed and polished to a granolithic finish, under layer 34 mm thick cement concrete 1:2:4 and top layer as specified below :- (a) white marble Makrana/Namau/Dehradun chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 parts of white marble chips) by volume complete. (b) white marble Makrana/Namau/Dehradun chipping of size above 4 mm and upto 7mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 parts of white marble chips) by volume complete.	0.29	0.015	0.030
				0.087
				0.027

Sr.No.	Description	Unit	Quantity
	white marble Makrana/Namau/Dehradun chipping of size above 4 mm and upto 7mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 parts of white marble chips) by volume complete.	Sqm.	0.33
			0.015
			0.030
			0.13
			0.041

St.No.	Description	Unit	Quantities		
			Cement (course)	Sand	Marble Marble chips powder
			(cu m)	(cu m)	(Bags)

(c) with top layer 12 mm thick with white marble Makrana/Narnaul/Dehradun chipping of size above 7 mm but upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix 3 parts of white marble chips) by volume complete.

Sqm. 0.386 0.015 0.030 0.166 0.058

(d) with top layer 20 mm thick with white marble Makrana/Narnaul/Dehradun chipping of size above 10 mm but upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix 4 parts of white marble chips) by volume complete.

(xiii) Terazzo skirting or dado on wall face rubbed and polished to a granolithic finish under layer 12 mm thick cement coarse sand plaster 1:3 and top layer as specified below :-

(a) with top layer 6 mm thick with white marble Makrana/Narnaul/Dehradun chipping of size 1 mm to 4 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 parts of white marble chips) by volume complete.

Sqm. 0.524 0.015 0.030 0.263 0.104

(b) with top layer 9 mm thick with white marble Makrana/Narnaul/Dehradun chipping of size above 4 mm but upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 parts of white marble chips) by volume complete.

Sqm. 0.23 0.0165 0.087 0.027

(b) with top layer 9 mm thick with white marble Makrana/Narnaul/Dehradun chipping of size above 4 mm but upto 7 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 4:7 (4 parts of cement marble powder mix 7 parts of white marble chips) by volume complete.

Sqm. 0.27 0.0165 0.13 0.041

Sr.No	Description	Unit	Quantities
	Cem- Sand Bajri Marble	(Bags) (cu m)	(Bags) (cu m)
	ment (coarse) chips powder	(cu m)	(quintal) (Bags)

(c)	with top layer 12 mm thick with white marble Makrana/Narnaul/Dehradun chipping of size above 7 mm but upto 10 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 2:3 (2 parts of cement marble powder mix 3 parts of white marble chips) by volume complete.	Sqm.	0.322	0.0165	--	0.166	0.058
(d)	with top layer 20 mm thick with white marble Makrana/Narnaul/Dehradun chipping of size above 10 mm but upto 15 mm laid in cement marble powder mix in the ratio of 3:1 (3 parts of cement and one part of marble powder) by weight in proportion of 3:4 (3 parts of cement marble powder mix 4 parts of white marble chips) by volume complete.	Sqm.	0.464	0.0165	-	0.263	0.104

Serial No.	Description	Unit	Quantities
	Cement	(50 kg.) (cu m)	(Bag of Sand) (cu m)
	Coarse Bajri Marble	(cu m)	Marble chips powder
	Crazy Marble	(quintal)	50 kg.)

(xiv)	Crazy marble stone flooring rubbed and polished with under layer 25mm thick cement concrete 1:2:4 and top layer of crazy marble stone white, black or as specified including filling with marble chips of size up to 15 mm of Narnaul/Makrana/Dehradun laid in cement marble powder mix in the ratio of 3:1 (3 parts of grey cement and one part of marble powder) in proportion of 4:7 (4 parts of cement marble powder mix : 7 parts of marble chips) by volume including cement slurry complete.	Sqm	0.318	0.011	0.022	0.24	0.087	0.027
(a)	20 mm thick.	-do-	0.358	0.011	0.022	0.36	0.13	0.04
(b)	30 mm thick	-do-	0.398	0.011	0.022	0.48	0.174	0.054
(c)	40 mm thick	-do-						

Serial Description	Unit	Quantities	Cement (Bags)	Sand (cu m)	No.
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(xv) Precast grey torrazzo tiles of 20mm minimum thickness in ordinary cement with marble chips of size and colour as required, laid in 20 mm-thick-bed of cement coarse sand mortar 1:3 with neat cement slurry between joints and over the base in floors, treads of steps and landings (complete as per item No. 14.44	Sq m	0.350	0.225	0.012	
(xvi) Precast grey torrazzo tiles of 12.5 mm minimum thickness in ordinary grey cement with marble chips of size and colour as required, laid on 10 mm thick cement coarse sand plaster 1:3 and jointed with neat cement slurry in skirting dado and risers of steps (complete as per item No. 14.47	-do-				

Serial Description	Unit	Quantities	Cement (bags)	White Sand Tiles (bags)	No.
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(xvii) White glazed tiles 15 cm x 15 cm, 5 mm thick in skirting and dado, on 12 mm thick cement coarse sand plaster 1:3 in base and jointed with white cement slurry in joints (complete as per item No. 14.48(a)(i).	Sq. m	0.20	0.008	0.015	50
(xviii) White glazed tiles 10cm x 10cm, 5 mm thick in skirting and dado; on 12 mm thick cement coarse sand plaster 1:3 base and jointed with white cement slurry in joints (complete as per item No. 14.48 (a) (ii).	-do-	0.20	0.010	0.015	110

Serial Description	Unit	Quantities	Marble Cement (grey) (bags)	Cement Sand (white) course (bags) (cu m)	No.
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(xix) Marble stone flooring 20 mm to 25 mm thick slab including matching grains of marble laid in any pattern as specified over base of 12mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of marble including rubbing and polishing and finishing (All sizes of marble slabs/tiles)	Sq m	1.15	0.25	0.02	0.015
(xx) Marble stone 20 mm to 25 mm thick in risers of steps, skirting, dado, pillars and wall lining including matching the grains of marble slab in any pattern as specified laid in 12 mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of marble including rubbing and polishing including labour for fixing cramps, pins and dowels in cement mortar including cost of mortar. If required (All sizes of marble slabs/tiles)	-do-	1.19	0.15	0.02	0.015

Serial Description Unit Quantities
Cement Sand Agra Red Sand
(bags) (coarse) (stone) (fine)
(cu m) (sq m) (cu m)

Serial Description	Unit	Quantities
(a) in 1:5 mortar	Sqm.	0.09 0.015 1.15
(b) in 1:3	-do-	0.15 0.015 1.15
(c) in 1:5 including cement pointing 1:2	-do-	0.112 0.015 1.15 0.0015
(d) in 1:3 including cement pointing 1:2	-do-	0.172 0.015 1.15 0.0015

Red sand stone from (Agra) 40 mm thick set in 12 mm thick cement coarse sand

(xxi) Rough/fine dressed / finished & rubbed

sand stone (from Agra) 25 mm to 30 mm thick on wall facing (fining) on walls, pillars, skirting, dado and risers of steps laid in any pattern as specified on 12 mm thick cement coarse sand mortar 1:3 with neat cement with an admixture of pig-ment to match the shade of stone including labour for fixing cramps and pins etc.

(xxii) Dholpur stone 25 mm thick in wall facing (fining) laid in any pattern as specified on 12 mm thick cement coarse sand mortar 1:3 and jointed with neat cement slurry mixed with pigment to match the shade of stone including labour for fixing cramps, pins and dowels etc.

(xxiv) Kota stone flooring 34 mm to 40 mm thick over 12 mm thick base of cement coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing.

(xxv) Kota stone rough dressed 40 mm to 50 mm thick slabs, set to pattern in pavement over 20 mm thick base of cement coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone.

(xxvi) Kota stone 20 mm thick in skirting, riser of steps, dados, pillars and wall facing in any pattern as specified laid on 12 mm thick cement coarse sand plaster 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing including labour for fixing cramps, dowels and pins etc.

Serial Description	Unit	Quantities	Cement (Bags)	Sand (cu m)	Ironite chips (bags)	No.
(xxvii) 46 mm thick ironite floor consisting of 40 mm thick cement concrete 1:2:4 base and top layer of 6 mm thick, laid with 1 part of ironite and grey cement, mixed together in the ratio of 1:4 by weight to two parts of hard granite chipings 6 mm gauge by volume (complete as per item No. 14.73)	Sqm	0.338	0.0176	0.0352	0.0215	0.007
(xxviii) 50 mm thick ironite floor consisting of 40 mm thick cement concrete 1:2:4 base and top layer of 10 mm thick, laid with 1 part of ironite and grey cement, mixed together in the ratio of 1:4 by weight to two parts of hard granite chipings 6 mm gauge by volume (complete as per item No. 14.74)	Sqm	0.395	0.0176	0.0352	0.0359	0.0117
(xxix) Floating coat 1.5 mm thick of neat cement laid in one operation to the C.C. topping	-do-	0.045	--	--	--	--
(a) cement plaster 12 mm thick on brick walls-	Sqm	0.18	0.15	0.11	0.015	0.014
(i) 1:2	-do-	0.015	0.09	0.074	0.015	0.015
(ii) 1:3	-do-	0.015	0.11	0.09	0.015	0.015
(iii) 1:4	-do-	0.015	0.09	0.074	0.015	0.015
(iv) 1:5	-do-	0.015	0.09	0.074	0.015	0.015
(v) 1:6	-do-	0.015	0.09	0.074	0.015	0.015
(b) Cement rendering on plaster 1 mm thick.	-do-	0.024	--	--	--	--
(i) 1:1:1	Sqm	0.007	0.007	0.007	0.007	0.007
(ii) 1:1:1	-do-	0.007	0.007	0.007	0.007	0.007
(iii) 1:2:9	-do-	0.049	0.0033	0.0033	0.015	0.015
(iv) 1:3:12	-do-	0.037	0.0039	0.0039	0.015	0.015
(ii) 1:1:6	Sqm	0.074	0.0026	0.0026	0.015	0.015
(iii) 1:2:9	-do-	0.049	0.0033	0.0033	0.015	0.015
(iv) 1:3:12	-do-	0.037	0.0039	0.0039	0.015	0.015

Serial Description Unit Quantities Cement (Bags) Sand (cu m) Ironite chips (bags)

Serial	Description	Unit	Quantities	No.
(i)	1 : 2	Sq m	0.04	27:13
(ii)	1 : 3	-do-	0.033	
(iii)	Flush cement pointing 1 : 2 on flat brick flooring.	-do-	0.035	27:13
(iv)	Flush cement pointing on under side of roof tiles 30.48 cm x 15.24 cm 1 : 2 mortar.	-do-	0.026	
(v)	Cement pointing on stone slab pavement with cement mortar 1 : 2	-do-	0.022	
(vi)	2 : 3	-do-	0.008	
(vii)	1 : 2	Sq m	0.007	
			Lime (Cu m)	Surkhi
			(4.1 Kg.)	
			Cement (Bags)	Sand
			(4.68 Kg.)	
			Quantities	
			Surkhi (cu m)	27:13
			(cu m)	
(i)	1 : 2	Sq m	0.0013	27:13
(ii)	1 : 3	-do-	0.065	
(a)	Flush walls - Cement pointing 1 : 2 on stone	-do-	0.0046	27:13
(b)	Raised walls - Cement pointing 1 : 3 on stone	-do-	0.130	
(a)	Flush walls -	-do-	0.046	27:13
(b)	Raised walls -	-do-	0.090	
			Quantities	
			Cement Sand Hydrated	Aggr
			(bags) (cu m)	
			Lime rate 2.36	(quintal) to 12mm
			(cu m)	
			Aggr	27:14
			(cu m)	
			Exterior Finishing	(i)
			Rough cast exterior cement plaster on walls with a mixture of sand and gravel or crushed stone aggregate from 2.36 to 12 mm nominal size dashed over and including fresh plaster in two coats, first coat 10 mm cement plaster 1:4 (1 cement: 4 sand) and finishing coat 10 mm cement plaster with cement mortar 1:3 (1 cement: 3 sand) mixed with 10% finely graded hydrated lime by volume of cement including airies, channers and/or rounded angles not exceeding 50 mm in girth.	Sqm
			0.228	
			0.026	0.0088
			0.010	

Serial	Description	Unit	Quantities	1st Quality	2nd Quality
27.18	Painting-				
(i)	Two coats of synthetic enamel paint on new wood or steel work.	Sq m	0.123	0.145	0.145
(ii)	Two coats of ready mixed paint on new wood or steel work.	-do-	0.104	0.122	0.122
(iii)	Two coats of synthetic enamel paint on old wood or steel work.	-do-	0.10	0.118	0.118
(iv)	Two coats of ready mixed paint on old wood or steel work plastered or concrete work.	-do-	0.083	0.098	0.098

Serial	Description	Unit	Quantities	1st Quality	2nd Quality
27.17	Second class mud roofing -				
(i)	When space between battens is filled with concrete-blocks.	Sq m	0.27	0.030	0.0024
(ii)	When space between battens is filled with wooden pieces.	-do-	0.26	0.029	0.0049
(iii)	Tile roofing	-do-	0.048	0.0049	0.0049

Serial	Description	Unit	Cement (bags)	Sand (cu m)	Aggre- gate (cu m)
27.15	White washing.				
(i)	One coat or subsequent coat	sq m	0.15	0.10	0.20
(ii)	Two coats	-do-	0.25	0.15	0.30
(iii)	Three coats	-do-	0.35	0.20	0.40
27.16	Colour washing.				
(i)	One coat or subsequent coat	-do-	0.10	0.10	0.20
(ii)	Two coats	-do-	0.20	0.20	0.40

Serial	Description	Unit	Quantities	Lime (kg)
(iii)	Pebble dash exterior plaster on walls with a mixture of washed pebble or crushed stone graded from 6 to 12 mm nominal size dashed over and including fresh cement plaster in two coats, first coat 10 mm thick cement plaster 1:4 (1 cement : 4 sand) and finishing coat 10 mm cement plaster 1:3 mixed with 10% finally rounded hydrated lime by volume of cement including angles not exceeding 50 mm in girth.	sq m	0.228	0.026
(iii)	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) and top layer 6 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished rough with sponging.	-do-	0.165	0.0225

Serial	Description	Unit	Quantities	Cement (bags)	Sand (cu m)	Aggre- gate (cu m)

Serial No.	Description	Unit	Quantities	Cement (bags)	Sand (cu m)	Tiles (Nos.)
27.26	Tile Lining-					
(i)	Double layer tile lining with tiles 30.48cm x 15.24cm x 5.08 cm	sq m	0.35	0.27	0.040	22
(ii)	(13.26cm thick) Single layer tile lining with tiles 30.48 cm x 15.24cm x 5.08 cm	sq m	0.49			44
27.25	Doors, panelled, glazed, or glazed and panelled (shutters) only					
(i)	40 mm thick	sq m	0.0350			
(ii)	35 mm thick	sq m	0.0319			
(iii)	30 mm thick	sq m	0.0271			
27.24	Battered and framed doors 50 mm thick (shutters only)					
-do-			0.0481			
27.23	Battered and braced doors 50 mm thick (shutters only)					
-do-			0.0271			
27.22	Wire gauze (shutters only)					
-do-			0.0551			
(i)	35 mm thick	-do-	0.0222			
(ii)	30 mm thick	-do-	0.0192			
(iii)	25 mm thick	-do-	--			
27.21	Distemping (dry or oil-bound)					
(i)	Two coats on new work	sq m	0.171			
(ii)	One coat on old work	sq m	0.073			
(iii)	Two coats on old work	-do-	0.146			
(iv)	Cement based paint, such as Snowcem	-do-				
(v)	Robracement, etc, such as Snowcem	-do-				
(i)	One coat on old work	-do-	0.15			
(ii)	Two coats on new work	-do-	0.45			
(b)	Plastic emulsion Paint-	-do-				
(i)	Two coats on new work	-do-	0.121 litres			
(ii)	One coat on old work	-do-	0.073 litres			
27.20	Timber (cu m)					
27.19	Distemper/Paint (Kg.)					
(v)	One coat of synthetic enamel paint on old wood or steel work or plastered or concrete work.	-do-	0.055			
(vi)	One coat of ready-mixed paint on old wood or steel work.	-do-	0.046			
(vii)	Solignum or creosote paint-	-do-	0.054			
(i)	Two coats	-do-	--			
(ii)	one coat	-do-	0.039			

27.31	Cement concrete grouting stone pitching-	cu m	1.40	0.10	0.20
	(i) 1:2:4			0.10	0.20
	(ii) 1:3:6	-do-	0.94	0.10	0.20

Note:- For grouting with cement mortar only use 0.36 cu m of sand per cu m of the contents and work out the quantity of cement accordingly in the mixed used.

Serial No.	Description	Unit	Quantities	Cement (bags)	Sand Shingle or aggregate (cu m)
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27.30	Cement mortar dry brick pitching or flooring.	Sq m	0.019		
	(i) 7.5 cm thick floor.			0.029	
	(ii) 11.43 cm thick floor.	-do-			

Note:- Quantities of cement for any mortar ratio may be worked out accordingly.

27.29	Dry grouting dry stone Pitching	cu m	0.20		
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27.28	Stone Pitching	cu m	1.10		
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Serial No.	Description	Unit	Quantities	Stone (cu m)	Shingle or stone aggregate, 10 mm ring
27.27	Filling stones wire crates hand-packed-	cu m	3.23		
	(i) 4.75 mm dia wire, 15 cm x 15 cm mesh.		1.00	4.83	
	(ii) 4.75 mm dia wire, 25 cm x 7.5 cm mesh.	-do-	1.00	2.31	
	(iii) 4.00 mm dia wire, 15 cm x 15 cm mesh.	-do-	1.00	3.47	
	(iv) 4.00 mm dia wire, 25 cm x 7.5 cm mesh.	-do-	1.00	1.50	
	(v) 3.25 mm dia wire, 15 cm x 15 cm mesh.	-do-	1.00	2.25	
	(vi) 3.25 mm dia wire, 25 cm x 7.5 cm mesh.	-do-	1.00		

		Unit	Stone	G.I. wire	No.
			(cu m)	(per sq m)	

		-do-	0.35	0.049	76
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Note:- Materials for cutting, drains, see page drains, bed sleepers and rungs to be extra in case of Item No. 27.26(i), (ii) and (iii).

		Unit	Quantities	Cement (bags)	Sand Shingle or Tiles (Nos.)
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Serial No.	Description	Unit	Quantities
27.32	Fuel Wood :-		
27.33	Consumption norms of Material for construction and maintenance of road.		
	(i) For heating bitumen	Tonne	4 quintals
	(ii) For heating Bajri	cu m	11.00 Kgs.
	(a) Extra over item No. (i) and (ii) above for the winter season (November to February)		
	(b) Extra for Patch work where the consumption is not more than one drum at a time.		
	10%		
	20%		
	Tool Baskets 53.34cm x 17.78 cm unsplit-		
	(i) For earth work	60 cu m	One basket
	(ii) For stone metal in soling and wearing coats.	20 cu m	One basket
	(iii) For stone metal in built up spray groll.	20 cu m	One basket
	(iv) For premix carpet or surfacing- Using round bajri	20 cu m	One basket
	(b) Using crushed bajri	20 cu m	One basket
27.34	Brushes (Wire, Katalol and soft Fibre) (for one lane width of road)-		
	(i) For 1st coat tarring on new work	1km	3 dozens mixed
	(ii) For 2nd or subsequent coat.	1km	1 dozen mixed
27.35	Tarring out fits (for one lane width of road)		
	(i) For 1st coat	1km	3 Nos.
	(ii) For 2nd /renewal coat	1km	2 Nos.
	(iii) For 20 mm premix carpet.	1km	5 Nos.

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WATER SUPPLY

CHAPTER NO. 28

NOTES :

(i) The rates for stringing out cast iron, A.C., P.V.C., and hume pipes and their specials etc. provided under this chapter which are in the wider sense labour rates in case of which the material is generally issued to the contractors free of cost from the stores of the engineer-in-charge or the nearest Railway station include the carriage of material within a radius of 5 km. of the site of works.

(ii) The rates provided under this chapter include the wastage and breakage of various materials during construction.

Serial No.	Description	Unit	Rate (Rs.)
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(A) Laying of C.I. Pipes and Specials

28.1 Stringing out C.I. pipes and specials castings along trenches and laying the same in trenches to correct alignment and gradients including cartage from divisional stores or nearest Railway station to site of works and return of pieces of pipes to stores.

(a)	80 mm internal diameter pipe line laid complete	10 metres	8.95
(b)	100 mm internal diameter pipe line laid complete	-do-	11.35
(c)	125 mm internal diameter pipe line laid complete	-do-	14.75
(d)	150 mm internal diameter pipe line laid complete	-do-	18.40
(e)	200 mm internal diameter pipe line laid complete	-do-	26.90
(f)	250 mm internal diameter pipe line laid complete	-do-	40.85
(g)	300 mm internal diameter pipe line laid complete	-do-	52.75
(h)	350 mm internal diameter pipe line laid complete	-do-	84.50
(i)	400 mm internal diameter pipe line laid complete	-do-	102.75
(j)	450 mm internal diameter pipe line laid complete	-do-	122.25
(k)	500 mm internal diameter pipe line laid complete	-do-	164.50
(l)	600 mm internal diameter pipe line laid complete	-do-	219.05

28.2 Extra for fixing cast iron socketed or flanged pipes, valves and special castings in vertical position for overhead reservoirs and stand pipes etc. including cost of all special scaffolding derricks, jim poles, tools and plants, ropes, guys etc. complete.

(a)	80 mm internal diameter of pipe lines and specials. Per metre of pipe line laid complete.	5.45
(b)	100 mm internal diameter of pipe lines and specials.	8.20
(c)	125 mm internal diameter of pipe lines and specials.	10.55
(d)	150 mm internal diameter of pipe lines and specials.	13.30
(e)	200 mm internal diameter of pipe lines and specials.	21.65
(f)	250 mm internal diameter of pipe lines and specials.	29.25
(g)	300 mm internal diameter of pipe lines and specials.	38.25
(h)	350 mm internal diameter of pipe lines and specials.	47.25
(i)	400 mm internal diameter of pipe lines and specials.	64.35

Serial Description Unit Rate (Rs.)

(J) 450 mm internal diameter of pipe lines and specials. Per metre of pipe line laid complete. 78.00

(K) 500 mm internal diameter of pipe lines and specials. -do- 90.50

(L) 600 mm internal diameter of pipe lines and specials. -do- 120.70

Notes:

(i) For pipes larger than 600 mm internal diameter, special rates shall be fixed.

(ii) The contractor shall be liable to make good all damage caused by breakage from the moment pipes are fittings are handed over to his charge.

(iii) All measurements shall be taken along the centre line and axis of the pipe line throughout its length and shall include the overall laying length of sluice valves, fixed therein.

28.3 Cutting cast iron pipes and specials and chipping or fling the surface to a uniform finish.

(a) 80 mm internal diameter pipe line Per cut 2.85

(b) 100 mm internal diameter pipe line -do- 3.50

(c) 125 mm internal diameter pipe line -do- 4.80

(d) 150 mm internal diameter pipe line -do- 5.25

(e) 200 mm internal diameter pipe line -do- 6.65

(f) 250 mm internal diameter pipe line -do- 7.80

(g) 300 mm internal diameter pipe line -do- 9.65

(h) 350 mm internal diameter pipe line -do- 12.10

(i) 400 mm internal diameter pipe line -do- 13.95

(j) 450 mm internal diameter pipe line -do- 15.80

(k) 500 mm internal diameter pipe line -do- 19.15

(l) 600 mm internal diameter pipe line -do- 21.70

28.4 Joining cast iron socketed pipes, valves and specials with run lead caulked joints excluding cost of lead and yarn but including cost of labour, fuel and tools etc. tested complete.

Internal diameter of pipe line Quantity of lead per joints in kg. Quantity of yarn per joint in kg. Rate(Rs.)

(a) 80 mm 1.80 0.10 Per joint 6.20

(b) 100 mm 2.20 0.18 -do- 7.65

(c) 125 mm 2.60 0.20 -do- 9.15

(d) 150 mm 3.40 0.20 -do- 9.55

(e) 200 mm 5.00 0.30 -do- 11.95

(f) 250 mm 6.10 0.35 -do- 14.90

(g) 300 mm 7.20 0.48 -do- 17.00

(h) 350 mm 8.40 0.60 -do- 18.90

(i) 400 mm 9.50 0.75 -do- 23.20

(j) 450 mm 14.00 0.95 -do- 25.85

(k) 500 mm 15.00 1.00 -do- 29.45

(l) 600 mm 19.00 1.20 -do- 38.70

28.5 Making flanged joints for cast iron pipes, valves or specials.

Serial No.	Description	Unit	Rate (Rs.)
(a)	80 mm internal diameter pipe, valves or specials	Each	4.50
(b)	100 mm internal diameter pipe, valves or specials	-do-	5.10
(c)	125 mm internal diameter pipe, valves or specials	-do-	5.65
(d)	150 mm internal diameter pipe, valves or specials	-do-	7.70
(e)	200 mm internal diameter pipe, valves or specials	-do-	10.35
(f)	250 mm internal diameter pipe, valves or specials	-do-	17.25
(g)	300 mm internal diameter pipe, valves or specials	-do-	21.35
(h)	350 mm internal diameter pipe, valves or specials	-do-	26.90
(i)	400 mm internal diameter pipe, valves or specials	-do-	33.00
(j)	450 mm internal diameter pipe, valves or specials	-do-	39.65
(k)	500 mm internal diameter pipe, valves or specials	-do-	46.25
(l)	600 mm internal diameter pipe, valves or specials	-do-	52.20
<p>Notes :- (i) The rubber insertion, 3mm thick required for making the joints will be issued in rectangular sheets or rolls at stock issue rates in force ex-divisional stores or F.O.R. nearest railway station.</p> <p>(ii) All bolts, nuts and washers for flanged joints will be supplied without charge in the contractor ex-divisional stores or delivered F.O.R. nearest railway station. The contractor at his own expenses and charges will take delivery of joining materials i.e. bolts, nuts and washers and transport the same to the site of work.</p>			
28.6	Joining cast iron socketed pipes, valves and specials with rubber tyton joints fitted complete including cost of labour and tools etc. and tested complete.	Each	5.45
(a)	80 mm internal diameter pipe, valves or specials	-do-	6.10
(b)	100 mm internal diameter pipe, valves or specials	-do-	7.00
(c)	125 mm internal diameter pipe, valves or specials	-do-	7.25
(d)	150 mm internal diameter pipe, valves or specials	-do-	7.50
(e)	200 mm internal diameter pipe, valves or specials	-do-	8.15
(f)	250 mm internal diameter pipe, valves or specials	-do-	9.80
(g)	300 mm internal diameter pipe, valves or specials	-do-	10.90
(h)	350 mm internal diameter pipe, valves or specials	-do-	13.05
(i)	400 mm internal diameter pipe, valves or specials	-do-	15.05
(j)	450 mm internal diameter pipe, valves or specials	-do-	16.30
(k)	500 mm internal diameter pipe, valves or specials	-do-	21.75
(l)	600 mm internal diameter pipe, valves or specials	-do-	
(B)	Laying of A.C. Pipes and Specials.		
28.7	Stringing out A.C./R.V.C. pipes and specials casing along trenches and laying the same in trenches, to correct alignment and gradients including cartage from divisional stores or nearest railway station to site of works and return of pieces of pipes to stores.	10 metres	6.80
(a)	50 mm internal diameter pipe line laid complete	-do-	8.95
(b)	80 mm internal diameter pipe line laid complete	-do-	12.50
(c)	100 mm internal diameter pipe line laid complete	-do-	14.15
(d)	125 mm internal diameter pipe line laid complete	-do-	

Serial No.	Description	Unit	Rate (Rs.)
28.8	Joining A.C./P.V.C. pipes and specials with cast iron P.V.C. detachable joints fitted with bolts and nuts excluding cost of detachable joints, rubber rings, bolts and nuts but including cost of labour and tools etc. and tested complete.	Each	2.85
	(a) 50 mm	-do-	3.60
	(b) 80 mm	-do-	4.45
	(c) 100 mm	-do-	6.00
	(d) 125 mm	-do-	7.35
	(e) 150 mm	-do-	9.15
	(f) 200 mm	-do-	11.00
	(g) 250 mm	-do-	12.95
	(h) 300 mm	-do-	
28.9	Cutting A.C./P.V.C. pipes and specials and chipping or filling surface to a uniform finish.		
	(a) 50 mm internal diameter pipe line	-do-	0.95
	(b) 80 mm internal diameter pipe line	-do-	1.45
	(c) 100 mm internal diameter pipe line	-do-	1.75
	(d) 125 mm internal diameter pipe line	-do-	2.40
	(e) 150 mm internal diameter pipe line	-do-	2.65
	(f) 200 mm internal diameter pipe line	-do-	3.35
	(g) 250 mm internal diameter pipe line	-do-	3.90
	(h) 300 mm internal diameter pipe line	-do-	4.85
28.10	Fixing of C.I. Valves/Hydrants. Extra for fixing sluice valves/flap valves socketted or flanged, including cartage from stores or nearest railway station to site of work.		
	(a) 80 mm internal diameter of valve.	-do-	10.20
	(b) 100 mm internal diameter of valve.	-do-	11.85
	(c) 125 mm internal diameter of valve.	-do-	13.50
	(d) 150 mm internal diameter of valve.	-do-	16.60
	(e) 200 mm internal diameter of valve.	-do-	19.25
	(f) 250 mm internal diameter of valve.	-do-	26.10
	(g) 300 mm internal diameter of valve.	-do-	28.40
	(h) 350 mm internal diameter of valve.	-do-	31.30
	(i) 400 mm internal diameter of valve.	-do-	34.30
	(j) 450 mm internal diameter of valve.	-do-	39.85
	(k) 500 mm internal diameter of valve.	-do-	45.55
	(l) 600 mm internal diameter of valve.	-do-	56.00
28.11	Extra for fixing fire hydrants, all sizes, including cartage from divisional stores or nearest railway station to site of work.	-do-	9.70
<p>Note :- Joints for hydrants shall be paid separately as per item No.28.5</p>			
<p>Note:- Joints for sluice valves shall be paid separately as per item No. 28.4 and 28.5.</p>			

Serial No.	Description	Unit	Rate (Rs.)
28.12	Extra for fixing single air valves all sizes including cartage from divisional stores or nearest railway station to site of works drilling, tapping and screwing in valves connections.	Each	43.00
28.13	Extra for fixing double air valves all sizes including cartage from divisional stores or nearest railway station to site of works.	do-	10.00
28.14	Fixing cast iron sluice valves, surface boxes indicating plates including cartage from divisional stores or nearest railway station and embedding to correct levels in cement mortar 1 : 3.	Each	6.40
28.15	Fixing cast iron fire hydrants surface boxes including cartage from divisional stores or nearest railway station and embedding to correct levels in cement mortar 1 : 3.	do-	6.65
28.16	Fixing cast iron single air valves surface boxes including cartage from divisional stores or nearest railway station and embedding to correct levels in cement mortar 1 : 3.	do-	6.95
28.17	Fixing cast iron double air valves surface boxes including cartage from divisional stores or nearest railway station and embedding to correct levels in cement mortar 1 : 3.	do-	7.15
<p><i>Notes:-</i></p> <p>(i) All surface boxes will be supplied without charge, ex divisional stores or F.O.R. nearest railway station. Payment for lime, concrete, brick work, pitching etc. required in connection with the construction of brick work pits or chambers for sluice valves, flap valves, air valves, hydrants, breast pressure tanks, ball valves, chamber and other works for water supply pipe lines where no composite rate exists will be made on the basis of actual measurements for each class of work at the rates laid down for appropriate classes of work in Schedule of Rates and an extra will be payable due to the limited quantities of the work or difficulties of construction or other causes.</p> <p>(D) Laying of G.I./P.V.C. Pipes and Specials. Labour for laying, joining, fixing and testing G.I./P.V.C./W.L. pipe lines and specials tees bends, sockets, elbows etc. inside building and testing etc., complete including cutting threading.</p> <p>(a) Excluding cost of specials.</p> <p>(i) 15 mm internal diameter of pipeline.</p> <p>(ii) 20 mm internal diameter of pipeline.</p> <p>(iii) 25 mm internal diameter of pipeline.</p> <p>(iv) 32 mm internal diameter of pipeline.</p> <p>(v) 40 mm internal diameter of pipeline.</p> <p>(vi) 50 mm internal diameter of pipeline.</p> <p>(b) Including cost of specials.</p> <p>(i) 15 mm internal diameter of pipeline.</p> <p>(ii) 20 mm internal diameter of pipeline.</p> <p>(iii) 25 mm internal diameter of pipeline.</p> <p>(iv) 32 mm internal diameter of pipeline.</p> <p>(v) 40 mm internal diameter of pipeline.</p> <p>(vi) 50 mm internal diameter of pipeline.</p> <p>(b) Including cost of specials.</p> <p>(i) 15 mm internal diameter of pipeline.</p> <p>(ii) 20 mm internal diameter of pipeline.</p> <p>(iii) 25 mm internal diameter of pipeline.</p> <p>(iv) 32 mm internal diameter of pipeline.</p> <p>(v) 40 mm internal diameter of pipeline.</p> <p>(vi) 50 mm internal diameter of pipeline.</p>			
		Metre	3.30
		do-	3.90
		do-	4.35
		do-	5.40
		do-	5.70
		do-	7.15
		do-	7.25
		do-	8.60
		do-	9.60
		do-	11.90
		do-	12.55
		do-	15.00

No. Description Unit Rate (Rs.)

28.19 Labour for laying, joining, fixing and testing G.I./P.V.C/W.L. pipe lines and specials tees, bends, sockets, elbows etc. in trenches in the ground, cutting, threading and testing etc. complete.

(a)	15 mm internal diameter	Metre	1.10
(b)	20 mm internal diameter	-do-	1.50
(c)	25 mm internal diameter	-do-	1.95
(d)	32 mm internal diameter	-do-	2.45
(e)	40 mm internal diameter	Metre	2.80
(f)	50 mm internal diameter	-do-	3.05
(g)	65 mm internal diameter	-do-	3.10
(h)	80 mm internal diameter	-do-	3.45
(i)	100 mm internal diameter	-do-	4.15

Notes:

(i) Holder bars, flanged joints, unions and mixing chases in walls will be paid for separately.

(ii) All G.I./P.V.C/W.L. pipes and specials shall be obtained by indent upon the executive engineer public health concerned and direct purchases by the contractor shall not be permitted except in such special cases as shall be allowed in writing by the executive engineer.

(iii) All G.I./P.V.C. and W.L. pipes and specials, bends, tees, etc. will be supplied ex-divisional stores or F.O.R. nearest Railway station at the divisional stock issue rates in force when the specials are indented for and the rate includes the cost of carriage to the site of works including fixing, joining and testing etc. complete.

(iv) Square elbow must not be used for any work but round elbows used instead.

(v) Short lengths of G.I. pipelines upto 5m in connection with construction of stand post and other such works will be paid at rates meant for inside building work.

28.20 Extra for fixing flanged joints on G.I. and W.L. pipes lines including cost of joining materials.

(a)	15 mm internal diameter	Each	1.55
(b)	20 mm internal diameter	-do-	1.65
(c)	25 mm internal diameter	-do-	1.95
(d)	32 mm internal diameter	-do-	2.25
(e)	40 mm internal diameter	-do-	2.60
(f)	50 mm internal diameter	-do-	3.30
(g)	65 mm internal diameter	-do-	3.80
(h)	80 mm internal diameter	-do-	4.50
(i)	100 mm internal diameter	-do-	5.10

Notes:-

(i) The joining material for the above will be supplied ex-divisional stores or F.O.R. nearest railway station at the stock issue rates in force when the material is indented for.

(ii) All bolts, nuts and washers will be supplied without charge to the contractor ex-divisional stores or F.O.R. nearest railway station and the rate includes the cost of carriage to site of work.

Serial	Description	Unit	Rate (Rs.)
28.21	Extra for fixing and joining union couplings in G.I. and W.I. pipelines.	Each	0.85
	(a) 15 mm internal diameter	-do-	1.05
	(b) 20 mm internal diameter	-do-	1.30
	(c) 25 mm internal diameter	-do-	1.55
	(d) 32 mm internal diameter	-do-	1.70
	(e) 40 mm internal diameter	-do-	2.10
	(f) 50 mm internal diameter	-do-	2.35
	(g) 65 mm internal diameter	-do-	2.45
	(h) 80 mm internal diameter	-do-	2.75
	(i) 100 mm internal diameter	-do-	
	Notes: (i) These unions shall be fixed on branches or near to the junctions with the main G.I. pipe line and also at intervals of about - 30 metres on all pipelines laid on ground and at intervals of 18 to 24 m on pipelines laid on roofs and inside buildings.		
	(ii) The rates apply to couplings on straight lines, branches and also on bends.		
	(iii) The couplings will be duplicated without charge to the contractor ex-divisional stores or F.O.R. nearest Railway station and the rate includes cost of carriage, fixing and testing etc. complete.		
28.22	Drilling and Tapping of G.I. Pipes.		
	Drilling and tapping cast iron pipe lines of all diameters and screwing in ferrule and connections -		
	Size of ferrule-	Each	23.95
	(a) 10 mm internal diameter	-do-	24.60
	(b) 15 mm internal diameter	-do-	29.85
	(c) 20 mm internal diameter	-do-	33.00
	(d) 25 mm internal diameter	-do-	36.10
	(e) 32 mm internal diameter	-do-	42.40
	(f) 40 mm internal diameter	-do-	
	Notes: Ferrule will be supplied without charges to the contractor ex-divisional stores or F.O.R. nearest railway station. The fixing rate includes carriage to site of work and also cost of excavation upto the main and filling in and making good the surface after finishing the job. The rate is for complete job.		
28.23	Cutting Holes in Walls/Floors/Roofs		
	Cutting holes upto 23 cm ² square through brick work in mud walls for pipes and making good including repointing replastering and finishing according to existing finish where required.		
	(a) 11.43 cm thickness of walls	-do-	8.20
	(b) 22.86 cm thickness of walls	-do-	11.95
	(c) 34.29 cm thickness of walls	-do-	17.10
	(d) 45.72 cm thickness of walls	-do-	21.00
	(e) 57.15 cm thickness of walls	-do-	25.80
	(f) 68.58 cm thickness of walls	-do-	30.70

Serial	Description	Unit	Rate	No.
28.24	Cutting holes upto 23 cm through stone masonry or brick work in cement walls for pipes and making good including repointing, replastering and finishing according to existing finish where required.	Each	14.00	
	(a) 11.43 cm thickness of walls	-do-	20.35	
	(b) 22.86 cm thickness of walls	-do-	27.00	
	(c) 34.29 cm thickness of walls	-do-	33.45	
	(d) 45.72 cm thickness of walls	-do-	38.05	
	(e) 57.15 cm thickness of walls	-do-	42.70	
	(f) 68.58 cm thickness of walls	-do-		
28.25	Cutting holes upto 23 cm square for pipes in flooring and roofs of bricks tiles with lime concrete and making good including repointing, replastering and colour or white washing where required.	Each	7.80	
	(a) 75 mm thickness of floor	-do-	11.15	
	(b) 115 mm thickness of floor	-do-	13.50	
	(c) 150 mm thickness of floor	-do-	14.80	
	(d) 190 mm thickness of floor	-do-	16.20	
	(e) 225 mm thickness of floor	-do-		
28.26	Cutting holes upto 23 cm square for pipes in floor and roofs of cement concrete reinforced concrete or reinforced brick work and making good including repointing, replastering, repatching blumen and colour or white washing where required.	Each	9.65	
	(a) 75 mm thickness of floor or roof	-do-	11.95	
	(b) 115 mm thickness of floor or roof	-do-	15.40	
	(c) 150 mm thickness of floor or roof	-do-	17.15	
	(d) 190 mm thickness of floor or roof	-do-	20.05	
	(e) 225 mm thickness of floor or roof	-do-		
28.27	Labour for fixing G.I. or W.I. pipe sleeve pieces in holes in walls, floors, and roofs rounds pipes including all cutting and wastage.	Metre	2.40	
	(a) 15 mm internal diameter of sleeve pipe	-do-	2.70	
	(b) 20 mm internal diameter of sleeve pipe	-do-	3.55	
	(c) 25 mm internal diameter of sleeve pipe	-do-	3.60	
	(d) 32 mm internal diameter of sleeve pipe	-do-	4.40	
	(e) 40 mm internal diameter of sleeve pipe	-do-	4.75	
	(f) 50 mm internal diameter of sleeve pipe	-do-	4.80	
	(g) 65 mm internal diameter of sleeve pipe	-do-	5.35	
	(h) 80 mm internal diameter of sleeve pipe	-do-	6.50	
	(i) 100 mm internal diameter of sleeve pipe	-do-		
28.28	Fixing galvanised malleable iron holder bats hold fasts to pipe lines fixed on walls and ceilings including all cuttings to walls and making good to original condition.	-do-		

Serial No.	Description	Unit	Rate (Rs.)		
28.29 (H)	Fixing of Valves, Cocks, Showers and Meters etc. Fixing and jointing gun metal peet valves (heavy pattern) with hand wheels, on G.L. pipelines laid in the ground or inside building including cartage from divisional stores or nearest railway station to site of works.	(a) 15 mm internal diameter	2.10		
		(b) 20 mm internal diameter	2.80		
		(c) 25 mm internal diameter	3.05		
		(d) 32 mm internal diameter	3.50		
		(e) 40 mm internal diameter	4.10		
		(f) 50 mm internal diameter	5.55		
		(g) 65 mm internal diameter	6.95		
		(h) 80 mm internal diameter	7.75		
		(i) 100 mm internal diameter	8.20		
		Note: Peet valves will be supplied free of cost to the contractor ex-divisional stores or nearest railway station.			
		Fixing screw down stop cocks of gunmetals or hard brass on G.L. pipelines laid in the ground or inside buildings including cartage from divisional stores or nearest railway station to site of works.			
28.30	Fixing screw down stop cocks of gunmetals or hard brass on G.L. pipelines laid in the ground or inside buildings including cartage from divisional stores or nearest railway station to site of works.	(a) 15 mm internal diameter	1.95		
		(b) 20 mm internal diameter	2.25		
		(c) 25 mm internal diameter	2.50		
		(d) 32 mm internal diameter	2.95		
		(e) 40 mm internal diameter	3.10		
		(f) 50 mm internal diameter	4.50		
Note: The stop cocks will be supplied free of cost to the contractor ex-divisional stores or nearest railway station.					
28.31	Fixing bib taps of gun-metal or hard brass on G.L. pipe lines including cartage from divisional stores or nearest railway station to site of works.	(a) 15 mm internal diameter	1.95		
		(b) 20 mm internal diameter	2.25		
		(c) 25 mm internal diameter	2.50		
		(d) 32 mm internal diameter	2.95		
		(e) 40 mm internal diameter	3.10		
		(f) 50 mm internal diameter	4.50		
		Note: The stop cocks will be supplied free of cost to the contractor ex-divisional stores or nearest railway station.			
		Holder bats are generally required to be fixed at intervals of about 2.4 m on straight line.			
		The holder bats will be supplied free of cost to the contractor ex-divisional stores or nearest railway station. The rates include the cost of cartage and labour, etc. to site of works.			
		(H)	Fixing of Valves, Cocks, Showers and Meters etc. Fixing and jointing gun metal peet valves (heavy pattern) with hand wheels, on G.L. pipelines laid in the ground or inside building including cartage from divisional stores or nearest railway station to site of works.	(a) 15 mm internal diameter of pipeline	2.05
				(b) 20 mm internal diameter of pipeline	2.05
(c) 25 mm internal diameter of pipeline	2.60				
(d) 32 mm internal diameter of pipeline	2.60				
(e) 40 mm internal diameter of pipeline	3.00				
(f) 50 mm internal diameter of pipeline	3.00				
(g) 65 mm internal diameter of pipeline	3.50				
(h) 80 mm internal diameter of pipeline	3.50				
(i) 100 mm internal diameter of pipeline	4.20				
Notes: (i) Holder bats are generally required to be fixed at intervals of about 2.4 m on straight line.					
(ii) The holder bats will be supplied free of cost to the contractor ex-divisional stores or nearest railway station. The rates include the cost of cartage and labour, etc. to site of works.					

Serial	Description	Unit	Rate	No.
				(Rs.)
		Each	1.35	
		-do-	1.40	
		-do-	1.55	
		-do-	1.70	
		-do-	1.85	
28.32	Fixing ball valves including cartage from divisional stores or nearest railway station, to site of works.	-do-	2.60	
	(a) 15 mm internal diameter	-do-	3.60	
	(b) 20 mm internal diameter	-do-	3.60	
	(c) 25 mm internal diameter	-do-	4.95	
	(d) 32 mm internal diameter	-do-	4.95	
	(e) 40 mm internal diameter	-do-	4.95	
	(f) 50 mm internal diameter	-do-	6.05	
28.33	Fixing chromium plated brass shower rose including cartage from divisional stores or nearest railway station to site of works.	-do-	7.15	
	(a) 150 mm internal diameter with 15 mm or 20 mm inlet	-do-	1.30	
	(b) 100 mm internal diameter with 15 mm or 20 mm inlet	-do-	1.30	
28.34	Making connection with the existing G.I. branch main upto 40 mm size including cutting and threading pipe etc. complete excluding cost of ice and long screw, but including cartage of material to site.	-do-	23.85	
	Fixing water meter and stop cock in G.I. pipe line upto 25 mm size including cutting and threading pipe and making long screw etc. complete including cost of G.I. jam nut but excluding cost of water meter and stop cock.	-do-	14.10	
28.36	Fixing peti valve and stop surface boxes (cast iron) including cartage from divisional stores or nearest railway station to site of works.	-do-	4.25	
(1)	Disassembling G.I. joints, Pipes Valves and specials. Dismantling lead caulked joints of cast iron socketted pipes, valves and specials by heating the joints including the cost of labour, fuel and tools etc., collecting the lead taken out from the joints and delivering the same to the divisional stores.	Per joint	1.70	
	(a) 50 mm internal diameter of pipe, valves or specials	-do-	1.80	
	(b) 65 mm internal diameter of pipe, valves or specials	-do-	2.45	
	(c) 80 mm internal diameter of pipe, valves or specials	-do-	2.80	
	(d) 100 mm internal diameter of pipe, valves or specials	-do-	3.65	
	(e) 125 mm internal diameter of pipe, valves or specials	-do-	4.20	
	(f) 150 mm internal diameter of pipe, valves or specials	-do-	5.10	
	(g) 175 mm internal diameter of pipe, valves or specials	-do-	6.05	
	(h) 200 mm internal diameter of pipe, valves or specials	-do-	6.90	
	(i) 225 mm internal diameter of pipe, valves or specials	-do-	8.00	
	(j) 250 mm internal diameter of pipe, valves or specials	-do-		

Serial No.	Description	Unit	Rate (Rs.)
(l)	300 mm internal diameter of pipe, valves or specials	Per joint	10.00
(k)	350 mm internal diameter of pipe, valves or specials	-do-	11.80
(m)	375 mm internal diameter of pipe, valves or specials	-do-	12.50
(n)	400 mm internal diameter of pipe, valves or specials	-do-	13.35
(o)	450 mm internal diameter of pipe, valves or specials	-do-	19.05
(p)	500 mm internal diameter of pipe, valves or specials	-do-	20.65
(q)	525 mm internal diameter of pipe, valves or specials	-do-	22.50
(r)	550 mm internal diameter of pipe, valves or specials	-do-	24.45
(s)	600 mm internal diameter of pipe, valves or specials	-do-	28.30
Dismantling flanged joints for cast-iron pipes, valves and specials including carriage of bolts, nuts and washers to the divisional stores.			
(a)	50mm, 65mm, 80mm and 100 mm internal diameter of pipe valve or specials.	-do-	1.00
(a)	125mm, 150mm, 175mm and 200 mm internal diameter of pipe valve or specials.	-do-	1.95
(c)	300mm, 350mm, and 375mm internal diameter of pipe valve or specials.	-do-	5.00
(d)	400mm and 450mm internal diameter of pipe valve or specials.	-do-	5.70
(e)	500 mm and 525 mm internal diameter of pipe, valve or specials.	-do-	6.30
(f)	550 mm and 600 mm internal diameter of pipe, valve and specials.	-do-	7.60
Taking out dismantled cast iron socketed or flanged pipes, valves and special etc. outside from the trenches and stacking at a nearest convenient place as required by the engineer in-charge from where they can be loaded into carts or trucks			
(a)	50 mm internal diameter of pipe	10 metres of pipeline dismantled	3.80
(b)	65 mm internal diameter of pipe.	-do-	4.40
(c)	80 mm internal diameter of pipe.	-do-	5.20
(d)	100 mm internal diameter of pipe.	-do-	6.35
(e)	125 mm internal diameter of pipe.	-do-	6.50
(f)	150 mm internal diameter of pipe.	-do-	7.75
(f)	175 mm internal diameter of pipe.	-do-	9.10
(g)	200 mm internal diameter of pipe.	-do-	10.35
(h)	225 mm internal diameter of pipe.	-do-	12.05
(i)	250 mm internal diameter of pipe.	-do-	14.05
(j)	300 mm internal diameter of pipe.	-do-	16.45
(k)	350 mm internal diameter of pipe.	-do-	20.75
(l)	375 mm internal diameter of pipe.	-do-	24.25
(m)	400 mm internal diameter of pipe.	-do-	27.35
(n)	450 mm internal diameter of pipe.	-do-	30.70
(o)	500 mm internal diameter of pipe.	-do-	32.95
(p)	525 mm internal diameter of pipe.	-do-	34.80
(q)	550 mm internal diameter of pipe.	-do-	39.15
(r)	600 mm internal diameter of pipe.	-do-	41.00

Serial No.	Description	Unit	Rate
	(i) The contractor shall be liable to make good all damage caused by breakage while taking out the pipes from trenches.		
	(ii) All measurements shall be taken along the centre line of axis of the pipelines throughout its length and shall include the overall laying length of sluice valves and specials fixed therein.		
28.40	Dismantling sluice valves socketed or flanged including carriage from the site of works to the divisional store.	Each	3.95
	(a) 50 mm internal diameter of valve	-do-	4.05
	(b) 65 mm internal diameter of valve	-do-	4.90
	(c) 80 mm internal diameter of valve	-do-	4.85
	(d) 100 mm internal diameter of valve	-do-	5.85
	(e) 125 mm internal diameter of valve	-do-	6.45
	(f) 150 mm internal diameter of valve	-do-	7.15
	(g) 175 mm internal diameter of valve	-do-	8.10
	(h) 200 mm internal diameter of valve	-do-	8.30
	(i) 225 mm internal diameter of valve	-do-	9.95
	(j) 250 mm internal diameter of valve	-do-	12.25
	(k) 300 mm internal diameter of valve	-do-	15.20
	(l) 350 mm internal diameter of valve	-do-	16.75
	(m) 375 mm internal diameter of valve	-do-	18.80
	(n) 400 mm internal diameter of valve	-do-	23.30
	(o) 450 mm internal diameter of valve	-do-	29.00
	(p) 500 mm internal diameter of valve	-do-	31.10
	(q) 525 mm internal diameter of valve	-do-	35.90
	(r) 550 mm internal diameter of valve	-do-	39.45
	(s) 600 mm internal diameter of valve	-do-	
28.41	Dismantling fire hydrants of all sizes including dismantling joints carriage from site of works to the divisional stores.	-do-	4.25
	Dismantling single or double air valves including	-do-	
	dismantling the joints and carriage from the site of works	-do-	
28.43	Dismantling cast iron surface boxes for sluice valves and fire hydrants including carriage from the site of works to the divisional stores.	Each	4.15
28.44	Dismantling cast iron single air valve surface boxes including carriage from the site of works to the divisional stores.	Each	2.60
28.45	Dismantling cast iron double air valve surface boxes including carriage from the site of works to the divisional stores.	-do-	2.80
(j)	Fixing Bell Mouths	-do-	8.70
28.46	Fixing bell mouths with or without puddle collars puddle collar pieces and plain, socketed or flanged pipes in bricks works cement concrete or reinforced cement concrete used for intakes culverts and overflow pipes of the overhead service reservoirs of the length of pipe or special embedded to correct alignment and levels including the cost of cutting hole if required, cement concrete filling around the pipes or specials and making good the joint water		

(Rs.)

48.30	-do-	(d) Fitting in position equilibrium ball valve at inlet chambers in cement sand mortar.
124.70	-do-	(c) Fixing water level recorders or rate of flow indicators complete including g.routing H.D. bolts and brackets guides for wire, etc., in 1 : 1 cement sand mortar.
69.75	-do-	(b) Cast iron 'V' notch with base including embedding in 1 : 2 cement sand mortar setting both in 1 : 1 cement sand g.routing leveling up and finishing complete.
55.00	Each	(a) 150 mm C.I. pipe, bends, specials and heads complete for ventilating column built into the walls.

28.49	(1)	Labour Rates including materials in erecting, fixing and joining fixtures to filter beds, clear water tanks and sedimentation tanks etc.
3.00	-do-	(i) 100 mm internal diameter of pipeline
2.70	-do-	(h) 80 mm internal diameter of pipeline
2.40	-do-	(g) 65 mm internal diameter of pipeline
2.10	-do-	(f) 50 mm internal diameter of pipeline
2.10	-do-	(e) 40 mm internal diameter of pipeline
1.65	-do-	(d) 32 mm internal diameter of pipeline
1.35	-do-	(c) 25 mm internal diameter of pipeline
1.00	-do-	(b) 20 mm internal diameter of pipeline
0.80	Metre	(a) 15 mm internal diameter of pipeline

28.48	(K)	Dismantling G.I. Pipes and specials :- G.I. pipe-lines, specials, valves and fittings :- Dismantling disjoining, removal and carriage to stores.
127.40	-do-	(d) Exceeding 600 mm internal diameter.
102.45	-do-	(c) Exceeding 450 mm internal diameter but not exceeding 450 mm internal diameter.
85.00	-do-	(b) Exceeding 300 mm internal diameter but not exceeding 300 mm internal diameter.
67.50	Each connection	(a) Up to 200 mm internal diameter. Size of the main with which connection is to be made :- grade as required by the Engineer-in-charge. Bailing out water from the trenches for making new connections in fully charged pipe-lines including cleaning, trimming and dressing the trenches to correct alignment and

28.47	(a)	Up to 300 mm internal diameter. washing as required by the Engineer-in-charge.
57.40	Each	(a) Up to 300 mm internal diameter.
91.65	-do-	(b) Exceeding 300 mm internal diameter but not exceeding 450 mm internal diameter.
140.05	-do-	(c) Exceeding 450 mm internal diameter but not exceeding 600 mm internal diameter.

Serial	Description	Unit	Rate (Rs.)
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No.

Serial No.	Description	Unit	Rate (Rs.)
(M)	28.50		
	(e) Fixing steel shutters with frame complete on inlet side of sedimentation tank including painting 3 coats of bituminastic paint.	Each	46.50
	(f) Fixing Noaling arm in position complete with sluice valve, long spindle hand wheel, brackets and guides complete in all respects.	-do-	121.50
	(g) Fixing enamelled gauge in storage and sedimentation tank.	-do-	49.30
	Providing and placing in horizontal layers filtering media screened, washed and cleaned as described below:-		
	(a) Top layer Fine sand screened, cleaned and washed and graded (effective size 0.2 to 0.4 mm with uniformity coefficient 2.0 to 3.0) from Chaggar or other approved source.	Cu m	160.30
	(b) Second layer Coursed sand screened, cleaned and washed and graded from 3 mm to 6 mm (from Chaggar or approved equivalent quarry)	-do-	288.20
	(c) Third layer Bajri screened washed and graded from 6 mm to 20 mm (from Chaggar or approved equivalent quarry)	-do-	145.75
	(d) Fourth layer Bajri (coarse) screened and washed graded from 20 mm to 25 mm (from Chaggar or approved equivalent quarry)	-do-	135.50
	(e) Bottom-layer Broken stone, screened, washed and graded from 50 mm to 75 mm (from Chaggar or approved equivalent quarry).	-do-	126.60

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CHAPTER NO. 29
SEWERAGE AND DRAINAGE

NOTES :

- (1) The rates for fixing manhole cover and frames, C.I. or malleable ironsteps, erection of C.I. or R.C.C. vent shafts, lowering of S.W. and R.C.C. pipes etc. provided under this chapter include the carriage of the material within a radius of 5 km of the site of works (i.e. all labour rates include carriage of material upto 5 km limit).
- (II) The rates for manhole chamber construction are only for estimating purposes and no payment will be made on these rates. The payment for these items will however be made according to the measurements of various quantities of works executed at site.
- (III) The rates provided under this chapter include the wastage and breakage of various materials during construction.
- (IV) In case of constructing brick or concrete sewers the rates are for 1.5 metres depth of invert level from the ground level. Where depth is greater, additional rate is to be paid for in slabs of 4 metres additional depth or part thereof.

Serial No.	Description	Unit	Rate (Rs.)
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29.1 Clay puddle, weathered and tempered, laid and consolidated on the hat or on the slope to correct template and levels or thickness as shall be required by the Engineer-in-charge.

23.50 Cu m

(A) 29.2 Dismantling existing drains of different sizes, section only including recovery of all usable materials, stacking the same near site of dismantled works and disposal of all rubbish off site of works.

Only weathered and tempered clay of quality to be approved by the Engineer-in-charge shall be allowed to be used. The rate includes the cost of all forms and shuttering required for the placing and supporting of the puddle and for filling in all cracks and scoured and holes or channels, etc. formed in puddle and finishing to an accurate smooth surface to the place.

(a) House connection drains.

10 metres

9.80

(b) Type I drain

-do-

15.00

(c) Type II drain

-do-

35.15

(d) Type III drain

-do-

45.00

(e) Type IV drain

-do-

52.50

(i) The disposal of all rubbish off-site of work means the removal thereof to the place of disposal outside the town into ponds and depression or other suitable places, levelling up the same and clearing of the site of structures dismantled, to the satisfaction of the Engineer-in-charge.

(ii) The dismantling of brick pitched drain shall be paid for at the rates given under Chapter No.8 (Demolition) on the class of work.

(B) Brick flooring and pitching.

Reinforcements to drains and flooring in strips.

Serial No.	Description	Unit	Rate (Rs.)
29.3	In cement sand mortar 1 : 5 and projecting to a maximum height of not more than 12.5 cm above top drain along house sides of drain where required for protection of house walls.	10 metres	88.00
29.4	Regu 11.50cm thick formed of first class bricks on end laid in cement sand mortar 1 : 5 as above.	-do-	121.00
<p>Note:- The rates for items 29.3 and 29.4 include for all excavation and for all bends, curves, cutting and wastage of bricks required. The external surfaces of the exposed joints must be struck flush as the work proceeds and left perfectly smooth.</p>			
29.5	First class flat brick 7.50 cm thick laid in reimbursements in and on lime mortar on sides of drains and in other work where required over lime concrete or other foundations. All joints to be left completely filled and struck flush.	10 Sq m	380.00
29.6	First class flat brick 7.50cm thick laid in reimbursements in and on 1:6 cement sand mortar as above.	-do-	366.00
29.7	First class flat brick 7.50cm thick laid in reimbursements in and on 1:5 cement sand mortar as above.	-do-	377.50
29.8	First class flat brick 7.50cm thick laid in reimbursements in and on 1:4 cement sand mortar as above.	-do-	391.00
29.9	First class brick on edge 11.50cm thick laid in reimbursements in and on lime mortar on sides of drains and in other work where required over lime concrete or other foundation, all joints to be left complete filled and struck flush.	-do-	522.50
29.10	First class bricks on edge 11.50cm thick laid in reimbursements in and on 1:6 cement sand mortar as above.	-do-	503.00
29.11	First class brick on edge 11.50cm thick laid in reimbursements in and on 1:5 cement sand mortar as above.	-do-	519.00
29.12	First class brick on edge 11.50cm thick laid in reimbursements in and on 1:4 cement sand mortar as above.	-do-	537.50
<p>Note:- The rates laid down for items 29.5 to 29.12 cover all reimbursements to drains and any strips ribs and edgings of narrow width enclosing areas to be paved with dry brick on edge or on flat. The rates also include all extra work involved in laying narrow strips 7.50cm x 11.50cm or 23 cm wide only along side the drains and for all curves, bends, slopes and changes of slopes and other works involving added labour or material also for all irregular areas and the cutting, fitting and wastage of bricks required for such work. No extra will be payable for any special difficult or complicated work required to be executed.</p>			
(ii)	In all cases of brick on flat or brick on edge reimbursements of pitching in lime or cement mortar, a layer of mortar not less than 6mm-thick shall be placed underneath the bricks and the bricks shall be embedded therein This is covered by the rate. All joints between the bricks and along outer and inner sides of reimbursements shall be completely filled with mortar.		
(iii)	In the event of cement pointing being required in writing to be carried out for any flooring or pitching specified		

Serial No.	Description	Unit	Rate (Rs.)
29.13	<p>(b) Flooring and Paving</p> <p>(v) All joints for items No. 29.3 to 29.12 inclusive shall be specially thin joints not exceeding 5 mm width.</p> <p>(iv) The rates laid down above for items 29.3 to 29.12 do not include the cost of the lime concrete brick ballast or other foundations under the flooring and pitching.</p> <p>(b) Flooring and Paving</p> <p>First class dry flat brick flooring or paving in ordinary bonded courses or in herring bone or other special courses or bond laid to template over rammed and dressed foundations and to correct longitudinal and cross slopes as shall be required by the Engineer-in-charge.</p> <p>All joints shall be thoroughly filled with dry sand grouting which shall be applied to a thickness of not less than 20mm over the surface of the flooring and brushed into the joints. All joints shall be fully filled with sand.</p>	10 Sq m	261.00
29.14	<p>First class dry brick on edge flooring or paving in ordinary bonded courses or in herring bone or other special courses or bond laid as described in item No. 29.13.</p>	-do-	401.50
29.15	<p>First class flat brick paving or flooring laid over and in lime mortar in ordinary bonded courses, or in herring bone or other special courses, to templates, over dressed foundation and to correct longitudinal and cross slopes as shall be required by the Engineer-in-charge. All joints shall be filled with mortar and struck flush as the work proceeds.</p>	-do-	373.50
29.16	<p>First class flat brick paving or flooring laid over and in cement sand mortar 1:6 laid as described in item No. 29.15</p>	-do-	359.50
29.17	<p>First class flat brick paving or flooring laid over and in cement sand mortar 1:5 laid as described in item No. 29.15</p>	-do-	371.00
29.18	<p>First class brick on edge paving or flooring laid over and in lime mortar laid as described in item No. 29.15</p>	-do-	514.00
29.19	<p>First class flat brick paving or flooring laid over and in cement sand mortar 1:6 laid as described in item No. 29.15</p>	-do-	494.50
29.20	<p>First class brick on edge paving or flooring laid over and in cement sand mortar 1:5 laid as described in item No. 29.15</p>	-do-	510.00
29.21	<p>First class brick on edge paving or flooring laid over and in cement sand mortar 1:4 laid as described in item No. 29.15</p>	-do-	529.00
29.22	<p>Extra over and above the rates for items No. 29.13 to 29.21 inclusive for pitching on the slope to sillage drains above cunnets and to storm water channels etc. where required.</p>	-do-	8.70
<p>Notes:- (i) The rates laid down for item No. 29.13 to 29.22 inclusive the cost of herring bone and other special bonding and curved work, corners, curves, longitudinal and cross slopes, corners, cutting, shipping and wastage of bricks to fit irregular areas and other special works. all bricks shall be laid with best side exposed. (ii) In cases of item Nos. 29.13 to 29.14 the rates include for a thin layer of clay or mud plaster from 5mm to 10mm</p>			

Sl. No.	Description	Unit	Rate (Rs.)
29.23	Brick ballast well or over burnt broken and screened through a 32 mm x 32 mm square mesh screened and rammed to a finished thickness of 50mm to temporary and levels to correct longitudinal slopes, cross slopes cambers, etc. under paving or flooring.	10 Sq. m	71.00
29.24	Brick ballast well or over burnt broken and screened through a 32 mm x 32 mm square mesh screened and rammed to a finished thickness of 75 mm as above.	-do-	113.00
29.25	Clay concrete, consisting of 100 parts by volume of well burnt or over burnt brick ballast screened through 32mm x 32 mm square mesh screened mixed with 33 parts by volume of fine bubble clay, thoroughly mixed laid, consolidated and rammed to a finished thickness of 50-mm to temporary and levels to correct longitudinal slopes, cross slopes, cambers, etc. under paving or flooring as shall be required by the Engineer-in-charge.	-do-	73.50
29.26	Clay concrete as above but laid consolidated and rammed to a finished thickness of 75 mm as above.	-do-	121.00
29.27	Fixing 500 mm, 500 mm and 450 mm internal diameter circular or 455 mm x 610 mm clear inside opening rectangular manhole cover and frame including carrying angular cast iron manhole cover and frame including carrying from the stores of the Engineer-in-charge to site of work loading, unloading, including stacking and setting the same to correct lines and levels in 1 : 2 cement sand mortar over manhole etc.		

which laid to correct temporary and levels underneath the bricks which should be carefully set in the mud plaster. In case of items 29.15 to 29.22 the rates include the provision of homogeneous layer of mortar not less than 5mm thick under the whole of the flooring or paving into which the bricks shall be carefully set and embedded when laid. The joints of the flooring and paving specified in items 29.15 to 29.22 shall be fine and the maximum width shall not exceed 5mm. All bricks shall be laid with the best side exposed and the rates cover the cost of cutting and trimming the bricks where necessary in order to ensure good bond and specified fine thickness of joints.

(v) In the event of Engineer-in-charge giving orders in writing for cement pointing to be applied to the exposed surface of any flooring or paving the appropriate rate for such work will be allowed as laid down in the schedule otherwise the external surfaces of the joints shall be struck flush as the work proceeds and left perfectly smooth.

(vi) The rates laid down for items 29.15 to 29.22 do not include the cost of the concrete brick ballast or other foundation under the flooring and pitching.

(vii) The rates for item No. 29.22 includes for any special profiles or strips laid to these specifications even though the width of such strips or profiles may be only 11.5 cm or 23cm and no extra over and above the rates laid down will be paid for such work.

Serial No.	Description	Unit	Rate (Rs.)
29.28	Fixing C.I. or Malleable iron step including carriage from stores of the Engineer-in-charge to the site of works and setting the same to correct lines and levels in the work embedded in 1:2 cement and sand mortar.	Each	1.05
29.29	Fixing of heavy cast iron automatic syphon with fittings including carriage from the stores of Engineer-in-charge to site of work, loading and unloading, fixing and setting the same to correct lines and levels in 1:2 cement sand mortar in automatic flushing tanks if required.	-do-	41.00
	(a) 80 mm diameter	-do-	48.00
	(b) 100 mm diameter	-do-	48.00
29.30	Erection of cast iron ventilating columns 150mm, 250mm and 300mm internal dia. including bases, columns, caps, cowls or wire domes, etc. complete including carriage from the stores of the Engineer-in-charge of works to site of works loading and unloading, fixing and joining and setting the same in position in 1:2 cement sand mortar over the foundation blocks, in the works including the fixing and grouping of holding down bolts, nuts and washers, the filling of the completed flanged joints with molten lead and finishing off to the requirements of the Engineer-in-charge.	-do-	367.00
	(a) 150 mm internal diameter columns- 5.50 metres high and weighing 8.10 quintal, complete including base, pipe and cap etc.	-do-	455.00
	(iii) 10.00 metres high and weighing 10.20 quintal	-do-	506.00
	(iv) 11.00 metres high and weighing 11.30 quintal	-do-	554.00
	(v) 12.00 metres high and weighing 11.90 quintal	-do-	601.00
	(h) 250 mm internal diameter columns-	-do-	826.00
	(i) 8.00 metres high and weighing 17.13 quintal	-do-	896.50
	(ii) 9.00 metres high and weighing 18.60 quintal	-do-	906.00
	(iii) 10.00 metres high and weighing 18.80 quintal	-do-	994.50
	(iv) 11.00 metres high and weighing 20.63 quintal	-do-	1081.00
	(v) 12.00 metres high and weighing 22.43 quintal	-do-	954.50
	(c) 300 mm internal diameter columns-	-do-	1051.00
	(i) 8.00 metres high and weighing 19.80 quintal	-do-	
	(iii) 10.00 metres high and weighing 21.80 quintal	-do-	
29.31	Erection of R.C.C. ventilating column having minimum 200 mm internal dia and a height of 11 metres above ground level, including caps, cowls or wire domes etc. complete including carriage from the stores of the Engineer	-do-	

(vi) The height of column as mentioned in item 27.30 above is exclusive of the height of base, cap and cover or dome.

(vii) The contractor shall be entirely responsible for the safety and the custody of the material handed over to him for erection and joining and shall not damage any columns or its component parts while the same is under his charge. Things assessably, erection etc. should however, any column or its component part or the joining material got damaged or stolen while the same are under his charge and until the columns are erected have been duly approved, passed and accepted by the Engineer-in-charge, the actual cost of such damage or loss shall be recovered from the contractor. The actual cost of various component parts of the columns and of the joining material to be issued to the contractor shall be of cost can be ascertained by the Engineer-in-charge before the contractor starts work on the columns.

(viii) The contractor shall be responsible for the safety and the custody of the material handed over to him for erection and joining and shall not damage any columns or its component parts while the same is under his charge. Things assessably, erection etc. should however, any column or its component part or the joining material got damaged or stolen while the same are under his charge and until the columns are erected have been duly approved, passed and accepted by the Engineer-in-charge, the actual cost of such damage or loss shall be recovered from the contractor. The actual cost of various component parts of the columns and of the joining material to be issued to the contractor shall be of cost can be ascertained by the Engineer-in-charge before the contractor starts work on the columns.

(ix) The contractor shall be responsible for the safety and the custody of the material handed over to him for erection and joining and shall not damage any columns or its component parts while the same is under his charge. Things assessably, erection etc. should however, any column or its component part or the joining material got damaged or stolen while the same are under his charge and until the columns are erected have been duly approved, passed and accepted by the Engineer-in-charge, the actual cost of such damage or loss shall be recovered from the contractor. The actual cost of various component parts of the columns and of the joining material to be issued to the contractor shall be of cost can be ascertained by the Engineer-in-charge before the contractor starts work on the columns.

(x) The contractor shall be responsible for the safety and the custody of the material handed over to him for erection and joining and shall not damage any columns or its component parts while the same is under his charge. Things assessably, erection etc. should however, any column or its component part or the joining material got damaged or stolen while the same are under his charge and until the columns are erected have been duly approved, passed and accepted by the Engineer-in-charge, the actual cost of such damage or loss shall be recovered from the contractor. The actual cost of various component parts of the columns and of the joining material to be issued to the contractor shall be of cost can be ascertained by the Engineer-in-charge before the contractor starts work on the columns.

(xi) The contractor shall be responsible for the safety and the custody of the material handed over to him for erection and joining and shall not damage any columns or its component parts while the same is under his charge. Things assessably, erection etc. should however, any column or its component part or the joining material got damaged or stolen while the same are under his charge and until the columns are erected have been duly approved, passed and accepted by the Engineer-in-charge, the actual cost of such damage or loss shall be recovered from the contractor. The actual cost of various component parts of the columns and of the joining material to be issued to the contractor shall be of cost can be ascertained by the Engineer-in-charge before the contractor starts work on the columns.

(xii) The contractor shall be responsible for the safety and the custody of the material handed over to him for erection and joining and shall not damage any columns or its component parts while the same is under his charge. Things assessably, erection etc. should however, any column or its component part or the joining material got damaged or stolen while the same are under his charge and until the columns are erected have been duly approved, passed and accepted by the Engineer-in-charge, the actual cost of such damage or loss shall be recovered from the contractor. The actual cost of various component parts of the columns and of the joining material to be issued to the contractor shall be of cost can be ascertained by the Engineer-in-charge before the contractor starts work on the columns.

(xiii) The contractor shall be responsible for the safety and the custody of the material handed over to him for erection and joining and shall not damage any columns or its component parts while the same is under his charge. Things assessably, erection etc. should however, any column or its component part or the joining material got damaged or stolen while the same are under his charge and until the columns are erected have been duly approved, passed and accepted by the Engineer-in-charge, the actual cost of such damage or loss shall be recovered from the contractor. The actual cost of various component parts of the columns and of the joining material to be issued to the contractor shall be of cost can be ascertained by the Engineer-in-charge before the contractor starts work on the columns.

(xiv) The contractor shall be responsible for the safety and the custody of the material handed over to him for erection and joining and shall not damage any columns or its component parts while the same is under his charge. Things assessably, erection etc. should however, any column or its component part or the joining material got damaged or stolen while the same are under his charge and until the columns are erected have been duly approved, passed and accepted by the Engineer-in-charge, the actual cost of such damage or loss shall be recovered from the contractor. The actual cost of various component parts of the columns and of the joining material to be issued to the contractor shall be of cost can be ascertained by the Engineer-in-charge before the contractor starts work on the columns.

Serial No.	Description	Unit	Rate (Rs.)
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Notes: (i) The rates given above are based on the free supply by the department of columns and fittings including bases, columns pipes, caps, cowl or wire downes holding down bolts nuts and washers, joining material comprising lead and bolts, nuts and washers and rubber insertion at the stores of the Engineer-in-charge but all steel strips or packing pieces required for joining and erecting the columns are provided by the contractor at his own expenses and cost therefor is included in the above rates.

(ii) The rates also cover the cost of all special scaffolding, derricks, jibs and poles, tools and plant, ropes, gins etc. and nothing extra will be admissible to the contractor for the difficulties involved in erecting the columns absolutely true and vertical.

(iii) The joints between the stone-work or cement concrete pipe columns at ground level and their hoisted and erected unless specific approval of the Engineer-in-charge in writing permitting the contractor to do shall have been given.

(iv) The pieces if any, of the column shall be assembled and raised in ground level and their hoisted and erected unless specific approval of the Engineer-in-charge in writing permitting the contractor to do shall have been given.

(v) The columns which have not been erected absolutely true, concrete and vertical shall not be accepted and the contractor shall rectify all defects arising from defective workmanship in joining, fixing and erection at his own cost and charges and nothing extra will be admissible to him for the removal of such defects.

in-charge of works to site of works, loading, unloading, fixing and setting the same in position and embedding in foundation block (to be paid separately) complete. 1070.00 -do-

Serial No.	Description	Unit	Rate (Rs.)
29.32	Painting Vent Shafts. ready mixed paint for metallic surfaces in all shades on new works-	Metre	4.35
	(i) 150 mm internal diameter vent shaft	-do-	7.10
	(ii) 250 mm internal diameter vent shaft	-do-	8.40
	(iii) 300 mm internal diameter vent shaft	-do-	9.55
29.33	Painting one coat ready mixed paint for metallic surfaces, in all shades on old work-	Metre	2.30
	(i) 150 mm internal diameter vent shaft	-do-	4.20
	(ii) 250 mm internal diameter vent shaft	-do-	4.95
	(iii) 300 mm internal diameter vent shaft	-do-	4.45
29.34	Painting two coats with anti-corrosive bitumastic paint on new work to give an even shade-	-do-	3.50
	(i) 150 mm internal diameter vent shaft	-do-	5.70
	(ii) 250 mm internal diameter vent shaft	-do-	6.75
	(iii) 300 mm internal diameter vent shaft	-do-	7.75
29.35	Painting one coat with anti-corrosive bitumastic paint on old work to give an even shade-	-do-	2.05
	(i) 150 mm internal diameter vent shaft	-do-	3.35
	(ii) 250 mm internal diameter vent shaft	-do-	4.00
	(iii) 300 mm internal diameter vent shaft	-do-	4.00
29.36	Finishing R.C.C. vent shafts minimum 200 mm internal diameter with exterior decorative cement based paints on new work two coats to give an even finish.	Each	131.00
29.37	Finishing R.C.C vent shafts as per item 29.36 above with exterior decorative cement based paints on old work one coat to give an even shade.	-do-	60.00
29.38	Salt glazed stoneware pipe sewers and drains. Lowering salt glazed stoneware pipes and specials into trenches for all depths and laying-out-the-same-to-correct-align-ment gradient, level etc. in trenches including all dressing and trimming of bed and sides of trenches, if required, trimming and cutting of concrete beds and joint holes, supporting the pipes and specials, in correct position in a suitable rigid manner while the same are being jointed and unit the surrounding benching, haunching and envelopes are completed. The sewer shall rest on the bed at every point throughout its length and to ensure this, it shall be grouted in without extra charge by the contractor with lime surkhi mortar, in the case of lime concrete beds and 1 : 3 cement sand mortar in the case of cement concrete beds including cartage from Divisional Store or nearest Railway station to site of work.	-do-	

The weight as mentioned in this item is approximate total weight of the column.

Serial, Description	Unit	With 1st Quality	With 2nd Quality
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The internal diameter of sewer being :-

Serial No.	Description	Unit	Rate (Rs.)
	10 metres of	completed sewer	22.40
	(a)	100 mm	
	(b)	150 mm	37.00
	(c)	175 mm	41.00
	(d)	200 mm	48.00
	(e)	225 mm	61.00
	(f)	250 mm	69.00
	(g)	300 mm	94.00
	(h)	350 mm	126.00
	(i)	375 mm	145.00
	(j)	400 mm	161.00
	(k)	450 mm	193.00
<p><i>Notes:-</i> The rates include all bricks and supports for the sewer and also all right rails and appliances to ensure that the sewer is maintained to perfect alignment and gradients throughout.</p>			
29.39	Joining and fixing salt glazed stoneware pipes and special in trenches using cement sand mortar 1 : 1 and best white Italian tarred hemp/yarn including finishing and trowelling of each joint at an angle of 45 degrees with the longitudinal axis of the pipes, watering, keeping the joints covered and wetted till the same are cured, testing the sewer lines for leakage and making all leakages and defects good, complete as laid down in the contract specifications.		
	(a)	100 mm	3.75
	(b)	150 mm	5.45
	(c)	175 mm	6.30
	(d)	200 mm	7.20
	(e)	225 mm	8.20
	(f)	250 mm	10.50
	(g)	300 mm	12.50
	(h)	350 mm	13.50
	(i)	375 mm	14.50
	(j)	400 mm	15.50
	(k)	450 mm	17.00
<p><i>Notes:-</i> (i) The line concrete in beds, benching, haunching and envelops of all glazed stoneware pipe sewers will be paid for separately according to the measurements of the work carried out to the requirements of the Engineer-in-charge or as shown in the contract drawings at the rates given in the Schedule of Rates, depending upon the description and specifications of the concrete. All brick ballast must be absolutely clean and free from rubbish dirt, clay etc.</p> <p>(ii) If any cement concrete is ordered by the Engineer-in-charge to be placed in the beds, benching, haunchings or envelops of any glazed stoneware pipe sewers the same will be paid for at the rates given in the Schedule of Rates for the respective specifications and description of Rates for the concrete work carried out.</p>			

Serial No.	Description	Unit	Rate (Rs.)
(iii)	No extra over and above the rates of this Schedule for lime concrete and cement concrete work in beds, benches, haunches and envelopes will be allowed by reasons of any difficulties or wastage in work or for rough shattering or muddling.		
(iv)	In cases where caps on sockets of branches have to be removed in order to make the joints with the next pipes no extra shall be payable for cutting and removing the caps.		
29.40	Cutting glazed stoneware pipes and specials chipping and finishing the cut surface to a uniform finish and roughing the part of the pipes, if any entering the sockets of the adjacent pipes complete, to the satisfaction of the Engineer-in-charge of the works.	The internal diameter of pipes or specials being :-	
	(a) 100 mm	Per cul	1.35
	(b) 150 mm	-do-	2.05
	(c) 175 mm	-do-	2.40
	(d) 200 mm	-do-	2.75
	(e) 225 mm	-do-	3.10
	(f) 250 mm	-do-	3.45
	(g) 300 mm	-do-	4.15
	(h) 350 mm	-do-	4.85
	(i) 375 mm	-do-	5.20
	(j) 400 mm	-do-	5.60
	(k) 450 mm	-do-	6.30
29.41	Extra for laying and fixing drain chutes in pipe sewers including lowering, aligning, setting in brick work and concrete cutting away and making good completes.		
	(a) 100 mm internal diameter	Per chute	3.10
	(b) 150 mm internal diameter	-do-	3.95
	(c) 175 mm internal diameter	-do-	4.60
	(d) 200 mm internal diameter	-do-	6.10
	(e) 225 mm internal diameter	-do-	6.70
29.42	Extra for laying oblique junction branches in stoneware pipe sewers including lowering, aligning, setting in correct position with correct slopes of branches and cutting and making a room for branches complete.		
	(a) 100 mm to 450 mm internal diameter of sewer and 100 mm internal diameter of branch	Per branch complete	2.50
	(b) 150 mm to 450 mm internal diameter of sewer and 150 mm internal diameter of branch	-do-	3.75
	(c) 175 mm to 450 mm internal diameter of sewer and 175 mm internal diameter of branch	-do-	5.20
29.43	Extra over the rate laid down in this schedule for cement concrete work for making and finishing benching and complicated floor-work-in-manholes, including formation of channels and bulbozing and smoothing finishing the surface accurately to template.	Per sq m benching and flooring surface measured horizontally	12.50

Serial No.	Description	Unit	Rate (Rs.)
(F)	Plain and reinforced concrete pipes		
29.44	Lowering plain and reinforced concrete pipes and specials into trenches for all depths and laying out the same to correct alignment gradients levels etc. including all dressing and trimming and cutting of concrete beds and joints supporting the pipes and specials in correct position in a suitable rigid manner while the same are being jointed and until the surrounding benchings haunches and envelope are completed. The pipes shall rest on the beds at all points throughout their lengths and to ensure this they shall be grouted in where necessary as described in item No.29.38 including carriage from the stores of the Engineer-in-charge and safe delivery thereof at site of works. This includes, loading, unloading, stacking at convenient points adjacent to the works ready for lowering as may be found most convenient in the interest of work.		
	The internal diameter of sewer being -	Class NP 1 to NP 2	Class NP3 to NP 4
		10 metres of completed sewer	
(a)	100 mm		16.30
(b)	150 mm	-do-	22.75
(c)	200 mm	-do-	29.10
(d)	225 mm	-do-	32.80
(e)	250 mm	-do-	36.65
(f)	300 mm	-do-	49.00
(g)	350 mm	-do-	63.50
(h)	400 mm	-do-	91.00
(i)	450 mm	-do-	99.50
(j)	500 mm	-do-	108.00
(k)	600 mm	-do-	127.00
(l)	700 mm	-do-	171.00
(m)	800 mm	-do-	222.00
(n)	900 mm	-do-	260.00
(o)	1000 mm	-do-	325.00
(p)	1100 mm	-do-	393.00
(q)	1200 mm	-do-	462.00
(r)	1400 mm	-do-	626.00
(s)	1600 mm	-do-	761.00
(t)	1800 mm	-do-	963.00
			1570.00

Notes:-

(i) The octroi and terminal taxes on the pipes and specials will not be payable by the contractor but he should be liable for all losses, breakages and other damages to the pipes and specials from the moment the pipes are delivered hereof and thereafter until the pipes and specials have been jointed and tested.

(ii) The rates includes all brick supports, siglitrails and appliances required to ensure that the alignment and gradient of the sewer is perfectly maintained throughout.

Serial No.	Description	Unit	Rate (Rs.)
29.45	Joining plain and reinforced concrete pipes and specials of all classes in trenches using collar joints jointed with 1 : 1 1/2 cement sand mortar nearly dry heavily caulked into joints and with end dowels filled with 1 : 1 1/2 cement sand mortar including facing and finishing the joints at an angle of 45 degrees with faces of collars keeping joints wet till cured testing the drain lines for leakage and making good all leakage and defects as laid down in the contract specifications complete with two spigot ends jointed to collar and internal diameter of sewer pipe or special being-	Per collar joint	5.90
	(a) 100 mm	-do-	7.80
	(b) 150 mm	-do-	9.90
	(c) 200 mm	-do-	12.50
	(d) 225 mm	-do-	14.00
	(e) 250 mm	-do-	17.50
	(f) 300 mm	-do-	21.50
	(g) 350 mm	-do-	24.50
	(h) 400 mm	-do-	34.50
	(i) 450 mm	-do-	39.00
	(j) 500 mm	-do-	47.00
	(k) 600 mm	-do-	53.00
	(l) 700 mm	-do-	62.00
	(m) 800 mm	-do-	71.00
	(n) 900 mm	-do-	81.00
	(o) 1000 mm	-do-	92.00
	(p) 1100 mm	-do-	102.00
	(q) 1200 mm	-do-	122.00
	(r) 1400 mm	-do-	141.00
	(s) 1600 mm	-do-	167.00
	(t) 1800 mm	-do-	
	Notes:- (i) If any socketed plain or reinforced cement concrete pipes or specials are jointed with 1 : 1 cement sand mortar and turned worn as described for all glazed stoneware pipes and specials in item No. 29.39 of this schedule, the joining rules laid down for the sizes of pipes or specials given in item No. 29.39 of this schedule shall be payable for such joints.		
	(ii) This schedule shall also apply to all lines of drains with plain or reinforced concrete pipes and specials.		
29.46	Cutting plain and reinforced concrete pipes and specials of all classes chipping and finishing the cut surface to a uniform finish to the satisfaction of the Engineer-in-charge. The internal diameter of pipe or special being -	Per cut	2.15
	(a) 100 mm	-do-	2.85
	(b) 150 mm	-do-	3.55
	(c) 200 mm	-do-	3.90
	(d) 225 mm	-do-	

Serial No.	Description	Unit	Rate (Rs.)
(e)	250 mm	-do-	4.25
(f)	300 mm	-do-	5.10
(g)	350 mm	-do-	6.50
(h)	400 mm	-do-	7.20
(i)	450 mm	-do-	7.90
(j)	500 mm	-do-	8.70
(k)	600 mm	-do-	10.00
(l)	700 mm	-do-	11.50
(m)	800 mm	-do-	13.50
(n)	900 mm	-do-	15.00
(o)	1000 mm	-do-	16.50
(p)	1100 mm	-do-	18.00
(q)	1200 mm	-do-	19.50
(r)	1400 mm	-do-	23.00
(s)	1600 mm	-do-	26.00
(t)	1800 mm	-do-	29.00
(C)	Stoneware intercepting traps, flap-valves, Road gullies etc.		
29.47	Fixing cast iron or stoneware intercepting traps to be supplied by the Engineer-in-charge and embedding the same in cement concrete to the requirements of the Engineer-in-charge in screening chambers including carriage from the stores of the Engineer-in-charge.	Each	17.00
	(u) 100 mm internal diameter	-do-	19.00
	(b) 150 mm internal diameter	-do-	26.50
	(c) 200 mm internal diameter	-do-	20.50
29.49	House outlet, connection including gulling and forming and painting of grating and frame with coal tar.	-do-	17.50
29.50	House outlet connections as described in item No. 29.49 above but with size of Khura not less than 30cm x 15 cm.	-do-	22.00
29.51	House outlet connections as described in item 29.49 above but with size of Khura not less than 23 cm x 15 cm.	-do-	17.50
29.52	Constructing standard drain, type house connection complete consisting of cement concrete drain provided and laid over fine concrete foundation rendered and finished smooth with 6 mm thick rendering concrete to be of 1:3:6 parts by volume of cement sand stone dust and rendering to be 1:1 cement sand mortar.	-do-	12.50
29.53	Constructing standard drain type I as per above item No.29.52	Metre	20.50
29.54	Constructing standard drain type II as per above item No.29.52	Metre	28.00
29.55	Constructing standard drain type II as per above item No.29.52	-do-	69.00
			85.00

Serial No.	Description	Unit	Rate (Rs.)
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29.56 Constructing standard drain type IV as per above item No. 29.52 -do- 103.00

Notes:- (i) The rates given above for the type drains include in all cases for the cost of the excavation for the drain below level of top of concrete, the timbering, shoring, dewatering and dressing of the excavation to correct template and levels, the removal and disposal of all surplus soil and re-filling if any as described under the head Earth work, the cost of fine concrete in foundation of the drains and of all setting out apparatus required for the work. The rates also include the cost of all curves, bends, falls, junctions, inlets, outlets and all other special work in the drains and expansion joints. For drains where precast slabs are used, the rate includes for setting in correct level and template in 1:2 cement mortar, the joint being finished perfectly smooth with the faces of the slabs.

(ii) All surface drains shall be finished perfectly smooth by rubbing with properly shaped steel finishing tools and the design of all tools and appliances moulds and temp-plates and used on the construction of the drains shall be to the approval of Engineer-in-charge of the work. All precast slabs shall be cured by immersion for 10 days under water before use and all cement concrete drains moulded in site shall be flooded with water upto the tops of the buttresses during for 10 days after construction to ensure that all concrete is thoroughly seasoned.

(iii) The rates for items 29.49, 29.50 and 29.51 house outlet connections include for all work from the plinth of the house upto the street drain where this is adjacent to the house wall. If the street drain is away from the wall the appropriate length of the house connection drain will be paid for. The rates also include for cutting dharies in the house wall and reinforcement of the drains for forming particulars where required and plastering the same. The line concrete shall be to the specification described in item No. 10.16.

(H) Providing masonry plugs to ends of sewers of all types with 1:4 brick wall in cement sand mortar 1:7 with 12 mm thick cement plaster 1:6 (as required by the Engineer-in-charge).
 (A) For Circular Sewers having internal diameter-

Each	100 mm	150 mm	175 mm	200 mm	225 mm	250 mm	300 mm	350 mm	375 mm	400 mm	450 mm	500 mm
0.50	1.05	1.05	2.05	2.15	2.70	4.20	5.80	5.90	7.40	9.40	11.00	

Serial No.	Description	Unit	Rate (Rs.)
(13)	600 mm	-do-	16.00
(14)	685 mm	-do-	21.00
(15)	700 mm	-do-	21.50
(16)	760 mm	-do-	26.50
(17)	800 mm	-do-	31.00
(18)	840 mm	-do-	31.50
(19)	900 mm	-do-	37.00
(20)	915 mm	-do-	41.50
(21)	990 mm	-do-	47.00
(22)	1000 mm	-do-	47.00
(23)	1065 mm	-do-	52.50
(24)	1100 mm	-do-	57.50
(25)	1145 mm	-do-	63.00
(26)	1200 mm	-do-	68.00
(27)	1220 mm	-do-	68.50
(28)	1295 mm	-do-	78.50
(29)	1370 mm	-do-	88.50
(30)	1400 mm	-do-	89.50
(31)	1450 mm	-do-	99.50
(32)	1525 mm	-do-	110.00
(33)	1600 mm	-do-	120.00
(34)	1680 mm	-do-	131.00
(35)	1755 mm	-do-	146.00
(36)	1800 mm	-do-	152.00
(37)	1830 mm	-do-	157.00
(B)	For Egg Shaped Sewer having inside dimensions:-		
(1)	610 mm x 915 mm	Each	26.00
(2)	660 mm x 990 mm	-do-	27.00
(3)	710 mm x 1065 mm	-do-	32.00
(4)	760 mm x 1140 mm	-do-	37.00
(5)	810 mm x 1215 mm	-do-	42.00
(6)	860 mm x 1290 mm	-do-	47.50
(7)	910 mm x 1365 mm	-do-	57.00
(8)	970 mm x 1455 mm	-do-	62.50
(9)	1020 mm x 1530 mm	-do-	68.00
(10)	1070 mm x 1605 mm	-do-	78.00
(11)	1120 mm x 1680 mm	-do-	83.50
(12)	1170 mm x 1755 mm	-do-	89.50
(1)	Brick Sewers (Egg Shaped)		

Construction of standard new egg shaped type sewers as per standard drawings where the invert level of the sewer is upto 1.5 meters below ground level including dressing of beds and sides of trenches to exact profiles, grades and alignment, lime concrete or cement lime sand concrete in beds, sides and in haunches (as specified in item No. 10, 7 or 10, 16) with 1:3 cement sand collar joint not less than 12 mm thick on sides 1:1 1/2 moulded cement concrete invert

29.58

accurately finished with neat cement rendering face specially hand moulded first class radiated brick work laid in 1:3 cement sand mortar in the side and under archings of the sewers and specially hand moulded first class radiated brick work laid in 1:4 cement sand mortar in the outer archings of the sewer laid over 1:3 cement sand and collar joint not less than 12 mm in thickness formed round the inner layer of brick work and with the entire inner surface of sewer rendered with a layer of neat cement not less than 12 mm thick of 1:2 cement sand plaster and finished with a floating coat of neat cement left absolutely smooth polished and correct to template finished with two coats of sodium silicate wherever required.

The rates includes the cost of accurately planed and fitted centring and supports for all works as well as for all curves bends, falls & other special works and the cleaning out of the sewers throughout their lengths. Sodium silicate shall be supplied free of cost at the stores of the Engineer-in-charge.

The finished inside dimension of egg shaped sewer being :-

Per metre With lime concrete
of completed sewer
With cement lime sand concrete

Serial No.	Description	Unit	Rate (Rs.)
(a)	610 mm x 915 mm	-do-	571.00
(b)	660 mm x 990 mm	-do-	603.00
(c)	710 mm x 1065 mm	-do-	636.00
(d)	760 mm x 1140 mm	-do-	672.00
(e)	810 mm x 1215 mm	-do-	709.00
(f)	860 mm x 1290 mm	-do-	754.00
(g)	910 mm x 1365 mm	-do-	787.00
(h)	970 mm x 1455 mm	-do-	818.00
(i)	1020 mm x 1530 mm	-do-	858.00
(j)	1070 mm x 1605 mm	-do-	896.00
(k)	1120 mm x 1680 mm	-do-	932.00
(l)	1170 mm x 1755 mm	-do-	980.00

Construction of standard new egg shaped type sewers as per standard drawings as described in item 29.58 above but with 1:2:9:24 cement lime sand concrete with stone ballast of 20 mm gauge in beds, sides and haunches in place of lime concrete of cement lime sand concrete with brick ballast. The finished inside dimensions of egg shaped sewer being :-

(a)	610 mm x 915 mm	-do-	593.00
(b)	660 mm x 990 mm	-do-	627.00
(c)	710 mm x 1065 mm	-do-	661.00
(d)	760 mm x 1140 mm	-do-	699.00
(e)	810 mm x 1215 mm	-do-	737.00
(f)	860 mm x 1290 mm	-do-	783.00
(g)	910 mm x 1365 mm	-do-	817.00
(h)	970 mm x 1455 mm	-do-	850.00

Serial No.	Description	Unit	Rate (Rs.)
29.60	(i) 1020 mm x 1530 mm	-do-	922.00
	(j) 1070 mm x 1605 mm	-do-	931.00
	(k) 1120 mm x 1680 mm	-do-	969.00
	(l) 1170 mm x 1755 mm	-do-	1019.00
	Extra over and above the rates for item No.29.58 and 29.59 above for every additional 4 metres depth or part there of for depth of the invert level beyond 1.5 metres below ground level.		
	The finished inside dimensions of egg-shaped sewer being :-		
	(a) 610 mm x 915 mm	-do-	5.70
	(b) 660 mm x 990 mm	-do-	6.00
	(c) 710 mm x 1065 mm	-do-	6.40
	(d) 760 mm x 1140 mm	-do-	6.70
	(e) 810 mm x 1215 mm	-do-	7.00
	(f) 860 mm x 1290 mm	-do-	7.50
	(g) 910 mm x 1365 mm	-do-	7.80
	(h) 970 mm x 1455 mm	-do-	8.10
	(i) 1020 mm x 1530 mm	-do-	8.50
	(j) 1070 mm x 1605 mm	-do-	8.80
	(k) 1120 mm x 1680 mm	-do-	9.20
	(l) 1170 mm x 1755 mm	-do-	9.70
29.61	Construction of standard new egg shaped sewers as per standard drawings built upto 2/3rd height only (as constructed in manhole lengths) where the invert level of the sewer is upto 1.5 metres below G.L. including dressing of beds and sides of trenches to exact profiles, grades and alignments, lime concrete or cement lime sand concrete in beds and sides (as specified in item No.10.17 or 10.16) with 1:3 cement sand collar joint not less than 12 mm thick on side 1:1 1/2 moulded cement concrete invert accurately finished with neat cement rendering face specially hand moulded first class redated brick work laid in 1:3 cement sand mortar in the sides of the sewer with entire inner surface of the sewer rendered with neat cement not less than 12 mm thick of 1:2 cement sand plaster and finished with a floating coat of neat cement left absolutely smooth polished and correct to template finished with two coats of sodium silicate wherever required. The rate includes the cost of accurately planed and fitted centring and moulds and supports for all works as well as for all curves, bends, falls and other special work and cleaning out of the sewer through out their length. Sodium silicate shall be supplied free of cost at the stores of the Engineer-in-charge. The finished inside dimensions of egg-shaped sewer being :-		

2.70	-do-	(a)	610 mm x 915 mm
3.00	-do-	(b)	660 mm x 990 mm
3.15	-do-	(c)	710 mm x 1065 mm
3.30	-do-	(d)	760 mm x 1140 mm
3.45	-do-	(e)	810 mm x 1215 mm

The finished inside dimensions of egg-shaped sewer being :-
 1.5 metres below ground level.
 or part thereof for depth of the invert level beyond and 29.62 above for every additional 4 metres depth Extra over and above the rates for item Nos. 29.61

591.00	-do-	(k)	1120 mm x 1680 mm
616.00	-do-	(l)	1170 mm x 1755 mm

Serial No.	Description	Per metre of completed sewer	with lime concrete	with cement lime sand concrete
(j)	1070 mm x 1605 mm	-do-	570.00	570.00
(i)	1020 mm x 1530 mm	-do-	546.00	546.00
(h)	970 mm x 1455 mm	-do-	517.00	517.00
(g)	910 mm x 1365 mm	-do-	496.00	496.00
(f)	860 mm x 1290 mm	-do-	475.00	475.00
(e)	810 mm x 1215 mm	-do-	445.00	445.00
(d)	760 mm x 1140 mm	-do-	423.00	423.00
(c)	710 mm x 1065 mm	-do-	402.00	402.00
(b)	660 mm x 990 mm	-do-	381.00	381.00
(a)	610 mm x 915 mm	-do-	354.00	354.00

Construction of standard new egg shaped type sewers as per standard drawing built up 2/3rd height only (as constructed in manhole lengths) (as per described in item No. 29.61 above) but with 1:2:9:24 cement lime sand concrete with stone ballast 20mm gauge in beds and sides in place of lime concrete or cement lime sand concrete with brick ballast.
 The finished inside dimensions of eggs-shaped sewer being :-

341.00	-do-	(a)	610 mm x 915 mm
368.00	-do-	(b)	660 mm x 990 mm
388.00	-do-	(c)	710 mm x 1065 mm
408.00	-do-	(d)	760 mm x 1140 mm
429.00	-do-	(e)	810 mm x 1215 mm
458.00	-do-	(f)	860 mm x 1290 mm
478.00	-do-	(g)	910 mm x 1365 mm
498.00	-do-	(h)	970 mm x 1455 mm
526.00	-do-	(i)	1020 mm x 1530 mm
549.00	-do-	(j)	1070 mm x 1605 mm
570.00	-do-	(k)	1120 mm x 1680 mm
594.00	-do-	(l)	1170 mm x 1755 mm

Serial No.	Description	Per metre of completed sewer	with lime concrete	with cement lime sand concrete
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Serial	Description	Per metre of completed sewer with lime sand concrete	No.
(a)	760 mm	523.00	528.00
(b)	840 mm	568.00	574.00
(c)	915 mm	613.00	619.00
(d)	990 mm	676.00	683.00
(e)	1065 mm	722.00	729.00
(f)	1145 mm	790.00	798.00
(g)	1220 mm	845.00	855.00
(h)	1295 mm	888.00	898.00
(i)	1370 mm	1030.00	1043.00

Serial	Description	Per metre of completed sewer with lime sand concrete	No.
(j)	Construction of brick circular non pressure type sewers as per standard drawings where the invert level of the sewer is upto 1.5 metres below G.L. including dressing of beds and sides of trenches to exact profiles, grades and alignments, lime concrete or cement lime sand concrete in beds, sides and in haunches (as specified in item No.10.7 or 10.16) with 1:3 cement sand collar joint not less than 12 mm thick on side 1:1 1/2:3 moulded cement concrete invert accurately finished with neat cement rendering face specially hand moulded first class radiated brick work laid in 1:3 cement sand mortar in the inner arch rings of the sewers and specially hand moulded first class radiated brick work laid in 1:4 cement sand mortar in the outer arch rings of sewers laid over arch 1:3 cement sand collar joint not less than 12 mm in thickness formed round the inner arch layer of brick work and with the entire inner surface of the sewer rendered with neat cement not less than 12mm in thickness of 1:2 cement sand plaster and finished with a floating coat of neat cement left absolutely smooth polished and correct to temperature finished with two coats of sodium silicate, wherever required. The rates include the cost of accurately planed and fitted centring moulds and supports for all cleaning out of the sewer through out their lengths. Sodium silicate shall be supplied free of cost at the stores of the Engineer-in-charge.	29.64	The finished inside diameter of sewer being :-
(f)	860 mm x 1290 mm	3.75	
(g)	910 mm x 1365 mm	3.90	
(h)	970 mm x 1455 mm	4.05	
(i)	1020 mm x 1530 mm	4.25	
(j)	1070 mm x 1605 mm	4.50	
(k)	1120 mm x 1680 mm	4.65	
(l)	1170 mm x 1755 mm	4.85	

Serial No.	Description	Unit	Rate
(j)	1450 mm	-do-	1090.00
(k)	1525 mm	-do-	1139.00

Serial No.	Description	Per metre with lime and sand concrete	Per metre of completed sewer
(j)	1450 mm	1076.00	1125.00
(k)	1525 mm	1139.00	1175.00

Construction of brick circular non-pressure type sewers as per standard drawings as per described in item No.29.64 above but with 1:2:9:24 cement lime sand concrete with stone ballast 20mm gauge in beds sides and haunches in place of lime concrete or cement lime sand concrete with brick ballast. The finished inside diameter of sewer being:-

540.00	-do-	760 mm	(a)
587.00	-do-	840 mm	(b)
634.00	-do-	915 mm	(c)
700.00	-do-	990 mm	(d)
747.00	-do-	1065 mm	(e)
820.00	-do-	1145 mm	(f)
878.00	-do-	1220 mm	(g)
922.00	-do-	1295 mm	(h)
1076.00	-do-	1370 mm	(i)
1124.00	-do-	1450 mm	(j)
1175.00	-do-	1525 mm	(k)

Extra over and above the rates for item No. 29.64 and 29.65 for every additional 4 metres depth or part thereof for depth of invert level beyond 1.5 metres below ground level. The finished inside diameter of sewer being:-

5.40	-do-	760 mm	(a)
5.90	-do-	840 mm	(b)
6.30	-do-	915 mm	(c)
6.90	-do-	990 mm	(d)
7.40	-do-	1065 mm	(e)
8.00	-do-	1145 mm	(f)
8.50	-do-	1220 mm	(g)
9.00	-do-	1295 mm	(h)
10.00	-do-	1370 mm	(i)
10.50	-do-	1450 mm	(j)
11.00	-do-	1525 mm	(k)

Construction of brick circular non-pressure type sewer as per standard drawings built up one half height only (as constructed in manhole lengths) where the invert level of the sewer is upto 1.5 metres below G.L. including dressing of beds and sides of trenches to exact profiles, grades and alignment lime concrete or cement lime sand concrete in

29.67

29.68	Construction of brick circular non-pressure type sewers as per standard drawings built up one half height only (as constructed in manhole lengths) as per described in item No.29.67 above but with 1:2:4 cement lime sand concrete with stone ballast 20mm gauge in beds and sides in place of lime concrete or cement lime sand concrete with brick ballast. The finished inside diameter of sewer being :-	(a) 760 mm	-do-	292.00
		(b) 840 mm	-do-	320.00
		(c) 915 mm	-do-	353.00
		(d) 990 mm	-do-	392.00
		(e) 1065 mm	-do-	412.00
		(f) 1145 mm	-do-	470.00

Serial No.	Description	Unit	Rate	Per metre of sewer completed
(a)	760 mm	-do-	278.00	278.00
(b)	840 mm	-do-	303.00	303.00
(c)	915 mm	-do-	335.00	335.00
(d)	990 mm	-do-	371.00	371.00
(e)	1065 mm	-do-	390.00	390.00
(f)	1145 mm	-do-	443.00	443.00
(g)	1220 mm	-do-	476.00	476.00
(h)	1295 mm	-do-	501.00	501.00
(i)	1370 mm	-do-	528.00	528.00
(j)	1450 mm	-do-	548.00	548.00
(k)	1525 mm	-do-	576.00	576.00

beds sides (as specified in item No. 10.7 or 10.16) with 1:3 cement sand collar joint not less than 12mm thick on sides 1:1 1/2:3 moulded cement concrete invert accurately finished with neat cement rendering face specially hand moulded 1st class radiated brick work laid in 1:3 cement sand mortar in the inner archings of sewers upto one half with the entire inner surface of the sewer rendered with neat cement not less than 12mm in thickness 1:2 cement sand plaster and finished with a floating coat of neat cement left absolutely smooth polished and correct to template finished with two coats of Sodium silicate wherever required. The rates include the cost of accurately planed and fitted centring moulds and supports for all works as well as for all curves, bends, falls and other special works and the cleaning out of the sewers throughout their lengths, Sodium silicate shall be supplied free of cost at the stores of the Engineer-in-charge.

The finished inside diameter of sewer being :-

Serial No.	Description	Unit	Rate	Per metre with lime and cement	Per metre with lime sand concrete

Serial No.	Description	Unit	Rate
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29.69	Extra over and above the rates for item No. 29.67 and 29.68 for every additional 4 metres depth or part thereof for depth of invert level beyond 1.5 metres below ground level.		
	(g) 1220 mm	-do-	505.00
	(h) 1295 mm	-do-	531.00
	(i) 1370 mm	-do-	560.00
	(j) 1450 mm	-do-	581.00
	(k) 1525 mm	-do-	611.00

	(a) 760 mm	-do-	2.20
	(b) 840 mm	-do-	2.45
	(c) 915 mm	-do-	2.70
	(d) 990 mm	-do-	3.00
	(e) 1065 mm	-do-	3.15
	(f) 1145 mm	-do-	3.65
	(g) 1220 mm	-do-	3.90
	(h) 1295 mm	-do-	4.15
	(i) 1370 mm	-do-	4.35
	(j) 1450 mm	-do-	4.50
	(k) 1525 mm	-do-	4.80

R.C.C. cum Brick Circular Sewer

(k) 29.70

Construction of R.C.C. cum Brick circular (pressure type) sewers with full section without drawings portion concrete in bed, as per standard drawings where the invert level of the sewer is up to 1.5 metres below G.L. including dressing of beds and sides of trenches to exact profiles, grades and alignments, cement concrete 1:3:6 in beds, and sides (as per specified in item No. 10.40), R.C.C. ring of cement concrete 1:2:4 (as specified in item No. 10.79, specially hand moulded 1st class radiated brick work laid in 1:3 cement sand mortar (as specified in item No. 11.5) in the inner and outer arch rings of the sewers and with the entire inner surface of the sewer rendered with neat cement not less than 12mm in thickness of 1:2 cement sand plaster and finished with a floating coat of neat cement left absolutely smooth polished and correct to template finished with two coats of sodium silicate wherever required.

The rates include the cost of accurately planned and fitted centring moulds and supports for all works as well as all curves, bends, falls and other special works and cleaning out of the sewers throughout their lengths. Sodium silicate and steel will be supplied free of cost at the stores of the Engineer-in-charge.

The finished inside diameter of sewer being :-

Serial No.	Description	Unit	Rate
29.71	(a) 760 mm	-do-	855.00
	(b) 840 mm	-do-	940.00
	(c) 915 mm	-do-	1024.00
	(d) 990 mm	-do-	1103.00
	(e) 1065 mm	-do-	1176.00
	(f) 1145 mm	-do-	1340.00
	(g) 1220 mm	-do-	1419.00
	(h) 1295 mm	-do-	1419.00
	(i) 1370 mm	-do-	1551.00
	(j) 1450 mm	-do-	1613.00
	(k) 1525 mm	-do-	1758.00
Extra over and above the rates for item No.29.70 for every additional 4 metres depth or part thereof for depth of invert level beyond 1.5 metres below G.L. The finished inside diameter of sewer being :-			
Construction of R.C.C. cum Brick circular (pressure type) sewers with triangular portion concrete in bed as per standard drawings as per described in item No. 29.70 above.			
The finished inside diameter of sewer being :-			
29.72	(a) 760 mm	-do-	5.40
	(b) 840 mm	-do-	5.90
	(c) 915 mm	-do-	6.20
	(d) 990 mm	-do-	6.90
	(e) 1065 mm	-do-	7.40
	(f) 1145 mm	-do-	8.20
	(g) 1220 mm	-do-	8.70
	(h) 1295 mm	-do-	9.50
	(i) 1370 mm	-do-	9.90
	(j) 1450 mm	-do-	10.50
	(k) 1525 mm	-do-	11.00
Construction of R.C.C. cum Brick circular (pressure type) sewers with triangular portion concrete in bed as per standard drawings as per described in item No. 29.70 above.			
The finished inside diameter of sewer being :-			
29.73	(a) 760 mm	-do-	954.00
	(b) 840 mm	-do-	1059.00
	(c) 915 mm	-do-	1148.00
	(d) 990 mm	-do-	1242.00
	(e) 1065 mm	-do-	1332.00
	(f) 1145 mm	-do-	1532.00
	(g) 1220 mm	-do-	1642.00
	(h) 1295 mm	-do-	1784.00
	(i) 1370 mm	-do-	1868.00
	(j) 1450 mm	-do-	1958.00
	(k) 1525 mm	-do-	2047.00
Extra over and above the rates for item No.29.72 above for every additional 4 metres depth or part thereof for depth of invert level beyond 1.5 metres below ground level.			

Per metre of completed sewer

Serial No.	Description	Unit	Rate
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	(a) 760 mm	-do-	5.90
	(b) 840 mm	-do-	6.50
	(c) 915 mm	-do-	7.00
	(d) 990 mm	-do-	7.60
	(e) 1065 mm	-do-	8.10
	(f) 1145 mm	-do-	9.20
	(g) 1220 mm	-do-	9.80
	(h) 1295 mm	-do-	10.50
	(i) 1370 mm	-do-	11.00
	(j) 1450 mm	-do-	11.50
	(k) 1525 mm	-do-	12.00

The finished inside diameter of sewer being :-

Construction of R.C.C. cum brick circular (pressure type) sewers as per standard drawings where the invert level of the sewer is upto 1.5 metres below ground level built upto one half height only (as constructed in manhole lengths) without irregular portion concrete in bed including dressing of beds and sides of trenches to exact profiles, grades and alignments cement concrete 1:3:6 in beds and sides (as specified in item No. 10.40) R.C.C. ring of cement concrete 1:2:4 (as specified in item No. 10.79) specially hand moulded 1st class radiated brick work laid in 1:3 cement sand mortar (as specified in item No. 11.5) in the inner arch ring of the sewer with the entire inner surface of the sewer rendered with neat cement not less than 12mm in thickness of 1:2 cement sand, plaster and finished with a finishing coat of neat cement left absolutely smooth and correct to template finished with two coats of sodium silicate wherever required. The rates include the cost of accessories planned and fitted centring moulds and supports for all works and cleaning out the sewer throughout their lengths sodium silicate and steel will be supplied free of cost at the stores of the Engineer-in-charge.

489.00	-do-	(a) 760 mm
542.00	-do-	(b) 840 mm
590.00	-do-	(c) 915 mm
642.00	-do-	(d) 990 mm
694.00	-do-	(e) 1065 mm
785.00	-do-	(f) 1145 mm
833.00	-do-	(g) 1220 mm
879.00	-do-	(h) 1295 mm
917.00	-do-	(i) 1370 mm
959.00	-do-	(j) 1450 mm
990.00	-do-	(k) 1525 mm

Serial	Description	Unit	Rate
29.75	Extra over and above the rates for item No.29.74 above for every additional 4 metres depth or part thereof for depth of invert level beyond 1.5 metres below ground level. The finished inside diameter of sewer being :-		
	(a) 760 mm	-do-	2.95
	(b) 840 mm	-do-	3.30
	(c) 915 mm	-do-	3.55
	(d) 990 mm	-do-	3.85
	(e) 1065 mm	-do-	4.20
	(f) 1145 mm	-do-	4.65
	(g) 1220 mm	-do-	4.90
	(h) 1295 mm	-do-	5.20
	(i) 1370 mm	-do-	5.40
	(j) 1450 mm	-do-	5.70
	(k) 1525 mm	-do-	5.90
29.76	Construction of R.C.C. cum Brick circular (pressure type) sewers with triangular portion concrete in bed as per standard drawings as per described in item No. 29.74 above. The finished inside diameter of sewer being :-		
	(a) 760 mm	-do-	587.00
	(b) 840 mm	-do-	661.00
	(c) 915 mm	-do-	714.00
	(d) 990 mm	-do-	781.00
	(e) 1065 mm	-do-	849.00
	(f) 1145 mm	-do-	977.00
	(g) 1220 mm	-do-	1055.00
	(h) 1295 mm	-do-	1112.00
	(i) 1370 mm	-do-	1170.00
	(j) 1450 mm	-do-	1228.00
	(k) 1525 mm	-do-	1280.00
29.77	Extra over and above the rates for item No.29.76 above for every additional 4 metres depth or part thereof for depth of invert level beyond 1.5 metres below ground level. The finished inside diameter of sewer being :-		
	(a) 760 mm	-do-	3.45
	(b) 840 mm	-do-	3.90
	(c) 915 mm	-do-	4.15
	(d) 990 mm	-do-	4.55
	(e) 1065 mm	-do-	5.00
	(f) 1145 mm	-do-	5.60
	(g) 1220 mm	-do-	6.00
	(h) 1295 mm	-do-	6.40
	(i) 1370 mm	-do-	6.70
	(j) 1450 mm	-do-	7.00
	(k) 1525 mm	-do-	7.40

Serial	Description	Unit	Rate
		Per metre of completed sewer	

Serial No. Description
 Per metre of completed concrete
 with lime concrete
 lime sand
 concrete drain

(1.) Circular storm water brick drain.
 29.78 Construction of Brick circular storm water drains

as per standard drawings where the invert level of the drain is upto 1.5 metres below G.L. including dressing of beds and sides of trenches to exact profiles, grades and alignments lime concrete or cement lime sand concrete in beds and sides. (as specified in item No. 10.7 or 10.16) specially hand moulded 1st class radiated brick work laid in 1:4 cement sand mortar in the inner and outer arch rings of drain and with the entire inner surface of the drain rendered with neat cement not less than 12mm in thickness of 1:2 cement sand plaster and finished with a floating coat of neat cement left absolutely smooth polished and correct to templates finished with two coats of sodium silicate wherever required.
 The rates include the cost of accurately planned and fitted centring moulds and supports for all works as well as for all curves, bends, falls and other special works and cleaning out of the storm water drains throughout their lengths Sodium silicate will be supplied free of cost at the stores of the Engineer-in-charge.
 The finished inside diameter of storm water drain

378.00	375.00	-do-	(a)	685 mm	Construction of brick circular storm water drains as per standard drawings as described in item No. 29.78 above with cement lime sand concrete 1:2:9:24 with stone ballast of 75 mm (as specified in item No. 10.18) gauge in beds and sides. The finished inside diameter of storm water drain being :-
410.00	407.00	-do-	(b)	760 mm	
449.00	445.00	-do-	(c)	840 mm	
484.00	480.00	-do-	(d)	915 mm	
516.00	512.00	-do-	(e)	990 mm	
548.00	544.00	-do-	(f)	1065 mm	
587.00	582.00	-do-	(g)	1145 mm	
619.00	614.00	-do-	(h)	1220 mm	
651.00	646.00	-do-	(i)	1295 mm	
683.00	678.00	-do-	(j)	1370 mm	
720.00	715.00	-do-	(k)	1450 mm	
756.00	750.00	-do-	(l)	1525 mm	
788.00	782.00	-do-	(m)	1600 mm	
820.00	814.00	-do-	(n)	1680 mm	
859.00	852.00	-do-	(o)	1755 mm	
890.00	884.00	-do-	(p)	1830 mm	
385.00		-do-			29.79 Construction of brick circular storm water drains as per standard drawings as described in item No. 29.78 above with cement lime sand concrete 1:2:9:24 with stone ballast of 75 mm (as specified in item No. 10.18) gauge in beds and sides. The finished inside diameter of storm water drain being :-
417.00		-do-			(a) 685 mm
		-do-			(b) 760 mm

Construction of of Brick circular storm water drains as per standard drawings built up one half height only (as constructed in manhole length) where the invert level of the drain is upto 1.5 metres below G.L.

Serial	Description	Unit	Rate	No.
(a)	685 mm	-do-	4.75	
(b)	760 mm	-do-	5.15	
(c)	840 mm	-do-	5.60	
(d)	915 mm	-do-	6.00	
(e)	990 mm	-do-	6.40	
(f)	1065 mm	-do-	6.70	
(g)	1145 mm	-do-	7.20	
(h)	1220 mm	-do-	7.60	
(i)	1295 mm	-do-	7.90	
(j)	1370 mm	-do-	8.30	
(k)	1450 mm	-do-	8.80	
(l)	1525 mm	-do-	9.20	
(m)	1600 mm	-do-	9.60	
(n)	1680 mm	-do-	9.60	
(o)	1755 mm	-do-	10.50	
(p)	1830 mm	-do-	11.00	

Extra over and above the rates for item No.29.78 & 29.79 for every additional 4 metres depth or part thereof for depth of invert level beyond 1.5 metres below ground level.
The finished inside diameter of drain being :-

Serial	Description	Per metre of completed sewer	Rate	No.
(c)	840 mm	-do-	457.00	
(d)	915 mm	-do-	493.00	
(e)	990 mm	-do-	526.00	
(f)	1065 mm	-do-	559.00	
(g)	1145 mm	-do-	598.00	
(h)	1220 mm	-do-	631.00	
(i)	1295 mm	-do-	664.00	
(j)	1370 mm	-do-	696.00	
(k)	1450 mm	-do-	733.00	
(l)	1525 mm	-do-	770.00	
(m)	1600 mm	-do-	802.00	
(n)	1680 mm	-do-	835.00	
(o)	1755 mm	-do-	875.00	
(p)	1830 mm	-do-	907.00	

Per metre with lime with cement of completed concrete lime sand drain concrete

Serial	Description	Unit	Rate	Per metre with lime and cement of completed concrete drain
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including dressing of beds and sides of trenches to exact profiles, grades and alignments, lime concrete or cement lime sand concrete in beds and sides, (as specified in item No. 10.7 or 10.16) with 1:4 cement sand mortar in the inner arch rings of the storm water drain and with the entire inner surface of the drain rendered with neat cement not less than 12mm in thickness of 1:2 cement sand plaster and finished with a floating coat of neat cement left absolutely smooth polished and correct to templates finished with two coats of sodium silicate wherever required. The rates include the cost of accurately planed and fitted centring moulds and supports for all works as well as for all curves, bends, falls and other special works and cleaning of the storm water drains throughout their lengths sodium silicate will be supplied free of cost at the stores of the Engineer-in-charge.

The finished inside diameter of storm water drain being :-

(a)	685 mm	-do-	192.00	195.00
(b)	760 mm	-do-	207.00	210.00
(c)	840 mm	-do-	232.00	236.00
(d)	915 mm	-do-	250.00	254.00
(e)	990 mm	-do-	265.00	269.00
(f)	1065 mm	-do-	285.00	289.00
(g)	1145 mm	-do-	305.00	310.00
(h)	1220 mm	-do-	320.00	325.00
(i)	1295 mm	-do-	340.00	345.00
(j)	1370 mm	-do-	354.00	360.00
(k)	1450 mm	-do-	369.00	375.00
(l)	1525 mm	-do-	392.00	398.00
(m)	1600 mm	-do-	407.00	413.00
(n)	1680 mm	-do-	426.00	432.00
(o)	1755 mm	-do-	447.00	454.00
(p)	1830 mm	-do-	462.00	469.00

Construction of brick circular storm water drains as per standard drawings built up to one half height only (as constructed in manhole length) as described in item No. 29.81 above with cement lime sand concrete 1:2:9:24 with stone ballast of 20 mm (as specified in item No. 10.18) gauge in beds and sides.

The finished inside diameter of storm water drain being :-

29.82

Serial	Description	Unit	Rate	No.
				with cement
				lime sand
				concrete
			202.00	
			217.00	
			244.00	
			263.00	
			279.00	
			299.00	
			321.00	
			337.00	
			357.00	
			373.00	
			388.00	
			412.00	
			427.00	
			447.00	
			470.00	
			485.00	
			29.83	
				Extra over and above the rates for item No.29.81
				to be for depth of invert level beyond 1.5 metres
				below ground level.
				The finished inside diameter of drain being :-
(a)	685 mm	-do-	1.95	
(b)	760 mm	-do-	2.10	
(c)	840 mm	-do-	2.35	
(d)	915 mm	-do-	2.50	
(e)	990 mm	-do-	2.65	
(f)	1065 mm	-do-	2.85	
(g)	1145 mm	-do-	3.05	
(h)	1220 mm	-do-	3.20	
(i)	1295 mm	-do-	3.40	
(j)	1370 mm	-do-	3.55	
(k)	1450 mm	-do-	3.65	
(l)	1525 mm	-do-	3.90	
(m)	1600 mm	-do-	4.05	
(n)	1680 mm	-do-	4.25	
(o)	1755 mm	-do-	4.45	
(p)	1830 mm	-do-	4.55	
(i)				For all types of sewers/ drains described under item
				No.29.58, 29.59, 29.61, 29.62, 29.64, 29.65, 29.67,
				29.68, 29.70, 29.72, 29.74, 29.76, 29.78, 29.79,
				29.81 and 29.82, the through rates laid down in these
				items shall be payable in all cases and not the in-
				divided rates for lime concrete, brick work and other
				separate components items of work as laid down in
				this Schedule.
(ii)				In the case of manholes, junctions and junction cha-

Notes:-

Constructing brick masonry inspection chamber
 sizes as given below upto 0.60 metre average depth
 in cement mortar 1:5 lime concrete with 40 percent
 lime mortar 2:3 in foundation concrete 1:2:4
 benching 12mm thick cement plaster 1:2 with a
 floating coat of 1mm thick of neat cement R.C.C.
 1:2:4 slab 100mm thick/C.C. topping. 30 mm thick

(M) 29.84

Masonry Chambers.

No. 29.39.
 Joining wall glazed stone ware pipes wide item
 sewers will be paid for at the rate laid down for
 or bricks laid in connection with the brick burn

(A)

Socketed joints made in branch pipes, junctions
 and difficulties in respect thereof in his tender.
 thoroughly acquainted with all local conditions and
 before tendering for the work shall make himself
 acquainted by him in the work and the contractor
 or difficulties or difficulties whatsoever which may be
 concrete in or under water or on account of any
 difficulties of the work shall dimensions, laying
 of Rates shall be allowed in the contract the 10
 and above the said rate laid down in this Schedule
 description of the said concrete work. No extra over
 in-charges of the relevant rates laid down in the Sche-
 dule of Rates depending on the Specifications and
 certified and by him under the orders of the Engineer
 to payment for the cement concrete work actually
 in the contract and the contractor shall be entitled
 or cement lime sand concrete from the amount payable
 etc. on account of the actual volume of lime concrete
 in beds and sides and in haunches and top arch rings
 10.16 for lime concrete/cement lime sand concrete
 thing to the rates specified in item No. 10.7 and
 lime sand concrete a deduction shall be made acco-
 of cement concrete in place of lime concrete/cement
 or envelope of any type of sewers to be constructed
 provision of the whole or any part of the foundation
 in the event of the Engineer-in-charge requiring the
 for the item of extra work actually carried out.

(iv)

for reinforcement, brick work pointing and plastering
 the heads lime concrete plain concrete and concrete
 the respective rates laid down in this Schedule under
 of sewer the same shall be measured and paid for at
 in-charges of the work in connection with any type
 certified and under orders in writing of the Engineer-
 in the event of any extra or additional work being

(v)

Schedule.
 plastering etc. as laid down and described in this
 cement for reinforcement, brick work, pointing and
 and under the heads lime concrete, plain concrete and
 measurements of each separate item of work carried
 payments will be made on the basis of detailed
 meters, flushing tanks and various works however

Serial No.	Description	Unit	Rate (Rs.)
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Serial No. Description Unit Rate (Rs.)

with 455 mm x 455 mm x 455 mm inside light duty C.I. inspection chamber cover and frame weight as per 1.5.1 specification painted with 3 coats of black bitumastic superior paint complete as per standard design.

(a) Size 450 mm x 450 mm inside (with 455 mm x 455 mm cover and frame light duty single seal) weighing 20 kg with C.C. clapping) Each 414.00

(b) Size 450 mm x 600 mm in side (with 455 mm x 610 mm cover and frame single seal pattern-1 weighing 38 kg with C.C. clapping) -do- 582.00

(c) Size 600 mm x 900 mm inside (with 455 mm x 455 mm cover and frame light duty single weighing 20 kg with R.C.C. slab) -do- 690.00

Normally inspection chambers of 450 mm x 450 mm and 450 mm x 600 mm should be constructed in very exceptional cases where connections cannot be accommodated in 450 mm x 600 mm size inspection chamber of 600 mm x 900 mm be adopted.

29.85 Extra for over 0.30 metre depth of inspection chamber:- (a) 450 mm x 450 mm Per 0.30 metre depth. 92.00

(b) 450 mm x 600 mm -do- 103.00

(c) 600 mm x 900 mm -do- 139.00

29.86 Constructing brick masonry ventilating chambers as per standard drawings including dressing of beds and sides of chamber to exact profiles 15 cm lime concrete 16:24:100 (as per specification in foundation, 1st class brick work laid in cement sand mortar 1:2:4 for reinforced concrete work in slab 12mm thick cement plaster 1:2 rendered with a floating coat of neat cement 1mm thick over exposed brick tablet and inside walls, lime pointing 2:3 on outside complete and as required by the Engineer-in-charge.

29.87 Constructing brick masonry road gully chambers as per standard drawings (as per sizes given below) including dressing of beds and sides of chamber to exact profiles, 15cm thick lime concrete 16:24:100 (as per specification in item No 10.6) in foundation, 1st class brick work laid in cement sand mortar, 1:5, 40mm thick cement concrete 1:2:4 topping inside the chamber with a floating coat of 1.5 mm thick neat cement laid in one operation to the topping the entire inner surface of the chamber rendered with neat cement not less than 12mm in thickness of 1:2 cement sand plaster and finished with a floating coat of neat cement 1mm thick left absolutely smooth polished and correct to templates including labour for fixing the C.I. road gully grating and frame including painting with coal tar (as specified in item No. 29.48 complete and to the requirement of the Engineer-in-charge.

(a) Single Road Gully Chamber size 610 mm x 457 mm x 800 mm Each 391.00

2160.00	Each	for 2.40 metres depth below ground level
2330.00	-do-	for 2.70 metres depth below ground level
2500.00	-do-	for 3.00 metres depth below ground level
2670.00	-do-	for 3.40 metres depth below ground level
2766.00	-do-	for 3.70 metres depth below ground level
3155.00	-do-	for 4.00 metres depth below ground level
3320.00	-do-	for 4.30 metres depth below ground level
3470.00	-do-	for 4.60 metres depth below ground level
3640.00	-do-	for 4.90 metres depth below ground level
3830.00	-do-	for 5.20 metres depth below ground level
3980.00	-do-	for 5.50 metres depth below ground level
4100.00	-do-	for 5.80 metres depth below ground level
4340.00	-do-	for 6.10 metres depth below ground level
	(II)	On egg-shaped sewers of size 910 mm x 1365 mm to 970 mm x 1455 mm

(I) On egg-shaped sewers of size 610 mm x 915 mm to 860 mm x 1290 mm

stores of Engineer-in-charge. The rate also covers the cost of M.S. steel for R.C.C. slab labour for fixing and carriage of C.I. manhole frame and cover and malleable iron steps from the stores of the Engineer-in-charge of the works to site of works. The rates further includes cost of accurately planned and fixed centring, supports for all works, as well as for all curves and specials work cleaning out their beds etc. sodium silicate shall be supplied free of cost at the stores of Engineer-in-charge.

The rate also covers the cost of M.S. steel for R.C.C. slab labour for fixing and carriage of C.I. manhole frame and cover and malleable iron steps from the stores of the Engineer-in-charge of the works to site of works. The rates further includes cost of accurately planned and fixed centring, supports for all works, as well as for all curves and specials work cleaning out their beds etc. sodium silicate shall be supplied free of cost at the stores of Engineer-in-charge.

Construction of rectangular standard brick masonry manhole chambers to standard drawings on new egg-shaped sewers upto the required depth in 1:5 cement sand mortar, lime concrete 40 percent lime mortar with 19-20 mm gauge brick ballast in haunches above the arch ring where the depth of cover in traffic streets is less than 1.5 metres, 12 mm thick water tight 1:2 cement sand plaster with a floating coat of neat cement and finished with two coats of sodium silicate on interior surface where required, reinforced cement concrete slab 180 mm thick fixing 560 mm internal diameter C.I. manhole frame and cover weight not less than 2.5 quintal painted with 3 coats of black bitumen paint, fixing galvanised malleable iron steps embedded in 1:2 cement sand mortar etc. complete.

Serial No.	Description	Unit	Rate (Rs.)
29.88	Reduction for every 7.5 cm depth of road gully chamber from the rate of item No. 29.87 above.	-do-	25.00
	(a) Single road gully chamber	-do-	41.00
	(b) Double road gully chamber	-do-	82.00
	(i) size 1448 mm x 457 mm x 800 mm	-do-	660.00
	(ii) size 1448 mm x 457 mm x 1105 mm	-do-	822.00
	(b) Double Road Gully Chamber:	-do-	490.00
	(iii) size 610 mm x 457 mm x 1105 mm	-do-	
29.89	Manhole Chambers:		
(N)			

Serial No.	Description	Unit	Rate (Rs.)
(a)	for 3.70 metres depth below ground level	Each	5265.00
(b)	for 4.00 metres depth below ground level	-do-	5480.00
(c)	for 4.30 metres depth below ground level	-do-	5623.00
(d)	for 4.60 metres depth below ground level	-do-	5820.00
(e)	for 4.90 metres depth below ground level	-do-	5990.00
(f)	for 5.20 metres depth below ground level	-do-	6210.00
(g)	for 5.50 metres depth below ground level	-do-	6380.00
(h)	for 5.80 metres depth below ground level	-do-	6790.00
(i)	for 6.10 metres depth below ground level	-do-	7225.00
(II)	On egg shaped sewers of size 1020 mm x 1530 mm or above.		
(a)	for 3.70 metres depth below ground level	-do-	5480.00
(b)	for 4.00 metres depth below ground level	-do-	5675.00
(c)	for 4.30 metres depth below ground level	-do-	5845.00
(d)	for 4.60 metres depth below ground level	-do-	6040.00
(e)	for 4.90 metres depth below ground level	-do-	6210.00
(f)	for 5.20 metres depth below ground level	-do-	6400.00
(g)	for 5.50 metres depth below ground level	-do-	6595.00
(h)	for 5.80 metres depth below ground level	-do-	6960.00
(i)	for 6.10 metres depth below ground level	-do-	7470.00
Construction of rectangular standard brick masonry manhole chambers to standard drawings on S.W. pipe sewers or other circular pipe sewers upto the required depth in 1:5 cement sand-mortar, lime concrete in bed and sides of pipe sewer and cement concrete 1:2:4 in benching, 12 mm thick water tight 1:2 cement sand plaster with a floating coat of neat cement and finished with 2 coats of sodium silicate on interior surface where required, reinforced cement concrete slab 180 mm thick fixing 560 mm internal diameter C.I. manhole cover and frame weight not less than 2.5 quintal painted with 3 coats of black bitumen paint, fixing galvanised malleable iron steps embedded in 1:2 cement sand mortar complete.			
The rate covers the cost of M.S. steel for R.C.C. slab labour for fixing and carriage of C.I. manhole frame and cover and malleable iron steps from the stores of the Engineer-in-charge of the works to site of works.			
The rates also includes cost of accurately planned and fitted centring, supports for all works, as well as for all curves and special work cleaning out their beds etc. sodium silicate shall be supplied free of cost at the stores of Engineer-in-charge.			
(i)	On 100 mm internal diameter pipe sewer	Each	1890.00
(a)	for 1.20 metres depth below ground level	-do-	2185.00
(b)	for 1.50 metres depth below ground level	-do-	2475.00
(c)	for 1.80 metres depth below ground level	-do-	2085.00
(ii)	On 150 mm internal diameter pipe sewer	-do-	
(a)	for 1.20 metres depth below ground level	-do-	

Serial No.	Description	Unit	Rate (Rate)
(b)	for 1.50 metres depth below ground level	Each	2400.00
(c)	for 1.80 metres depth below ground level	-do-	2670.00
(d)	for 2.10 metres depth below ground level	-do-	2985.00
(e)	for 2.40 metres depth below ground level	-do-	3300.00
(iii)	On 175 mm internal diameter pipe sewer	-do-	2740.00
(a)	for 1.80 metres depth below ground level	-do-	3055.00
(b)	for 2.10 metres depth below ground level	-do-	3395.00
(c)	for 2.40 metres depth below ground level	-do-	3685.00
(d)	for 2.70 metres depth below ground level	-do-	3810.00
(e)	for 3.00 metres depth below ground level	-do-	3810.00
(iv)	On 200 mm internal diameter pipe sewer	-do-	2815.00
(a)	for 1.80 metres depth below ground level	-do-	3130.00
(b)	for 2.10 metres depth below ground level	-do-	3415.00
(c)	for 2.40 metres depth below ground level	-do-	3685.00
(d)	for 2.70 metres depth below ground level	-do-	3830.00
(e)	for 3.00 metres depth below ground level	-do-	3830.00
(v)	On 225 mm internal diameter pipe sewer	-do-	2860.00
(a)	for 1.80 metres depth below ground level	-do-	3180.00
(b)	for 2.10 metres depth below ground level	-do-	3495.00
(c)	for 2.40 metres depth below ground level	-do-	3750.00
(d)	for 2.70 metres depth below ground level	-do-	3855.00
(e)	for 3.00 metres depth below ground level	-do-	4730.00
(vi)	On 250 mm internal diameter pipe sewer	-do-	3615.00
(a)	for 2.40 metres depth below ground level	-do-	3855.00
(b)	for 2.70 metres depth below ground level	-do-	4000.00
(c)	for 3.00 metres depth below ground level	-do-	4340.00
(d)	for 3.40 metres depth below ground level	-do-	4755.00
(e)	for 3.70 metres depth below ground level	-do-	4755.00
(vii)	On 300 mm internal diameter pipe sewer	-do-	3615.00
(a)	for 2.40 metres depth below ground level	-do-	3855.00
(b)	for 2.70 metres depth below ground level	-do-	3955.00
(c)	for 3.00 metres depth below ground level	-do-	4125.00
(d)	for 3.40 metres depth below ground level	-do-	4390.00
(e)	for 3.70 metres depth below ground level	-do-	4560.00
(viii)	On 350 mm internal diameter pipe sewer	-do-	4075.00
(a)	for 2.40 metres depth below ground level	-do-	4365.00
(b)	for 2.70 metres depth below ground level	-do-	4485.00
(c)	for 3.00 metres depth below ground level	-do-	4705.00
(d)	for 3.40 metres depth below ground level	-do-	4850.00
(e)	for 3.70 metres depth below ground level	-do-	4850.00
(ix)	On 375 mm internal diameter pipe sewer	-do-	4000.00
(a)	for 2.40 metres depth below ground level	-do-	4295.00
(b)	for 2.70 metres depth below ground level	-do-	4365.00
(c)	for 3.00 metres depth below ground level	-do-	4365.00
(d)	for 3.40 metres depth below ground level	-do-	4560.00
(e)	for 3.70 metres depth below ground level	-do-	4705.00

Serial No.	Description	Unit	Rate (Rate)
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(x)	On 400 mm internal diameter pipe sewer	Each	4365.00
(a)	for 2.40 metres depth below ground level	-do-	4560.00
(b)	for 2.70 metres depth below ground level	-do-	4680.00
(c)	for 3.00 metres depth below ground level	-do-	4800.00
(d)	for 3.40 metres depth below ground level	-do-	4950.00
(e)	for 3.70 metres depth below ground level	-do-	5045.00
(xi)	On 450 mm internal diameter pipe sewer	-do-	4630.00
(a)	for 2.40 metres depth below ground level	-do-	4800.00
(b)	for 2.70 metres depth below ground level	-do-	4900.00
(c)	for 3.00 metres depth below ground level	-do-	5045.00
(d)	for 3.40 metres depth below ground level	-do-	5045.00
(e)	for 3.70 metres depth below ground level	-do-	5045.00

29,91

Construction of circular standard brick masonry manhole chambers to standard drawings on S.W pipe sewer or other circular sewers upto the required depth in 1:5 cement sand mortar lime concrete in bed and sides of pipe sewer and cement concrete 1:2:4 in benching 12 mm thick water tight 1:2 cement sand plaster with a floating coat of neat cement and finished with two coats of seditum silicate on interior surface where required fixing 500 mm internal diameter C.I. manhole cover and frame weight not less than 2.5 quintal painted with 3 coats of black bitumen paint fixing galvanised millable iron steps embedded in 1:2 cement sand mortar complete. The rate covers the cost of carriage of C.I. manhole, frame and cover and meltable iron steps from the stores of the Engineer-in-charge of the works to site of works. The rate also includes the cost of accurately planed and fitted centring supports for all works as well as for all curves and special works cleaning our their beds etc. Sodium silicate will be supplied free of cost at the stores of the Engineer-in-charge.

FOR 1.80 METRES DEPTH BELOW GROUND LEVEL

(i)	on 175 mm internal diameter pipe sewer	-do-	1940.00
(ii)	on 200 mm internal diameter pipe sewer	-do-	1965.00
(iii)	on 225 mm internal diameter pipe sewer	-do-	1965.00
(iv)	on 250 mm internal diameter pipe sewer	-do-	1980.00
(v)	on 300 mm internal diameter pipe sewer	-do-	2000.00
(vi)	on 350 mm internal diameter pipe sewer	-do-	2000.00
(vii)	on 375 mm internal diameter pipe sewer	-do-	2110.00
(viii)	on 400 mm internal diameter pipe sewer	-do-	2110.00
(ix)	on 450 mm internal diameter pipe sewer	-do-	2135.00

29,92

Extra cover and above on item No. 29,91 for every additional per 0.30 metre depth of manhole upto 4 metres depth beyond 1.80 metres below ground level.

per 0.30 metre depth.

315.00

SANITARY INSTALLATIONS

CHAPTER NO. 30

NOTES :

- (1) All the labour rates provided under this chapter include the carriage of material within a radius of 5 km of the site of works.
 - (II) The labour as well as through rates provided under this chapter include the wastage and breakage of various materials during construction.
 - (III) Provision has been made under this chapter for Sanitary fittings of best Indian make to the approval of the Engineer-in-charge. In this connection the Superintending Engineer will circulate from time to time the list of fittings of best Indian manufacture which may be considered to be on the approved list and be allowed to be used on works.
- Separate rates have been provided for different types of fittings, pipes and specials for different sizes.

Serial	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)	No.
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SANITARY FITTINGS

(A) 30.1 Water Closet Suites

Providing and fixing in position best Indian make (to the approval of the Engineer-in-charge) Indian type water closet suite consisting of :-

(i) Closet set Vitreouschinaire W.C. pan with horizontal inlet, for sinking into floor with a pair of footrests, 100 mm H.C.T. 'P' trap with or without vent as required and suitable joint for closet inlet.

(ii) 1 1/2 litres capacity mosquito proof cast iron flushing cistern best Indian make I.S.I. marked

nomos or other (as approved by the Engineer-in-charge) painted with non-yellowing white or other approved shade enamel paint on outside and black bituminastic superior paint approved manufacture on inside complete with all accessories such as 20 mm G.I. over flow pipe with specials & clamps upto 15 cm above floor level of W.C. room, and brass perforated mosquito proof cap, 32 mm outlet, 15 mm I.S.I. marked ballcock, G.I. pull and chain R.S. or C.I. painted brackets and mosquito proof cup-lings for outlet and overflow pipes, etc.

(iii) 32 mm diameter telescopic 1.25 mm thick galvanized inside and outside steel flush pipe with clips. Complete in all respects including cutting and making good the walls and floors and painting of fittings etc.

(a) Size 580 mm (i) White (ii) Single colour (iii) Mixed colour (b) Size 630 mm (i) White

Each	86.50	86.50	767.00
-do-	86.50	86.50	860.00
-do-	86.50	86.50	953.00
-do-	86.50	86.50	785.00

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.2	Providing and fixing in position best Indian make (to the approval of the Engineer-in-charge), Indian type orissa or oya water closet suite for sink- ing into floor, with raised foot leads complete with 100-mm H.C.L. 'P' trap with or without vent as re- quired and all other necessary fitting as fully descri- ed in item No.30.1 above.	(i) Single colour	86.50	836.00
		(ii) Mixed colour	86.50	988.00
		(iii) White	86.50	800.00
		(c) Size 680 mm	86.50	909.00
		(i) Single colour	86.50	800.00
		(ii) Mixed colour	86.50	909.00
		(iii) White	86.50	800.00
		(b) Size 630 mm	86.50	909.00
		(i) Single colour	86.50	800.00
		(ii) Mixed colour	86.50	909.00
30.3	Providing and fixing in position best Indian make Anglo Indian water closet suite (as approved by the Engineer-in-charge) consisting of :-	(a) Size 580 mm	86.50	925.00
		(i) White	86.50	1097.00
		(ii) Single colour	86.50	1269.00
		(iii) Mixed colour	86.50	1097.00
		(b) Size 630 mm	86.50	1269.00
		(i) White	86.50	970.00
		(ii) Single colour	86.50	1165.00
		(iii) Mixed colour	86.50	1359.00
		(c) Size 680 mm	86.50	1022.00
		(i) White	86.50	1242.00
(ii) Single colour	86.50	1472.00		
(iii) Mixed colour	86.50	1472.00		
30.4	Complete in all respects including cutting and mak- ing good the walls and floors and painting of fit- ings etc. 32 mm diameter telescopic 1.25 mm thick galvanized inside and outside steel flush pipe with clips.	(i) Single colour	86.50	1193.00
		(ii) White	86.50	1474.00
		(iii) Mixed colour	86.50	1755.00
		(i) Single colour	86.50	1193.00
		(ii) White	86.50	1474.00
		(iii) Mixed colour	86.50	1755.00
		(iii) Mixed colour	86.50	1755.00
		(ii) Single colour	86.50	1474.00
		(i) White	86.50	1193.00
		(iii) Mixed colour	86.50	1755.00

Serial No. Description Unit Labour Rate(Rs.) Through Rate(Rs.)

30.5	(i) Vitreous chinaware syphonic suite with 15 litres capacity matching chinaware cistern and all internal brass fittings complete with 'P' or 'S' trap with or without vent (as approved by the Engineer-in-charge) European type water closet suite, syphonic type consisting of	Each	86.50	901.00	(as approved by the Engineer-in-charge) European type water closet suit with non-concealed 'P' or 'S' trap with or without vent and all other necessary fittings as fully described in item No.30.3 above.
	(ii) White		86.50	1036.00	
	(iii) Single colour		86.50	1171.00	
	(iii) Mixed colour		86.50	1171.00	
30.5	Providing and fixing in position best Indian make (as approved by the Engineer-in-charge) European type water closet suite, syphonic type consisting of				
	(i) Vitreous chinaware syphonic suite with 15 litres capacity matching chinaware cistern and all internal brass fittings complete with 'P' or 'S' trap with or without vent (as approved by the Engineer-in-charge)				Complete in all respects including cutting and making good the walls and floors.
	(ii) White		86.50	1542.00	
	(iii) Single colour		86.50	2204.00	
	(iii) Mixed colour		86.50	2866.00	
	(b) Double trap syphonic W.C. Suite,				
	(i) White		86.50	1958.00	
	(ii) Single colour		86.50	2829.00	
	(iii) Mixed colour		86.50	3699.00	
30.7	Providing and fixing in position best Indian make (as approved by the Engineer-in-charge) bidet, suite consisting of-				
	(i) Bidet suite in vitreous china ware 380 mm high (as approved by the Engineer-in-charge)				
	(ii) Best chromium plated brass bidet fitting four holes basin mixer with pop-waste etc. complete (as approved by the Engineer-in-charge)				Complete in all respects including cutting and making good the walls and floors & painting of fittings etc.
	(i) White		86.50	958.00	
	(ii) Single colour		86.50	1121.00	
	(iii) Mixed colour		86.50	1284.00	
	Providing and fixing in position best Indian make (as approved by the Engineer-in-charge) bidet, suite consisting of-				
	(i) Bidet suite in vitreous china ware 380 mm high (as approved by the Engineer-in-charge)				
	(ii) Best chromium plated brass bidet fitting four holes basin mixer with pop-waste etc. complete (as approved by the Engineer-in-charge)				Complete in all respects including cutting and making good the walls and floors & painting of fittings etc.
	(i) White		53.50	1517.00	

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.8	Extra over item Nos. 30.1 to 30.4 and 30.6 for providing and fixing 15 litres capacity vitreous china flush level cistern complete with internal brass fittings instead of 12.5 litres capacity high level C.I. cistern complete (as approved by the Engineer-in-charge)	Each	53.50	1845.00
	(ii) Single colour			
	(iii) Mixed colour		53.50	2173.00
30.9	Extra over item No. 30.1 to 30.4 and 30.6 for providing and fixing 15 litres capacity C.I. low down cistern flush bend and all other necessary fittings instead of 12.5 litres capacity high level C.I. flushing cistern with flush pipe in white enamel spray paint after making smooth the C.I. surface by rubbing scraping etc. complete.	-do-	-	319.00
	(i) White			
	(ii) Single colour		-	458.00
	(iii) Mixed colour		-	597.00
30.10	Extra over item No. 30.1 to 30.4 and 30.6 for providing and fixing 15 litres capacity C.I. low down cistern flush bend and all other necessary fittings instead of 12.5 litres capacity high level C.I. flushing cistern with flush bend and all other necessary fittings in white enamel paint.	-do-	--	132.00
30.11	Extra over item No. 30.1 to 30.4 and 30.6 for providing and fixing 15 litres capacity C.I. low down cistern complete with flush bend and all other necessary fittings instead of C.I. high level cistern complete with flush bend and all other necessary fittings in white enamel paint.	-do-	--	191.00
30.12	Extra over item Nos. 30.3 to 30.6 for providing and fixing best Indian make plastic hygienic seat with lid complete instead of hollow black or white plastic seat and lid.	-do-	--	329.00
	(i) White			
	(ii) Single colour		--	290.00
	(iii) Mixed colour		--	464.00
30.13	Extra for providing and fixing best Indian make china pull handle with chromium plated brass chain instead of G.I. chain and pull.	-do-	--	655.00
	(i) White plastic seat (Solid)		--	193.00
	(ii) Black plastic seat (Solid)		--	90.00
	(iii) Coloured plastic seat other than black or white (Solid)		--	251.00
30.14	Extra for providing and fixing 32 mm dia. G.I./C.P. flush pipe complete with accessories instead of 32	-do-	--	40.00
30.15	Extra for providing and fixing 32 mm dia. G.I./C.P. flush pipe complete with accessories instead of 32	-do-	--	30.00

Serial No. Description Unit Labour Rate(Rs.) Through Rate(Rs.)

30.16	(a) 32 mm dia G.I. flush pipe. (b) 32 mm dia C.P. brass flush pipe	Each	--	31.50	125.00
30.17	Providing and fixing 32 mm diameter G.I. extension pipe for Indian type W.C. suite complete in all respects.	-do-	6.80	78.50	
30.18	Extra for providing and fixing 32 mm lead extension pipe weighing 4.46 kg per metre and 3.6 mm thick for Indian type water closet suite including cost of wiped solder joint.	-do-	6.80	111.00	
30.19	Urinals (B) Providing and fixing in position best Indian make flat back or angular lipped front urinal 465 mm high consisting of :- (i) Flat back lipped or angular urinal basin of Vitreous china ware (in the approval of the Engineer-in-charge) (ii) 5 litres capacity mosquito proof Indian make C.I. automatic flushing cistern, painted with non-yellowing white enamel paint or other approved shade enamel paint on outside and superior black bituminous paint on inside complete with screwed 15 mm pipe. (iii) Pair of R. S. or C.I. painted brackets and brass couplings. (iv) Standard size G.I. flush pipe with C.P. brass wall clips and unions complete including cutting and making good the walls and floor and painting of fittings etc. (as required by the Engineer-in-charge).	-do-	--	68.00	
30.20	Providing and fixing in position best Indian make a range of two urinals flat back or angular lipped front in vitreous china ware with 5 litres capacity best Indian make C.I. automatic flushing cistern with fittings and flush pipe etc. complete as fully described in Item No.30.19 above.	-do-	59.00	402.00	478.00
	(i) White	-do-	59.00		
	(ii) Single colour	-do-	59.00		
	(iii) Mixed colour	-do-	59.00	554.00	
30.21	Providing and fixing in position best Indian make a range of three urinals flat back or angular lipped in vitreous china ware with one No.10 litres capacity 465 mm high	-do-	78.00	614.00	766.00
	(i) White	-do-	78.00		
	(ii) Single colour	-do-	78.00		
	(iii) Mixed colour	-do-	78.00	917.00	

Serial No. Description Unit Labour Rate(Rs.) Through Rate(Rs.)

30.22	(i) White 465 mm high city best Indian make C.I. automatic flushing cistern with fittings and flush pipe etc. complete as fully described item No. 30.19 above.	Each	113.00	864.00
	(ii) Single colour	-do-	113.00	1091.00
	(iii) Mixed colour	-do-	113.00	1319.00
30.22	Providing and fixing in position best Indian make a range of four urinals flat back or angular lipped in vitreous china ware with two Nos. 5 litres capacity best Indian make C.I. automatic flushing cistern with fittings and flush pipe etc. complete as fully described in item No. 30.19 above.	Each	152.00	1232.00
	(i) White	-do-	152.00	1332.00
	(ii) Single colour	-do-	152.00	1535.00
	(iii) Mixed colour	-do-	152.00	1839.00
30.23	Extra over and above item No. 30.19 to 30.22 above for providing and fixing per sealed 'P' trap and 32 mm lead waste pipe weighing 3.47 kg/metre and 2.8 mm thick upto floor level and plumber joint.	Each	6.80	108.00
30.24	Extra over and above item No. 30.19 to 30.22 above for providing and fixing chromium plated brass 'P' or 'S' trap with waste pipe of 32 mm dia complete.	-do-	6.80	101.00
30.25	Providing and fixing in position best Indian make large flat back or angular lipped front Urinal 610 mm high consisting of - (i) Flat back lipped or angular urinal basin or vitreous chinaware, (to the approval of the Engineer-in-charge) (ii) 5 litres capacity mosquito proof Indian make C.I. automatic flushing cistern painted with non-yellowing white enamel paint or other approved shade enamel paint on outside and superior black bitumastic paint on inside with screwed 15 mm pipe. (iii) Pair of R.S. or C.L. painted brackets and brass couplings. (iv) Pair of C.L. special type brackets for urinal. (v) 32 mm C.P. brass spreader. (vi) Standard size G.I. flush pipe with C.P. brass wall clips and unions. (vii) 32 mm C.P. brass waste with dome-grating. (viii) 32 mm C.P. brass bottle trap. Complete including cutting and making good the walls and floors and painting of fittings etc. (as required by the Engineer-in-charge)	-do-	101.00	101.00
	Single Urinal	Each	67.00	1014.00
	(i) White	-do-	67.00	1251.00
	(ii) Single colour	-do-	67.00	1251.00

Serial No. Description Unit Labour Through Rate(Rs.) Rate(Rs.)

30.26 (iii) Mixed colour Each 67.00 1488.00

Providing and fixing in position best Indian make range of two urinals large flat back or angular tipped front 610 mm high in vitreous chinaware with 5 litres capacity best Indian make C.I. automatic flushing cistern with fittings and flush pipe etc. complete as fully described in item No.30.25 above.

Range of two Urinals

(i) White -do- 87.50 1827.00

(ii) Single colour -do- 87.50 2301.00

(iii) Mixed colour -do- 87.50 2775.00

Providing and fixing in position best Indian make a range of three urinals large flat back or angular tipped front 610 mm high in vitreous chinaware with one No. 10 litres capacity best Indian make C.I. automatic flushing cistern with fittings and flush pipe etc. complete as fully described in item No. 30.25 above.

Range of three Urinals

(i) White -do- 123.00 2679.00

(ii) Single colour -do- 123.00 3390.00

(iii) Mixed colour -do- 123.00 4101.00

Providing and fixing in position best Indian make a range of four urinals flat back or angular tipped front 610 mm high in vitreous chinaware with two Nos. 5 litres capacity C.I. automatic flushing cistern with fittings and flush pipe etc. complete as fully described in item No.30.25 above.

Range of four Urinals

(i) White -do- 153.00 3625.00

(ii) Single colour -do- 153.00 4573.00

(iii) Mixed colour -do- 153.00 5521.00

Providing and fixing in position best Indian make stall urinal in vitreous chinaware (to the approval of the Engineer-in charge) consisting of -

(i) Stall urinal 1150 mm high in vitreous china-ware (to the approval of the Engineer-in charge) 5 litres capacity mosquito proof Indian make C.I. automatic flushing cistern painted with non-yellowing white enamel paint or other approved shade enamel paint on outside and superior black bitumastic paint on inside complete with inlet screwed 15 mm pipe.

(iii) Pair of R.S. or C.I. painted brackets and brass couplings.

(iv) Standard size G.I. flush pipe C.P. brass clips and unions.

(v) 32 mm C.P. brass waste with dome grating.

(vi) 32 mm C.P. brass spreader.

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
	Complete including cutting and making good the walls and floor and painting of fittings etc. (as required by the Engineer-in-charge)			
30.30	Providing and fixing in position best Indian make a range of two stall urinals 1150 mm high in vitreous china ware with one No. 5 litres capacity C.I. automatic flushing cistern with fittings and flush pipe complete as fully described in Item No.30.29 above.	Each	67.00	1653.00
	(i) White	-do-	67.00	2280.00
	(ii) Single colour	-do-	67.00	2907.00
	(iii) Mixed colour	-do-	67.00	
30.31	Providing and fixing in position best Indian make a range of three stall urinals 1150 mm high in vitreous china ware with one No. 10 litres capacity C.I. automatic flushing cistern with fittings and flush pipe complete as fully described in Item No.30.29 above.	-do-	87.50	3101.00
	(i) White	-do-	87.50	4355.00
	(ii) Single colour	-do-	87.50	5609.00
	(iii) Mixed colour	-do-	87.50	
30.32	Providing and fixing in position best Indian make back a range of four stall urinals 1150 mm high in vitreous china ware with two No. 5 litres capacity C.I. automatic flushing cistern with fittings and flush pipe complete as fully described in Item No.30.29 above.	-do-	123.00	4592.00
	(i) White	-do-	123.00	6473.00
	(ii) Single colour	-do-	123.00	8354.00
	(iii) Mixed colour	-do-	123.00	
30.33	Providing and fixing in position best Indian make squatting urinals of size 600 mm x 350 mm consisting of -	-do-	154.00	6174.00
	(i) Squatting plate urinals 600 mm x 350 mm in vitreous china ware, (as approved by the Engineer-in-charge)	-do-	154.00	11190.00
	(ii) C.I. automatic flushing cistern painted with non yellowing white enamel paint or other approved shade enamel paint on outside and superior black bitumastic paint on inside complete with screwed 15 mm pipe;	-do-	154.00	
	(iii) Pair of R.S. or C.I. painted brackets and brass couplings;	-do-	154.00	
	(iv) Standard size C.I. flushing pipe complete with fittings;	-do-	154.00	
	Complete including cutting and making good the walls and floor and painting of fittings etc. (as			

Serial Description Unit Labour Rate(Rs.) Through Rate(Rs.)

Serial	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
	approved by the Engineer-in-charge)			
30.34	Providing and fixing in position best Indian make china ware with one No. 5 litres capacity C.I. automatic flushing cistern with fitting and flush pipe complete as fully described in item No. 30.33 above.	Each	67.00	531.00
	(i) White	-do-	67.00	642.00
	(ii) Single colour	-do-	67.00	753.00
	(iii) Mixed colour	-do-	67.00	
30.35	Providing and fixing in position best Indian make china ware with 10 litres capacity C.I. automatic flushing cistern with fitting and flush pipe complete as fully described in item No. 30.33 above.	Each	78.00	818.00
	(i) White	-do-	78.00	1040.00
	(ii) Single colour	-do-	78.00	1262.00
	(iii) Mixed colour	-do-	78.00	
30.36	Providing and fixing in position best Indian make a range of four squatting urinals in vitreous china ware with two Nos. 5 litres capacity C.I. automatic flushing cistern with fitting and flush pipe complete as fully described in item No. 30.33 above.	Each	113.00	1169.00
	(i) White	-do-	113.00	1501.00
	(ii) Single colour	-do-	113.00	1834.00
	(iii) Mixed colour	-do-	113.00	
30.37	Extra for providing and fixing vitreous automatic flushing cistern including fittings and brackets instead of C.I. flushing cistern complete.	Each	152.00	1624.00
	(i) White	-do-	152.00	2068.00
	(ii) Single colour	-do-	152.00	2512.00
	(iii) Mixed colour	-do-	152.00	
30.38	Extra for providing and fixing standard size C.P. brass flush pipe complete with fittings instead of G.I. Flush pipe complete.	Per set	75.00	75.00
	(i) For single urinal	-do-	75.00	158.00
	(ii) For a range of two urinals	-do-	75.00	251.00
	(iii) For a range of three urinals	-do-	75.00	286.00
	(iv) For a range of four urinals	-do-	75.00	
30.39	Providing and fixing 25 mm thick marble backs for the different type of urinals. Size 60mm x 1050mm	Each	38.00	216.00

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.40	Providing and fixing 25 mm thick marble partitions for different type of urinals.			
	(a) Size 375 mm x 750mm	Each	19.00	95.00
	(B) Vetreous Chinaware Partition plate.			
	(i) Small size 680mm x 330 mm			
	(i) White	-do-	17.50	200.00
	(ii) Single colour	-do-	17.50	287.00
	(iii) Mixed colour	-do-	17.50	374.00
	(ii) Large size 835mm x 355 mm			
	(i) White	-do-	17.50	298.00
	(ii) Single colour	-do-	17.50	434.00
	(iii) Mixed colour	-do-	17.50	570.00
30.41	Providing and fixing in position best Indian make (ordinary) lavatory suites consisting of:- Lavatory in vitreous chinaware size as given below (to the approval of the Engineer-in-charge) including china plug for tap hole where necessary. R.S. or C.I. brackets for building into wall including painting. 32 mm C.P. Brass waste with C.P. brass chain and rubber plug; 15 mm C.P. Brass screw down pillar tap with joints or couplings best design (as approved by the Engineer-in-charge). All fittings best Indian make and to the approval of the Engineer-in-charge. All brass work chromium plated and complete in all respects including cutting and making good the walls floors and painting of fittings etc. White			
	(i) Size 450 mm x 300 mm with one no. tap	-do-	48.00	138.00
	(iii) Size 480 mm x 400 mm with one no. tap	-do-	48.00	159.00
	(iii) Size 510 mm x 400 mm with one no. tap	Each	48.00	392.00
	(iv) Size 550 mm x 400 mm with one no. tap	-do-	48.00	407.00
	(v) Size 560 mm x 450 mm with one no. tap	-do-	48.00	475.00
	(vi) Size 630 mm x 450 mm with one no. tap	-do-	48.00	491.00
	(vii) Size 630 mm x 500 mm with one no. tap	-do-	48.00	565.00
	Single Colour:			
	(i) Size 450 mm x 300 mm with one no. tap	-do-	48.00	417.00
	(ii) Size 480 mm x 400 mm with one no. tap	-do-	48.00	449.00
	(iii) Size 510 mm x 400 mm with one no. tap	-do-	48.00	498.00
	(iv) Size 550 mm x 400 mm with one no. tap	-do-	48.00	521.00
	(v) Size 560 mm x 450 mm with one no. tap	-do-	48.00	622.00
	(vi) Size 630 mm x 450 mm with one no. tap	-do-	48.00	647.00
	(vii) Size 630 mm x 500 mm with one no. tap	-do-	48.00	768.00

Serial No. Description Unit Labour Rate(Rs.) Through Rate(Rs.)

30.42	Mixed Colour	Each	48.00	496.00
	(i) Size 450 mm x 300 mm with one no. tap	-do-	48.00	539.00
	(ii) Size 480 mm x 400 mm with one no. tap	-do-	48.00	604.00
	(iii) Size 510 mm x 400 mm with one no. tap	-do-	48.00	634.00
	(iv) Size 550 mm x 400 mm with one no. tap	-do-	48.00	770.00
	(v) Size 560 mm x 450 mm with one no. tap	-do-	48.00	802.00
	(vi) Size 630 mm x 450 mm with one no. tap	-do-	48.00	950.00
	(vii) Size 630 mm x 500 mm with one no. tap	-do-	48.00	

Providing and fixing in position best Indian make lavatory suites (with full and splash rim in vitreous chinaware and all other necessary fittings as fully described in item No.30.41 above.

	White.		48.00	442.00
	(i) Size 510 mm x 400 mm with one no. tap.	-do-	48.00	575.00
	(ii) Size 530 mm x 430 mm with one no. tap.	-do-	48.00	701.00
	(iii) Size 610 mm x 510 mm with one no. tap.	-do-	48.00	710.00
	(iv) Size 530 mm x 430 mm with one no. tap.	-do-	48.00	961.00
	(v) Size 630 mm x 450 mm with one no. tap.	-do-	48.00	923.00
	(vi) Size 630 mm x 510 mm with one no. tap.	-do-	48.00	1115.00
	(vii) Size 690 mm x 550 mm with one no. tap.	-do-	48.00	1499.00
	Mixed Colour		48.00	704.00
	(i) Size 510 mm x 400 mm with one no. tap.	-do-	48.00	845.00
	(ii) Size 530 mm x 430 mm with one no. tap.	-do-	48.00	1221.00
	(iii) Size 610 mm x 510 mm with one no. tap.	-do-	48.00	1171.00
	(iv) Size 630 mm x 450 mm with one no. tap.	-do-	48.00	1427.00
	(v) Size 630 mm x 510 mm with one no. tap.	-do-	48.00	1938.00
	(vi) Size 690 mm x 550 mm with one no. tap.	-do-	48.00	

Providing and fixing in position best Indian make lavatory suites (Angle back) in vitreous chinaware and all other necessary fittings as fully described in item No.30.41 above.

	White.	Each	48.00	343.00
	Size 530 mm x 430 mm with one no. tap	-do-	48.00	425.00
	Single Colour		48.00	507.00
	Size 530 mm x 430 mm with one no. tap	-do-	48.00	
	Mixed Colour		48.00	279.00
	Size 530 mm x 430 mm with one no. tap	-do-	14.50	

Providing and fixing in position best Indian make Pedestal fittings of vitreous chinaware complete (as required by the Engineer-in-charge)

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
	(i) Single colour	Each	14.50	408.00
	(iii) Mixed colour	-do-	14.50	538.00
30.45	Providing and fixing in position best Indian chrome plated brass 2nd tap for lavatory.	-do-	2.75	92.00
30.46	(a) Providing and fixing in position best Indian make C.P. brass basin mixer complete inst-ead of one no pillar tap.	-do-	8.30	257.00
	(b) Providing and fixing in position best Indian make C.P. brass three tap holes mixer with pop-up-waste instead of one no pillar tap and C.P. waste.	-do-	14.00	611.00
30.47	Extra for providing and fixing in position best Indian make C.P. elbow action pillar tap instead of or C.P. brass pillar tap.	-do-	--	50.00
30.48	Providing and fixing in position 32mm Dia. G.L. waste pipe embedded in wall or lead waste pipe (weighing 3.47 kg. per metre and 2.8 mm thick) upto floor level including cost of wiped solder joint etc. complete (as required by the Engineer-in-charge)	-do-	6.80	98.00
30.49	Providing and fixing in position best Indian chrome plated brass 'P' or 'S' tap 32 mm dia.	-do-	2.75	40.50
30.50	Providing and fixing in position best Indian chrome plated brass bottle trap 32 mm dia. metre.	-do-	4.25	92.00
30.51	Providing and fixing in position best Indian makes sink consisting of :- (i) R.C.C. sink in Mosaic size as given below (ii) R.S. or C.I. Buckets for building into wall for sink including painting. (iii) 40 mm C.P. Brass waste with C.P. Brass chain and rubber plug : All fittings best Indian make and to the approval of the Engineer-in-charge. All brass work chromium plated complete in all respects including cutting and making good the walls and floors and painting of fittings etc. complete. (a) Size 600 mm x 450 mm x 200 mm (b) Size 600 mm x 450 mm x 250 mm (c) Size 750 mm x 450 mm x 200 mm (d) Size 750 mm x 450 mm x 250 mm Providing and fixing in position best Indian vitreous chinaware sinks with complete fittings as fully described in item No.30.51 above.	-do-	48.00	207.00
		-do-	48.00	220.00
		-do-	48.00	232.00
		-do-	48.00	245.00
30.52	White Size 600 mm x 450 mm x 200 mm (a) Size 600 mm x 450 mm x 250 mm (b) Size 750 mm x 450 mm x 200 mm (c) Size 750 mm x 450 mm x 250 mm (d)	Each	48.00	847.00
		-do-	48.00	897.00
		-do-	48.00	968.00
		-do-	48.00	1082.00

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.53	Providing and fixing in position best quality stainless steel sinks with complete fittings as fully described in item No. 30.51 above.	Each	48.00	1210.00
	(a) Size 600 mm x 450 mm x 200 mm	-do-	48.00	1285.00
	(b) Size 600 mm x 450 mm x 250 mm	-do-	48.00	1393.00
	(c) Size 750 mm x 450 mm x 200 mm	-do-	48.00	1564.00
30.54	Providing and fixing in position best quality stainless steel sinks with complete fittings as fully described in item No. 30.51 above.	Each	48.00	1574.00
	(a) Size 600 mm x 450 mm x 200 mm	-do-	48.00	1674.00
	(b) Size 600 mm x 450 mm x 250 mm	-do-	48.00	1817.00
	(c) Size 750 mm x 450 mm x 200 mm	-do-	48.00	2045.00
30.55	Providing and fixing in position well seasoned teak wood draining board with skirting and beadings. Iron brackets for building into wall including painting and cutting and making good the walls etc.	Each	48.00	809.00
	(a) Size 600 mm x 450 mm x 200 mm	-do-	48.00	903.00
	(b) Size 600 mm x 450 mm x 250 mm	-do-	48.00	978.00
	(c) Size 750 mm x 450 mm x 200 mm	-do-	48.00	1191.00
30.56	Providing and fixing in position best Indian make vitreous chinaware draining board with iron brackets for building into wall including painting, cutting and making good the walls etc.	Each	12.00	169.00
	(a) Size 750 mm x 450 mm x 40 mm thick	-do-	12.00	156.00
	(b) Size 600 mm x 450 mm x 40 mm thick	-do-	12.00	156.00
	(c) Size 750 mm x 450 mm x 40 mm thick	-do-	12.00	156.00
31.57	Providing an fixing in position best Indian make fire clay draining board with iron brackets for building into wall including painting, cutting and making good the walls etc.	Each	12.00	244.00
	(a) 500 mm x 350 mm	-do-	12.00	244.00
	(b) 600 mm x 450 mm	-do-	12.00	299.00
	White.	-do-	12.00	244.00
	(a) 450 mm x 450 mm	-do-	12.00	251.00
	(b) 530 mm x 450 mm	-do-	12.00	251.00
	Single Colour	-do-	12.00	357.00
	(a) 450 mm x 450 mm	-do-	12.00	357.00
(b) 530 mm x 450 mm	-do-	12.00	368.00	
Mixed Colour	-do-	12.00	470.00	
(a) 450 mm x 450 mm	-do-	12.00	470.00	
(b) 530 mm x 450 mm	-do-	12.00	485.00	

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.58	(c) 750 mm x 450 mm Providing and fixing in position best quality stain- less steel draining board with iron brackets for building into wall including painting, cutting and making good the walls etc.	Each	12.00	359.00
30.59	(a) 600 mm x 450 mm Providing and fixing in position with best quality stainless steel sink built in draining board of size 600 mm x 450 mm complete as described in Item No 30.53 and 30.58.	-do-	12.00	1774.00
30.60	(a) Sink size 600 x 450 x 200 mm (b) Sink size 530 x 450 x 175 mm Providing and fixing in position best Indian make vitreous chinaware laboratory sinks (to the approval of the Engineer-in-charge).	-do-	60.00	7630.00
	(i) Sink in vitreous chinaware with or without 15 mm rim projection around outlet 65 mm x 50 mm and with or without combined open weir overflow centre in end complete with. (ii) Laboratory sink waste. (iii) Pair of clamps of 25 mm x 3 mm thick iron complete in all respects including cutting making good the walls or tables etc.	-do-	48.00	232.00
	(u) Size 275 mm x 225 mm x 175 mm (b) Size 350 mm x 275 mm x 175 mm (c) Size 425 mm x 330 mm x 175 mm (d) Size 450 mm x 300 mm x 150 mm (e) Size 500 mm x 350 mm x 150 mm (f) Size 530 mm x 430 mm x 180 mm (g) Size 575 mm x 425 mm x 200 mm	-do-	48.00	232.00
	White Single Colour	-do-	48.00	297.00
	(u) Size 275 mm x 225 mm x 175 mm (b) Size 350 mm x 275 mm x 175 mm (c) Size 425 mm x 330 mm x 175 mm (d) Size 450 mm x 300 mm x 150 mm (e) Size 500 mm x 350 mm x 150 mm (f) Size 530 mm x 430 mm x 180 mm (g) Size 575 mm x 425 mm x 200 mm	-do-	48.00	455.00
	Mixed Colour	-do-	48.00	548.00
	(u) Size 275 mm x 225 mm x 175 mm (b) Size 350 mm x 275 mm x 175 mm (c) Size 425 mm x 330 mm x 175 mm (d) Size 450 mm x 300 mm x 150 mm (e) Size 500 mm x 350 mm x 150 mm (f) Size 530 mm x 430 mm x 180 mm (g) Size 575 mm x 425 mm x 200 mm	-do-	48.00	476.00
	Mixed Colour	-do-	48.00	558.00
	(u) Size 275 mm x 225 mm x 175 mm (b) Size 350 mm x 275 mm x 175 mm (c) Size 425 mm x 330 mm x 175 mm (d) Size 450 mm x 300 mm x 150 mm (e) Size 500 mm x 350 mm x 150 mm (f) Size 530 mm x 430 mm x 180 mm (g) Size 575 mm x 425 mm x 200 mm	-do-	48.00	561.00
	Mixed Colour	-do-	48.00	600.00
	(u) Size 275 mm x 225 mm x 175 mm (b) Size 350 mm x 275 mm x 175 mm (c) Size 425 mm x 330 mm x 175 mm (d) Size 450 mm x 300 mm x 150 mm (e) Size 500 mm x 350 mm x 150 mm (f) Size 530 mm x 430 mm x 180 mm (g) Size 575 mm x 425 mm x 200 mm	-do-	48.00	653.00
	Mixed Colour	-do-	48.00	573.00
	(u) Size 275 mm x 225 mm x 175 mm (b) Size 350 mm x 275 mm x 175 mm (c) Size 425 mm x 330 mm x 175 mm (d) Size 450 mm x 300 mm x 150 mm (e) Size 500 mm x 350 mm x 150 mm (f) Size 530 mm x 430 mm x 180 mm (g) Size 575 mm x 425 mm x 200 mm	-do-	48.00	362.00
	Mixed Colour	-do-	48.00	48.00
	(u) Size 275 mm x 225 mm x 175 mm (b) Size 350 mm x 275 mm x 175 mm (c) Size 425 mm x 330 mm x 175 mm (d) Size 450 mm x 300 mm x 150 mm (e) Size 500 mm x 350 mm x 150 mm (f) Size 530 mm x 430 mm x 180 mm (g) Size 575 mm x 425 mm x 200 mm	-do-	48.00	1215.00
	Mixed Colour	-do-	48.00	1114.00

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.61	Providing and fixing in position best Indian make fire clay Hospital sink consisting of :- (i) Bed pan sink with 'P' trap in fire clay. (ii) R.S. or C.I. brackets for building-into wall for sink including painting. (iii) 40 mm C.P. brass waste with C.P. brass chain and rubber plug. (iv) C.P. Brass fitting set complete. All fittings best Indian make and to the approval of the Engineer-in-charge. All brass work chromium plated complete in all respects including cutting and making good the wall and floors and painting of fittings etc. complete. Size 600 mm x 450 mm	Each	71.50	2651.00
30.62	Providing and fixing 40 mm I/D G.I. waste pipe embedded in walls or lead waste pipe weighing 4.46 kg/metre and 3.0 mm thick upto floor level as required by the Engineer-in-charge including cost of union and plumber joint. Providing and fixing 40 mm I/D chromium plated brass trap with chromium plated brass pipe to wall with wall flange, complete (as per requirement of the Engineer-in-charge) for use with sinks. (a) With Boile Trap (Indian make) (b) With 'P' or 'S' Trap (Indian make)	-do-	4.25	117.00
30.63	Providing and fixing 20 mm with telephonic shower : (iii) C.P. Brass tub mixer 20 mm with telephonic including over flow (ii) C.P. Brass waste with plug and chain (i) Fibre glass tub with grip handle the Engineer-in-charge) consisting of :- make complete in all respects (to the approval of the Engineer-in-charge) consisting of :- ding waste plug chain and overflow of best Indian with legs essco mixer no. 518 with each tub incli- below complete with outer side wall of plain design white or coloured fibre glass bath tubs of sizes given Providing and fixing in position best Indian make	-do-	2.75	40.50
30.64	Providing and fixing in position best Indian make chrome plated complete in all respects including cutting of fittings etc. complete. Size 1500 mm x 750 mm (a) Size 1650 mm x 750 mm (b) Size 1650 mm x 700 mm (c) Size 1575 mm x 750 mm (d) Size 1500 mm x 750 mm (e) Size 1450 mm x 700 mm (f) Providing and fixing in position best Indian make vitreous chinaware drinking fountain consisting of :-	-do-	92.50	3272.00
		-do-	92.50	3052.00
		-do-	92.50	3052.00
		-do-	92.50	3052.00
		-do-	92.50	3002.00

Serial No. Description Unit Labour Rate(Rs.) Through Rate(Rs.)

15 mm self closing non-concussive inlet valves with regulating device waste coupling with flush grating bottle trap with 32 mm seal inlet coupling nut screw and including cutting and making good the walls and floors etc. with 32 mm lead waste pipe upto floor level.

311.06	(a) White	Each	54.00	1366.00
	(b) Single colour	-do-	54.00	1496.00
	(c) Mixed colour	-do-	54.00	1625.00

Providing and fixing in position best Indian make shower with 15 or 20 M/D In-let.

	(a) Vitreous china ware rose showers.	-do-	1.15	46.50
	(i) 175 mm diameter	-do-	1.15	29.00
	(ii) 125 mm diameter	-do-	1.15	43.00
	Mixed Colour	-do-	1.15	91.50
	(i) 175 mm diameter	-do-	1.15	56.50
	(ii) 125 mm diameter	-do-	1.15	45.00
	(i) 150 mm diameter rose shower	-do-	1.15	36.50
	(ii) 125 mm diameter rose shower	-do-	1.15	27.50
	(iii) 100 mm diameter rose shower	-do-	1.15	122.00
	(c) C.P. brass with revolving joint	-do-	1.15	152.00
	(d) C.P. brass with telephone shower	-do-	1.15	

Providing and fixing in position best Indian make paper holders fixed into wall with C.P. brass screws complete in all respects including cutting and making goods with walls etc

	(a) C.P. Brass.	-do-	1.15	27.50
	(b) Vitreous Chinaware.	-do-	1.15	35.00
	(i) White	-do-	1.15	51.50
	(ii) Single colour	-do-	1.15	67.50
	(iii) Mixed colour	-do-	1.15	50.00
	(c) Recessed vitreous chinaware	-do-	1.15	74.00
	(i) White	-do-	1.15	98.00
	(ii) Single colour	-do-	1.15	
	(iii) Mixed colour	-do-	1.15	

Providing and fixing in position best Indian make towel rails fixed in with rivets embedded in walls with C.P. Brass screws, complete in all respects including cutting and making goods the walls etc.

30.68	(a) 25 mm dia, C.P. Brass adjustable.	-do-	1.95	67.00
	(i) 750 mm long	-do-	1.95	61.00
	(ii) 600 mm long	-do-	1.95	

Serial No. Description Unit Labour Rate(Rs.) Through Rate(Rs.)

30.69	(b)	20 mm dia. C.P. Brass adjustable	Each	1.95	65.00
	(i)	750 mm long	-do-	1.95	57.00
	(ii)	600 mm long	-do-		
	(c)	25 mm dia Aluminium	-do-	1.95	37.00
	(i)	600 mm long	-do-		
	(j)	600 mm long	-do-		
	(d)	C.P. Brass two swivel towel rail 400 mm long	-do-	1.95	110.00
	(c)	C.P. Brass towel ring.	-do-	1.95	53.50
30.70		Providing and fixing in position glass shelf fixed in with rawl plugs with C.P. Brass screws, complete including cutting and making good the walls etc. :			
	(a)	With C.P. brass brackets and guard rail	-do-	2.05	72.50
	(i)	600 mm x 125 mm	-do-		
	(ii)	530 mm x 125 mm	-do-	2.05	64.50
	(b)	With Aluminium brackets and guard rail	-do-	2.05	43.50
	(i)	600 mm x 125 mm.	-do-		
	(c)	Vitreous chinaware shelf 560 mm long.	-do-	2.05	68.50
	(i)	White	-do-	2.05	101.00
	(ii)	Single colour	-do-	2.05	134.00
	(iii)	Mixed colour	-do-		
		Providing and fixing in position best Indian make Soap dish fixed into wall with C.P. brass screws and complete in all respects including cutting and making goods the walls etc.			
	(a)	C.P. Brass	-do-	1.20	59.00
	(i)	Soap dish large	-do-		
	(ii)	Soap dish small	-do-	1.20	46.50
	(b)	Vitreous Chinaware			
	(i)	White	-do-	1.20	30.00
	(i)	Soap dish 160 mm	-do-		
	(ii)	Soap dish 380 mm	-do-	1.20	50.00
	Single Colour		-do-	1.20	44.00
	(i)	Soap dish 160 mm	-do-		
	(ii)	Soap dish 380 mm	-do-	1.20	74.00
	Mixed Colour		-do-	1.20	57.50
	(i)	Soap dish 160 mm	-do-		
	(ii)	Soap dish 380 mm	-do-	1.20	98.00
	(c)	Vitreous Chinaware recessed soap dish 150 mm x 150 mm.	-do-	1.20	49.00
	(i)	White	-do-	1.20	72.00
	(ii)	Single Colour	-do-	1.20	95.50
	(iii)	Mixed Colour	-do-		
	(d)	Vitreous Chinaware recessed soap dish with hand rails.	-do-	1.20	104.00
	(i)	White	-do-	1.20	155.00
	(ii)	Single Colour	-do-	1.20	206.00
	(iii)	Mixed Colour	-do-		

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.71	Providing and fixing in position best Indian make bevelled edge 5.5 mm thick mirror mounted on asbestos sheet ground fixed in position by means of 4 Nos. chromium plated brass screws and washers over rubber washers and rawl plug embedded in the wall or chromium plated brass clamps with C.P. brass screws (as required by the Engineer-in-charge) complete including cutting and making good the walls etc.			
	(a) Indian Make	Each	17.50	107.00
	(i) 600 mm x 450 mm			
	(ii) 550 mm x 400 mm			
	(b) With vitreous china frame of size 530 mm x 430 mm.	-do-	17.50	94.50
	(i) White			
	(ii) Single Colour			
30.72	Providing and fixing in position brass oxidized gas taps (to the approval of the Engineer-in-charge) complete in all respects.			
	(a) One way	-do-	1.20	35.00
	(b) Two way	-do-	1.20	52.00
	(c) Three way	-do-	1.20	69.50
	(d) Four way	-do-	1.20	87.00
30.73	Providing and fixing in position best Indian make coal and hat hooks fixed into wall with C.P. brass screws and rawl plugs etc. complete including cutting and making good the walls etc.			
	(a) C.P. Brass	-do-	1.50	36.50
	(i) One way			
	(ii) Two way			
	(b) Aluminium Make	-do-	1.50	43.00
	(i) One way			
	(ii) Twin way			
	(c) Chinaware	-do-	1.50	11.50
	(i) White			
	(ii) Single Colour			
	(iii) Mixed Colour			
	(d) China ware recessed robe Hooks	-do-	1.50	19.00
30.74	Providing and fixing in position superior quality 65 mm id opening C.P. brass dome type hinged grating weighing about 750 gms. fixed in cement mortar 1:2 complete in all respects (as required by the Engineer-in-charge)			
	(i) White	-do-	1.50	11.00
	(ii) Single Colour	-do-	1.50	15.00
	(iii) Mixed Colour	-do-	1.50	19.00
30.75	Providing and fixing in position 15mm id C.P. brass bib cocks of best quality (as required by the Engineer-in-charge).			
	-do-	-do-	3.90	67.50

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.76	(a) Bib cock long body.	Each	1.10	116.00
	(b) Bib cock sparrow with permit and flange.	-do-	1.10	105.00
	(c) Bib cock	-do-	1.10	100.00
30.77	Providing and fixing in position C.P. brass stop cocks (as approved by the Engineer-in-charge).			
	(a) 15 mm Stop cock.	-do-	1.95	101.00
	(i) Stop cock male & female and (ii) Concealed stop cock with flange	-do-	1.95	130.00
30.78	Providing and fixing C.P. brass liquid soap container of best quality (as required by the Engineer-in-charge)	-do-	1.20	52.50
	Providing and fixing 15 mm C.P. brass Laboratory cock swan neck of best quality (to the approval of Engineer-in-charge).			
	(a) One way (b) Two way (c) Three way	-do-	3.15	129.00
30.79	Providing and fixing in position best Indian make C.P. brass Tooth Paste Holder			
	(i) Tooth Brush cum Tooth Paste holder fixed in with rawl plugs with C.P. brass screws and making good the walls etc.	-do-	1.20	46.50
	(ii) Tooth Brush holder.	-do-	1.20	34.00
30.80	Providing and fixing in position best Indian make Tumbler cum Tooth Brush holder fixed in with rawl plugs with C.P. brass screws and complete including cutting and making good the walls etc.			
	(a) C.P. Brass (b) Vitreous China (i) White (ii) Single Colour	-do-	1.20	40.00
	Providing and fixing in position best Indian make C.P. brass wall mixer 15 mm.	-do-	6.50	418.00
30.81	(a) With Telephonic shower (b) Without Telephonic shower	-do-	6.50	311.00
	Providing and fixing in position best Indian make flexible tube connection.			
	(a) Aluminium (i) 15 mm x 300 mm (ii) 15 mm x 375 mm (iii) 15 mm x 450 mm	-do-	2.20	27.50
30.82	(b) C.P. Brass (i) 15 mm x 300 mm (ii) 15 mm x 375 mm (iii) 15 mm x 450 mm	-do-	2.20	35.00
	Providing and fixing in position best Indian make			
	(i) 15 mm x 300 mm (ii) 15 mm x 375 mm (iii) 15 mm x 450 mm	-do-	2.20	37.50
				40.00

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.83	Providing and fixing in position best Indian make C.P. Brass inlet connection 15 mm with 375 mm pipe and C.P. Brass nuts.			
(B)	Laying of H.C.T. Pipes and Specials etc.	Each	2.20	11.50
30.84	Providing and fixing in position H.C.T. soil waste vent or antisiphonage pipes to I.S.I. specifications of E.L.C. manufacture or of any other reputed firm including cutting and wastage etc. and cutting holes in walls, roofs or floor etc. and making good to its original condition but excluding cost of lead joining.			
(a)	100 mm internal diameter	Metre	2.50	97.50
(b)	75 mm internal diameter	-do-	2.40	83.00
(c)	50 mm internal diameter	-do-	2.10	71.50
30.85	Providing and fixing in position C.T. Gully trap cover weighing approximately 7.26 kg. and frame for gully trap chamber clear opening size 300 mm x 300 mm and out side size 330mm x 330 mm including painting the exposed surfaces with 3 coats of black bitumastic superior paint of approved manufacture etc.			
30.86	Providing and fixing in position H.C.T. grating 150 mm x 150 mm for gully trap including painting with black bitumastic superior paint of approved manufacture three coats.	Each	1.75	51.50
30.87	Providing lead caulked joints to H.C.T. pipes and specials conforming to I.S.I specifications of E.L.C. manufacture or any other reputed firm including cost of lead yarn, fuel and tools etc.	-do-	1.80	7.20
(a)	100 mm internal diameter (1.13 kg.)	-do-	4.70	53.50
(b)	75 mm internal diameter (0.91 kg.)	-do-	4.35	27.50
(c)	50 mm internal diameter (0.68 kg.)	-do-	3.45	20.50
Note:-	The lead and yarn in item No.30.87 above will be supplied Ex-Divisional Stores or F.O.R. nearest Railway Station at the stock issue rate in force.			
30.88	Providing and fixing in position M.S. OR Heavy flat iron clamps made out of I.M.S. flat not less than 5 mm of the approved design for fixing C.T. soil waste vent or anti-pipes to walls complete in all respects including cutting and making good the walls and floors etc. and painting.			
(a)	For 100 mm internal diameter pipes	-do-	3.40	12.50
(b)	For 75 mm internal diameter pipes	-do-	3.40	11.00
(c)	For 50 mm internal diameter pipes	-do-	3.40	9.80
30.89	Providing and fixing H.C.T. floor traps I.S.I. marked of the self cleaning design with C.P. brass hinged grilling with frame with or without vent arm and including cement concrete 1:2:4 under and around the floor trap where required upto floor level complete in all respects including cutting and making good the walls and floors, etc., minimum depth of water should be 150 mm with a minimum seal of 50mm.			

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.90	(a) with 50 mm i/d outlet	Each	33.50	105.00
	(b) with 75 mm i/d outlet	-do-	33.50	105.00
30.91	Providing and fixing in position H.C.I. 50mm inter-nal diameter outlet plain nahani trap [S.I] marked of the self-cleaning design with C.P. brass hinged grating with frame weighing 6.80 kg. each fixed complete as fully described in item No.30.89 above.	-do-	33.50	90.50
	(a) 50 mm i/d outlet plain Nahani trap.	-do-	33.50	100.00
	(b) 75 mm i/d outlet plain Nahani trap.	-do-	33.50	100.00
	Providing and fixing in position H.C.I. specials for soil, waste, vent or anti-siphonage pipes to I.S.I. marked including cutting and wastage etc. cutting holes in walls roofs or floors etc., and making good to its original condition but excluding cost of lead jointing.	-do-	3.00	58.00
1	Heat rest bend	-do-	3.00	99.00
2	Double junction with door 100 mm x 100 mm	-do-	3.00	52.00
3	Pass over pipe	-do-	3.00	86.50
4	Single junction with door 100 mm x 100 mm x 100 mm	-do-	3.00	88.50
5	Double junction plain 100 mm x 100 mm	-do-	3.00	76.50
6	Single junction plain 100 mm x 100 mm x 100 mm	-do-	3.00	65.00
7	Single junction with door 100 mm x 100 mm x 50 mm	-do-	3.00	77.50
8	Double junction with door 100 mm x 100 mm x 50 mm x 50 mm	-do-	3.00	52.00
9	Single junction plain 100 mm x 100 mm x 50 mm	-do-	3.00	76.50
10	Double junction plain 100 mm x 100 mm x 50 mm	-do-	3.00	101.00
11	Double invert junction 100 mm x 100 mm x 50 mm x 50 mm	-do-	3.00	76.50
12	Single invert junction 100 mm x 100 mm x 50 mm	-do-	3.00	60.00
13	Bend with door	-do-	3.00	53.00
14	Bend plain	-do-	3.00	39.50
15	Terminal guard	-do-	1.20	36.50
16	Cowls	-do-	3.00	53.00
17	Door piece	-do-	3.00	76.50
18	Hand hole pipe	-do-	3.00	35.00
19	Finishing pipe piece	-do-	3.00	76.50
20	For S trap with vent	-do-	3.00	76.50
21	For S trap without vent	-do-	3.00	27.50
22	Collars	-do-	3.00	

Serial No. Description Unit Labour Rate(Rs.) Through Rate(Rs.)

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
23)	Offsets			
(a)	65 mm projection	Each	3.00	39.50
(b)	75 mm projection	-do-	3.00	47.00
(c)	115 mm projection	-do-	3.00	54.00
(d)	150 mm projection	-do-	3.00	59.00
(e)	225 mm projection	-do-	3.00	66.50
(f)	300 mm projection	-do-	3.00	74.00
24)	Water closet connectors (Plain)			
(a)	150 mm long	-do-	1.60	12.50
(b)	225 mm long	-do-	1.60	16.50
(c)	300 mm long	-do-	1.60	20.00
(d)	375 mm long or 400 mm long	-do-	1.60	23.50
(e)	425 mm long or 450 mm long	-do-	1.60	27.00
(f)	500 mm long or 525 mm long	-do-	1.60	31.00
(g)	600 mm long	-do-	1.60	32.00
(h)	750 mm long	-do-	1.60	36.00
(b)	For 75 mm I/D pipes			
1)	Heal rest bend	-do-	3.00	39.50
2)	Pass over pipe	-do-	3.00	48.00
3)	Double junction with door 75 mm x 75 mm	-do-	3.00	53.00
4)	Single junction with door 75 mm x 75 mm	-do-	3.00	59.00
5)	Double junction plain 75 mm x 75 mm	-do-	3.00	69.00
6)	Single junction plain 75 mm x 75 mm	-do-	3.00	77.50
7)	Single junction with door 75 mm x 75 mm	-do-	3.00	88.50
8)	Double junction with door 75 mm x 75 mm	-do-	3.00	99.00
9)	Single junction plain 75 mm x 75 mm	-do-	3.00	109.00
10)	Double junction plain 75 mm x 75 mm	-do-	3.00	119.00
11)	Single invert junction 75 mm x 75 mm	-do-	3.00	129.00
12)	Double invert junction 75 mm x 75 mm	-do-	3.00	139.00
13)	Bend with door	-do-	3.00	149.00
14)	Bend plain	-do-	3.00	159.00
15)	Terminal guard	-do-	3.00	169.00
16)	Door piece	-do-	3.00	179.00
17)	Cowls	-do-	1.20	180.00
18)	Collars	-do-	3.00	183.00
19)	Hand hole pipe	-do-	3.00	186.00
20)	Diminishing pipe piece	-do-	3.00	189.00

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
21)	P or S trap with vent	Each	3.00	76.50
22)	P or S trap without vent	-do-	3.00	74.00
23)	Offsets	-do-	3.00	39.50
(a)	65 mm projection	-do-	3.00	41.00
(b)	75 mm projection	-do-	3.00	46.00
(c)	115 mm projection	-do-	3.00	52.00
(d)	150 mm projection	-do-	0.90	53.00
(e)	225 mm projection	-do-	3.00	61.50
(f)	300 mm projection	-do-	3.00	27.50
(c)	For 50 mm I.D. pipes	-do-	3.00	27.50
(i)	Heal rest bend	-do-	3.00	44.50
(ii)	Pass over pipe	-do-	3.00	59.00
(iii)	Double junction with door 50mm x 50mm	-do-	3.00	47.00
(iv)	Single junction with door 50 mm x 50 mm	-do-	3.00	46.00
(v)	Double junction plain 50mm x 50mm	-do-	3.00	36.00
(vi)	Single junction plain 50mm x 50mm	-do-	3.00	59.00
(vii)	Single invert junction with door	-do-	3.00	62.50
(viii)	Double invert junction with door	-do-	3.00	33.50
(ix)	Bend with door	-do-	3.00	27.50
(x)	Bend plain	-do-	3.00	25.00
(xi)	Terminal Guard	-do-	3.00	17.50
(xii)	Collars	-do-	1.20	30.50
(xiii)	Cowls	-do-	3.00	52.00
(xiv)	Hand hole pipe	-do-	3.00	28.50
(xv)	Door piece	-do-	3.00	37.00
(xvi)	P or S trap without vent	-do-	3.00	39.50
(xvii)	P or S trap with vent	-do-	3.00	21.50
(a)	65 mm projection	-do-	3.00	25.00
(b)	75 mm projection	-do-	3.00	25.00
(c)	115 mm projection	-do-	3.00	25.00
(d)	150 mm projection	-do-	3.00	25.00
(e)	225 mm projection	-do-	3.00	32.50
(f)	300 mm projection	-do-	3.00	39.50
(f)	Lead Pipes and Fittings			
30.92	Providing and fixing lead pipe complete in all respects.			
(a)	100 mm i/d weighing 11.31 kg/metre thickness 3.0 mm.	Metre	13.50	290.00
(b)	75 mm i/d weighing 8.48 kg/metre thickness 3.0 mm.	-do-	10.00	217.00
(c)	50 mm i/d weighing 5.95 kg/metre thickness 3.1 mm.	-do-	6.80	152.00

Serial Description Unit Labour Rate(Rs.) Through Rate(Rs.)

(d)	40 mm i/d weighing 4.46 kg/metre	Metre	6.80	116.00
(e)	32 mm i/d weighing 3.47 kg/metre		5.80	90.50
(f)	32 mm i/d weighing 7.94 kg/metre		5.80	200.00
(g)	25 mm i/d weighing 6.20 kg/metre		5.80	157.00
(h)	20 mm i/d weighing 4.46 kg/metre		5.80	115.00
(i)	15 mm i/d weighing 3.47 kg/metre		5.80	89.00
	thickness 3.0 mm.			
	thickness 2.80 mm.			
	thickness 5.9 mm.			
	thickness 5.6 mm.			
	thickness 5.2 mm.			
	thickness 5.4 mm.			
	Providing and fixing lead inlet connection with brass union for flushing and warning pipes complete in all respects.			
(a)	15 mm lead pipe 1.49 kg/metre thickness	Each	2.50	21.00
(b)	20 mm lead pipe 2.48 kg/metre thickness		2.50	30.00
(c)	15 mm alkaline pipe inlet connections		1.60	10.50
	Wiped Solder Joints			
	Providing wiped solder joints lead pipes and brass fittings including cost of joining materials.			
(a)	100 mm internal diameter		11.00	121.00
(b)	75 mm internal diameter		11.00	98.00
(c)	50 mm internal diameter		8.00	70.00
(d)	40 mm internal diameter		8.00	52.00
(e)	32 mm internal diameter		5.40	44.00
(f)	25 mm internal diameter		5.40	36.50
	Cutting chase in brick walls in cement or in floor for embedding G.I. or H.C.L. pipe lines and making good the same to its original condition.			
(a)	Size 75 mm x 75 mm	Metre	6.00	
(b)	Size 150 mm x 150 mm		9.00	
(c)	Size 75 mm x 50 mm		4.00	
(d)	Size 22 mm x 225 mm		14.00	
	Dismantling of H.C.L. pipes and specials etc.			
(a)	100 mm internal diameter		1.15	
(b)	75 mm internal diameter		0.95	
(c)	50 mm internal diameter		0.80	
	Dismantling H.C.L. Specials			
(a)	100 mm internal diameter	Each	0.55	
(b)	75 mm internal diameter		0.50	
(c)	50 mm internal diameter		0.40	
	Dismantling lead caulked joints of H.C.L. pipes including cost of fuel and tools.			
(a)	100 mm internal diameter		2.75	

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
30.99	Dismantling heavy flat iron clamps.	Each	2.45	--
	(b) 75 mm internal diameter	-do-	1.45	--
	(c) 50 mm internal diameter	-do-	--	--
30.98	Painting of Pipes			
	(a) 100 mm internal diameter	-do-	3.35	--
	(b) 75 mm internal diameter	-do-	2.65	--
	(c) 50 mm internal diameter	-do-	2.05	--
30.100	Painting H.C.I. soil waste and vent pipes and fittings with black bitumastic ordinary paint of approved manufacture one coat on old work.	Metre	0.65	1.00
	(a) 100 mm internal diameter	-do-	0.45	0.80
	(b) 75 mm internal diameter	-do-	0.35	0.55
	(c) 50 mm internal diameter	-do-	--	--
30.101	Painting H.C.I. soil waste and vent pipes and fittings with black bitumastic ordinary paint of approved manufacture two coats on new work.			
	(a) 100 mm internal diameter	-do-	0.95	1.85
	(b) 75 mm internal diameter	-do-	0.70	1.35
	(c) 50 mm internal diameter	-do-	0.55	1.00
30.102	Painting H.C.I. soil waste and vent pipes and fittings with ordinary quality synthetic enamel paints in all shades on old work one coat including rubbing down old paint.			
	(a) 100 mm internal diameter	-do-	0.60	1.65
	(b) 75 mm internal diameter	-do-	0.45	1.20
	(c) 50 mm internal diameter	-do-	0.35	0.90
30.103	Painting H.C.I. soil waste vent and pipes and fittings with ordinary quality synthetic enamel paint in all shades on existing or new work two coats paints including cleaning, rubbing etc.			
	(a) 100 mm internal diameter	-do-	0.95	3.25
	(b) 75 mm internal diameter	-do-	0.70	2.35
	(c) 50 mm internal diameter	-do-	0.55	1.75
30.104	Painting H.C.I. soil waste and vent pipes and fittings with superior quality synthetic enamel paint in all shades on old work one coat paint including rubbing down the old paint.			
	(a) 100 mm internal diameter	-do-	0.60	1.90
	(b) 75 mm internal diameter	-do-	0.45	1.35
	(c) 50 mm internal diameter	-do-	0.35	1.00
30.105	Painting H.C.I. soil waste and vent pipes and fittings with 1st quality synthetic enamel paint in all shades on existing or new work two coats paints, including cleaning, rubbing etc.			
	(a) 100 mm internal diameter	-do-	1.00	3.80
	(b) 75 mm internal diameter	-do-	0.70	2.75
	(c) 50 mm internal diameter	-do-	0.55	2.10

Serial No.	Description	Unit	Labour Rate(Rs.)	Through	
				Rate(Rs.)	Quantity
30.106	Painting G.I. Pipes and specials with 1st and 2nd quality synthetic enamel paint in all shades on existing or new work Two coats paints including cleaning rubbing surface etc.	10 metres	2.00	7.75	6.65
	(a) 15 mm and 20 mm i/d of pipes and specials.	-do-	2.60	10.10	8.65
	(b) 25 mm and 32 mm i/d of pipes and specials.	-do-	4.05	15.80	13.50
30.107	Repairing G.I. Pipes and fittings with 1st and 2nd quality synthetic enamel paint in all shades on old work including Rubbing down old surface.	-do-			
	(a) 15 mm and 20 mm i/d of pipes and specials.	-do-	1.25	3.85	3.35
	(b) 25 mm and 32 mm i/d of pipes and specials.	-do-	1.60	5.00	4.35
	(c) 40 mm and 50 mm i/d of pipes and specials.	-do-	2.50	7.80	6.80
30.108	Painting G.I. Pipes and specials with Alu-minium paints on new or existing work two coats paint including cleaning rubbing surface etc.	-do-			
	(a) 15 mm and 20 mm i/d of pipes and specials.	-do-	2.20	5.00	4.85
	(b) 25 mm and 32 mm i/d of pipes and specials.	-do-	2.85	6.50	6.30
	(c) 40 mm and 50 mm i/d of pipes and specials.	-do-	4.45	10.15	9.85
30.109	Repairing G.I. pipes and fittings with Alu-minium paints on existing work including cleaning rubbing etc.	-do-			
	(a) 15 mm and 20 mm i/d of pipes and specials.	-do-	1.30	2.70	2.60
	(b) 25 mm and 32 mm i/d of pipes and specials.	-do-	1.70	3.50	3.40
	(c) 40 mm and 50 mm i/d of pipes and specials.	-do-	2.70	5.50	5.30
(1)	Internal Water Supply				
30.110	Providing and fixing in position automatic brass ball valves in tanks.	Each	1.85		47.00
	(i) 15 mm internal diameter	-do-			
	(ii) 20 mm internal diameter	-do-	1.85		55.50

Serial No.	Description	Unit	Labour Rate(Rs.)	Through	
				Rate(Rs.)	Quantity

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)			
30.111	Labour only for fixing in position mild steel storage tanks (to be supplied by the Engineer-in-charge-Ex-Public Health Store) including hoisting etc. and carriage from store to site of work complete with providing and fixing and 15 mm or 20 mm internal diameter flanges for inlet and outlet, 25 mm for overflow and 40 mm for scour pipe including 25 mm brass perforated masquito proof cap for overflow and plug for scour pipe and labour for making pipe connections and small masonry supports on the top of the roof where these tanks are to be fixed complete in all respects including cutting and making good the walls and floors etc.	(iii) 25 mm internal diameter	Each	1.85	74.50		
		(iv) 32 mm internal diameter	-do-	1.85	112.00		
		(v) 40 mm internal diameter	-do-	1.85	206.00		
		(vi) 50 mm internal diameter	-do-	1.85	269.00		
		(b) With Plastic Ball					
		(i) 15 mm internal diameter	-do-	1.85	39.00		
		(ii) 20 mm internal diameter	-do-	1.85	48.00		
		(iii) 25 mm internal diameter	-do-	1.85	65.50		
		(iv) 32 mm internal diameter	-do-	1.85	104.00		
		(v) 40 mm internal diameter	-do-	1.85	198.00		
		(vi) 50 mm internal diameter	-do-	1.85	256.00		
		30.112	Labour only for fixing in position pressed steel storage tanks capacity as given below (to be supplied by the Department Ex-Public Health Stores in unassembled condition) including carriage from stores to site of work, hoisting and placing the tanks in position assembling, making inlet, outlet scour and overflow connections including providing and fixing in position brass perforated cap for overflow and plug for scour pipe and small masonry supports on the roof where these tanks are to be fixed complete in all respects including cutting and making good the walls and floors etc.	(a) Tanks made out of 3.00 mm thick plates.	-do-	142.00	142.00
				(i) Up to 275 litres capacity	-do-	145.00	145.00
(ii) More than 275 litres capacity	-do-			147.00	147.00		
(b) Tanks made out of 5.00 mm thick plates.	-do-			149.00	149.00		
(i) Up to 680 litres capacity.	-do-			151.00	151.00		
(ii) Greater than 680 litres but up to 910 litres capacity.	-do-						
(iii) More than 910 litres capacity.	-do-						
30.113	Labour only for fixing in position A.C. water storage tanks (to be supplied by the Engineer-in-charge Ex-			(a) 1800 litres capacity	-do-	165.00	165.00
				(b) 3600 litres capacity	-do-	221.00	221.00
				(c) 5400 litres capacity	-do-	276.00	276.00
				(d) 7200 litres capacity	-do-	345.00	345.00

Serial Description Unit Labour Through Rate(Rs.) Rate(Rs.)

30.114	Drainage (a) Upto 275 litres capacity (b) More than 275 litres capacity	Each	35.50	36.50
30.115	Providing and fixing in position gully traps fixed in cement concrete 1:4:8 complete with H.C.I. grating 150 mm x 150 mm cast iron cover weighing approximately 7.26 kg. and frame clear opening 300 mm x 300 mm and outside size 330 mm x 330 mm and chamber including cost of all brick work in cement mortar 1:5 cement concrete 1:8:16 in foundations, and cement concrete 1:2:4 in coping around C.I. cover and frame etc. with three coats of black bituminastic superior paint of approved manufacture on all C.I. work as per standard design, minimum depth of water should be 150 mm with a minimum seal 50 mm.	(a) 100 mm internal diameter S.W. gully trap (b) 100 mm internal diameter H.C.I. gully trap (c) 150 mm internal diameter S.W. gully trap (d) 150 mm internal diameter H.C.I. gully trap	17.00 17.00 20.00 20.00	166.00 208.00 182.00 230.00
30.116	Providing and fixing in position best Indian make air purifier complete with first change (as approved by the Engineer-in-charge)	(a) In card board container (b) In metal container	- -	8.80 32.00
30.117	Providing and fixing in position best Indian make type automatic electric water heater, pressure/non-pressure type thermostatically controlled, suitable for operation on 230 volts, 50 cycles single phase vertical wall mounting fitted with with-drawable and adjustable type A.C. thermostat. Thermostat knob to be readily accessible through the opening of suitable cover for and adjustment of temperature in the installed position of heater and the thermostat should be withdrawn without having to drain the water, electric heating element made	(a) In card board container (b) In metal container	- 0.85	8.80 32.00

Serial No. Description Unit Labour Through Rate(Rs.) Rate(Rs.)

out of copper tube (heating element should be easily removed and replaced in the installed position of heater) A neon indicator 1 AMP inner container made out of copper/innered both from inside and outside outer container made out of mild steel sheet finished in gleaming white stove enamel paint insulated between the inner and outer with fibre glass wool with 1 metre length of suitable capacity 3 core flexible cord with plug and non return valve plastic/lead connections or pressure release valve (where required).

Complete including fixing and testing for a week (as required by the Engineer-in-charge)

Vertical Water Heater

(a)	25 litres capacity	Each	49.50	2047.00
(b)	30 litres capacity	-do-	49.50	2413.00
(c)	35 litres capacity	-do-	49.50	2535.00
(d)	40 litres capacity	-do-	49.50	3024.00
(e)	50 litres capacity	-do-	49.50	3512.00
(f)	70 litres capacity	-do-	49.50	3756.00
(g)	80 litres capacity	-do-	49.50	4123.00
(h)	90 litres capacity	-do-	49.50	4367.00
(i)	100 litres capacity	-do-	49.50	5710.00
(j)	140 litres capacity	-do-	49.50	115.00

Extra over and above item No.30.117 above if the water heater is provided horizontally instead of vertically.

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Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
	(a) short point	Each	26.60	71.00
	(b) medium point	-do-	34.60	110.00
	(c) long point	-do-	40.70	153.00
(iv)	Light point without control	-do-	8.70	38.00
	(a) short point	-do-	10.90	69.00
	(b) medium point	-do-	14.50	108.00
	(c) long point	-do-	26.00	65.00
(v)	Bed light control point	-do-	33.00	102.00
	(a) short point	-do-	38.50	143.00
	(b) medium point	-do-	27.30	87.00
	(c) long point	-do-	34.20	124.00
(vi)	Call bell point including M.S. box of size 180mm x 100 mm x 60 mm deep for call bell	-do-	40.20	166.00
	(a) short point	-do-	26.60	80.00
	(b) medium point	-do-	33.60	120.00
	(c) long point	-do-	38.50	162.00
(viii)	3 pin 15 amp, plug point including earthing the 3rd pin etc. with 4 Sqmm PVC insulated aluminium conductor cable.	-do-	26.60	93.00
	(a) short point	-do-	33.60	135.00
	(b) medium point	-do-	38.50	180.00
	(c) long point	-do-	23.10	93.00
	(a) short point	-do-	28.00	130.00
	(b) medium point	-do-	34.90	175.00
	(c) long point	-do-	21.20	64.00
(iii)	Light point	-do-	26.00	101.00
	(a) short point	-do-	33.00	146.00
	(b) medium point	-do-	21.90	67.00
	(c) long point	-do-	27.20	105.00
	(a) short point	-do-	34.60	152.00
	(b) medium point	-do-	5.80	36.00
	(c) long point	-do-		
(iv)	Light point without control	-do-		
	(a) short point	-do-		
	(b) medium point	-do-		
	(c) long point	-do-		
(iii)	Twin control light point with 2 way 5 amp single pole switch.	-do-		
	(a) short point	-do-		
	(b) medium point	-do-		
	(c) long point	-do-		
(i)	Fan point.	-do-		
	(a) short point	-do-		
	(b) medium point	-do-		
	(c) long point	-do-		
(B)	PVC Insulated Wiring in Surface Conduit	-do-		
31.2	Wiring in 1.5 Sq mm PVC insulated aluminium conductor cable in 1.6 mm thick conduit pipe.	-do-		
	(Item No. 31.1 (viii) amended vide A & C slip No. 10 dt. 10-12-92)	-do-		

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
(b)	medium point	Each	6.70	69.00
(c)	long point	-do-	7.90	109.00
(a)	short point	-do-	21.20	62.00
(b)	medium point	-do-	26.00	98.00
(c)	long point	-do-	33.00	143.00
(vi)	Call bell point including M.S. box of size 150mm x 100 mm x 60 mm deep for call bell.	-do-		
(a)	short point	-do-	22.50	81.00
(b)	medium point	-do-	27.30	118.00
(c)	long point	-do-	34.20	163.00
(vii)	3 pin 5 amp-plug point including earthing the 3rd pin etc.	-do-		
(a)	short point	-do-	22.00	76.00
(b)	medium point	-do-	26.60	114.00
(c)	long point	-do-	33.60	162.00
(viii)	3 pin 15 amp. plug point including earthing the 3rd pin etc. with 4 Sqmm PVC insulated aluminium conductor cable.	-do-		
(a)	short point	-do-	22.00	89.00
(b)	medium point	-do-	26.60	129.00
(c)	long point	-do-	33.60	180.00
(C)	PVC Sheathed Wiring On-Batten			
31.3	Wiring in 1.5 Sq mm PVC sheathed aluminium conductor cable on pyra wood batten.			
(i)	Fan point	-do-		
(a)	short point	-do-	23.10	66.00
(b)	medium point	-do-	25.60	80.00
(c)	long point	-do-	30.90	100.00
(iii)	Light point	-do-		
(a)	short point	-do-	16.90	48.00
(b)	medium point	-do-	21.20	64.00
(c)	long point	-do-	24.40	81.00
(iiii)	Twin control light point with 2 way 5 amp single pole switch.	-do-		
(a)	short point	-do-	18.80	53.00
(b)	medium point	-do-	24.40	76.00
(c)	long point	-do-	28.90	99.00
(iv)	Light point without control.	-do-		
(a)	short point	-do-	5.80	22.00
(b)	medium point	-do-	6.70	36.00
(c)	long point	-do-	7.90	51.00

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
(v)	Bed light control point.	Each	16.90	43.00
(a)	short point	-do-	21.20	60.00
(b)	medium point	-do-	24.40	76.00
(c)	long point	-do-		
(vi)	Call bell point including wooden box of size 180 mm x 100mm x 60 mm deep for call bell.			
(a)	short point	-do-	18.80	61.00
(b)	medium point	-do-	23.00	77.00
(c)	long point	-do-	27.20	94.00
(vii)	3 pin 5 amp. plug point including earthing the 3rd pin etc.			
(a)	short point	-do-	17.90	56.00
(b)	medium point	-do-	23.10	81.00
(c)	long point	-do-	26.00	108.00
(viii)	3 pin 15 amp. plug point including earthing the 3rd pin etc. with 4 Sqmm PVC insulated aluminium conductor cable.			
(a)	short point	-do-	17.90	66.00
(b)	medium point	-do-	23.10	94.00
(c)	long point	-do-	26.00	124.00
(Item No. 31.3 (viii) Amended vide A & C slip No. 10 dt. 10-12-92)				
(i)	Fan Point			
(a)	short point	-do-	21.60	70.00
(b)	medium point	-do-	27.40	103.00
(c)	long point	-do-	32.60	142.00
(ii)	Light Point			
(a)	short point	-do-	18.70	50.00
(b)	medium point	-do-	24.70	84.00
(c)	long point	-do-	28.80	121.00
(iii)	Twin control light point			
(a)	short point	-do-	18.70	50.00
(b)	medium point	-do-	24.70	84.00
(c)	long point	-do-	28.80	121.00
(iv)	Light point without control.			
(a)	short point	-do-	5.80	30.00
(b)	medium point	-do-	7.20	59.00
(c)	long point	-do-	9.60	94.00
(v)	Bed light control point			
(a)	short point	-do-	18.70	48.00
(b)	medium point	-do-	24.70	83.00

Conduit pipe only (Recessed) for electrical points.
 Supply and erection of pipe of 1.60 mm thickness recessed in wall and complete with M.S. boxes for housing regulators wall sockets switches etc.

(D) 31.4

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
	(c) long point	Each	28.80	120.00
	(vi) Call bell point including cost of M.S. box 180mm x 100mm x 60mm deep for call bell.			
	(a) short point	-do-	20.00	63.00
	(b) medium point	-do-	25.90	96.00
	(c) long point	-do-	30.50	134.00
	(vii) 3 pin 5 amp. plug point.			
	(a) short point	-do-	19.30	55.00
	(b) medium point	-do-	25.30	91.00
	(c) long point	-do-	28.80	129.00
	(viii) 3 pin 15 amp. plug point.			
	(a) short point	-do-	19.30	55.00
	(b) medium point	-do-	25.30	91.00
	(c) long point	-do-	28.80	129.00
	(ix) Wiring in existing conduit pipe (Recessed) for electrical points.			
31.5	Wiring only in 1.5 sq. min PVC aluminium conductor cable in existing conduit pipe and M.S. Boxes covered with 5 mm thick bakelite sheet including cost of switches, wall socket, ceiling rose etc.			
	(i) Fan point.			
	(a) short point	-do-	7.30	29.00
	(b) medium point	-do-	8.30	33.00
	(c) long point	-do-	9.70	37.00
	(ii) Light point			
	(a) short point	-do-	7.30	19.00
	(b) medium point	-do-	8.30	22.00
	(c) long point	-do-	9.70	26.00
	(iii) Twin control light point with 2 way 5 amp single pole switch.			
	(a) short point	-do-	7.90	21.00
	(b) medium point	-do-	9.90	26.00
	(c) long point	-do-	11.90	32.00
	(iv) Light point without control			
	(a) short point	-do-	2.90	8.00
	(b) medium point	-do-	3.70	10.00
	(c) long point	-do-	4.90	14.00
	(v) Bed light control point.			
	(a) short point	-do-	7.30	17.00
	(b) medium point	-do-	8.30	19.00
	(c) long point	-do-	9.70	23.00
	(vi) Call bell point			
	(a) short point	-do-	7.30	24.00
	(b) medium point	-do-	8.30	28.00
	(c) long point	-do-	9.70	32.00

Serial No. Description Unit Labour Rate(Rs.) Through Rate(Rs.)

(vii)	3 pin 5 amp. plug point including earthing the 3rd pin etc.	Each	7.30	25.00
(viii)	3 pin 15 amp. plug point including earthing the 3rd pin etc. with 4 Sqmm PVC insulated aluminium conductor cable).	Each	7.30	25.00
(c)	long point	-do-	9.70	33.00
(b)	medium point	-do-	8.30	29.00
(a)	short point	-do-	7.30	25.00
(a)	short point	-do-	7.30	38.00
(b)	medium point	-do-	8.30	44.00
(c)	long point	-do-	9.70	51.00
(Item No. 31.5 (viii) amended vide A & C slip No. 10 dt. 10-12-92)				
(i)	Fan point	-do-	17.30	67.00
(a)	short point	-do-	20.70	100.00
(b)	medium point	-do-	26.60	141.00
(c)	long point	-do-	15.40	47.00
(ii)	Light point	-do-	18.70	80.00
(a)	short point	-do-	15.40	47.00
(b)	medium point	-do-	18.70	80.00
(c)	long point	-do-	24.70	121.00
(iii)	Twin control light point	-do-	15.40	47.00
(a)	short point	-do-	18.70	80.00
(b)	medium point	-do-	24.70	121.00
(c)	long point	-do-	3.90	29.00
(a)	short point	-do-	4.40	60.00
(b)	medium point	-do-	5.20	98.00
(c)	long point	-do-	15.40	47.00
(a)	short point	-do-	18.70	79.00
(b)	medium point	-do-	24.70	121.00
(c)	long point	-do-	16.70	58.00
(a)	short point	-do-	20.00	91.00
(b)	medium point	-do-	25.90	133.00
(c)	long point	-do-	16.20	52.00
(a)	short point	-do-		
(b)	medium point	-do-		
(c)	long point	-do-		
(vii)	3 pin 5 amp. plug point	-do-		
(a)	short point	-do-		
(b)	medium point	-do-		
(c)	long point	-do-		
(vi)	Call bell point including cost of 180 mm x 100 mm x 60 mm deep M.S. box for call bell.	-do-		
(a)	short point	-do-		
(b)	medium point	-do-		
(c)	long point	-do-		
(v)	Bed light control point	-do-		
(a)	short point	-do-		
(b)	medium point	-do-		
(c)	long point	-do-		
(iv)	Light point without control	-do-		
(a)	short point	-do-		
(b)	medium point	-do-		
(c)	long point	-do-		

(F) 31.6
 Conduit Pipe only (Surface) for Electrical Points.
 Supply and erection of conduit pipe of 1.60 mm thickness installed on surface complete with M.S. Boxes for housing regulators, Wall sockets switches etc.

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)	
31.7	Wiring in existing Conduit Pipe (Surface) Wiring only in 1.5 Sq. mm PVC aluminium conductor cable in existing conduit pipe and M.S. boxes covered with 5mm thick bakelite sheet including cost of switch, wall socket, ceiling rose etc.	(b) medium point	Each	19.00	86.00
		(c) long point	-do-	25.30	131.00
		(a) short point	-do-	16.20	52.00
		(b) medium point	-do-	19.00	86.00
		(c) long point	-do-	25.30	131.00
		(i) Fan point	-do-	5.80	26.00
		(ii) Light point	-do-	8.30	34.00
		(a) short point	-do-	5.80	26.00
		(b) medium point	-do-	7.30	30.00
		(c) long point	-do-	8.30	34.00
		(iii) Twin control light point	-do-	8.30	25.00
		(a) short point	-do-	5.80	17.00
(b) medium point	-do-	7.30	21.00		
(c) long point	-do-	8.30	25.00		
(iv) Light point without control	-do-	9.90	31.00		
(a) short point	-do-	1.90	7.00		
(b) medium point	-do-	2.30	9.00		
(c) long point	-do-	2.70	11.00		
(v) Bed light control point	-do-	5.80	15.00		
(a) short point	-do-	7.30	19.00		
(b) medium point	-do-	8.30	22.00		
(c) long point	-do-	8.30	22.00		
(vi) Call Bell point	-do-	5.80	23.00		
(a) short point	-do-	7.30	27.00		
(b) medium point	-do-	8.30	30.00		
(c) long point	-do-	8.30	30.00		
(vii) 3 pin 5 amp. plug point including earthing the 3rd pin etc.	-do-	5.80	24.00		
(a) short point	-do-	7.60	28.00		
(b) medium point	-do-	8.30	31.00		
(c) long point	-do-	8.30	31.00		
(viii) 3 pin 15 amp. plug point including earthing the 3rd pin etc. with 4 Sqmm PVC insulated aluminium conductor cable	-do-	5.80	37.00		
(a) short point	-do-	5.80	37.00		

Serial No.	Description	Unit	Labour Rate(Rs.)	Through Rate(Rs.)
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(b)	medium point	Each	7.60	43.00
(c)	long point	-do-	8.30	49.00

Item No. 31:7 (viii) amended vide A & C slip No. 10 dt. 10-12-92)

Wiring mains & Sub-mains.

31.8 (H) Wiring mains and sub mains in two single core PVC sheathed cable 1100 volts grade on 10 mm thick pyna wood ballen of suitable size including painting as required -

(i) Size 1.50 sqmm (1/1.40mm) 4.50 Metre

(ii) Size 2.50 sqmm (1/1.80 mm) 6.40 -do-

(iii) Size 4 sqmm (1/2.24mm) 7.00 -do-

(iv) Size 6 sqmm (1/2.80 mm) 8.40 -do-

(v) Size 10 sqmm (1/3.50 mm) 10.00 -do-

(vi) Size 16 sqmm (7/1.70 mm) 12.40 -do-

(vii) Size 25 sqmm (7/2.24 mm) 18.00 -do-

(viii) Size 35 sqmm (7/2.50 mm) 20.90 -do-

(ix) Size 50 sqmm (7/3.00 mm) or 19/1.80 mm 31.20 -do-

Wires & Cables.

31.9 (I) Supply and erection of PVC copper insulated and sheathed 2 core circular flexible wire-

(a) Size 0.50 sqmm (16/0.20 mm) 3.30 -do-

(b) Size 0.75 sqmm (24/0.20 mm) 5.00 -do-

(c) Size 1.00 sqmm (32/0.20 mm) 6.10 -do-

(d) Size 1.50 sqmm (48/0.20 mm) 7.90 -do-

(e) Size 2.50 sqmm (80/0.20 mm) 11.10 -do-

(ii) Supply and erection of 3 core PVC copper insulated and sheathed circular flexible wire-

(a) Size 0.50 sqmm (16/0.20 mm) 4.50 -do-

(b) Size 0.75 sqmm (24/0.20 mm) 6.70 -do-

(c) Size 1.00 sqmm (32/0.20 mm) 8.20 -do-

(d) Size 1.50 sqmm (48/0.20 mm) 10.30 -do-

(e) Size 2.50 sqmm (80/0.20 mm) 15.60 -do-

(iii) Supply and erection of glazed cotton braided twin core twisted flexible wire -

(a) Size 0.50 sqmm (16/0.20 mm) 3.10 -do-

(b) Size 0.75 sqmm (24/0.20 mm) 4.40 -do-

(c) Size 1.00 sqmm (32/0.20 mm) 5.30 -do-

(d) Size 1.50 sqmm (48/0.20 mm) 6.90 -do-

(e) Size 2.50 sqmm (80/0.20 mm) 10.70 -do-

31.10 Supply and erection of PVC unshathed aluminium conductor cable single core 1100 volts grade in pipe of suitable size excluding cost and erection of pipe -

(i) Size 1.5 sqmm (1/1.40mm) 0.70 -do-

Serial No.	Description	Unit	Through Rate Category
31.12 (a)	Main Switches		A B C
(i)	Category 'A' :- Larson and Tubro, English Electric Co. Siemens.		
(ii)	Category 'B' :- G.E.C. Crompton, Zeta, Sentinel, Acco, Standard, Havells and H.P.L.		
(iii)	Category 'C' :- Spunilk, Kenbar, GECCO.		
(iv)	Branch Distribution Boards		
(v)	Category 'B' :- Sentinel, Zeta, Havells.		
(vi)	Category 'C' :- Abrol, Spunilk, GECCO		
(vii)	Change over Switches		
(viii)	Category 'B' :- Zeta, Havells, AECO, GECCO.		
(ix)	Moulded case Circuit breakers.		
(x)	Crompton, English Electric Company, Larson & Tubro.		
Notes			
(i)	The category of metal clad switches and distribution board is as approved by the Superintending Engineer, Elect. Circle, PWD B&R Branch, Karnal from time to time. The present list is as under :-		
(ii)	Category 'H' switches shall be with H.R.C. fuses.		
(iii)	Category for main switches, branch distribution boards change over switches moulded case circuit breaker is as under:		
(i)	Size 1.50 Sqmm (1/1.40mm)	Metre	1.00
(ii)	Size 2.50 Sqmm (1/1.80 mm)	-do-	1.40
(iii)	Size 4 Sqmm (1/2.24mm)	-do-	1.80
(iv)	Size 6 Sqmm (1/2.80 mm)	-do-	2.30
(v)	Size 10 Sqmm (1/3.50 mm)	-do-	3.20
(vi)	Size 16 Sqmm (7/1.70 mm)	-do-	4.40
(vii)	Size 25 Sqmm (7/2.24 mm)	-do-	6.30
(viii)	Size 35 Sqmm (7/2.50 mm)	-do-	7.90
(ix)	Size 50 Sqmm (7/3.00 mm) or 19/1.80 mm	-do-	13.20
Metal Clad Switches and Distribution Boards.			
31.11	Supply and erection of PVC sheathed aluminium conductor cable single core 1100 volts grade in pipe etc. of suitable size excluding cost and erection of pipe-		
(i)	Size 2.5 Sqmm (1/1.80 mm)	Metre	0.90
(ii)	Size 4 Sqmm (1/2.24mm)	-do-	1.20
(iv)	Size 6 Sqmm (1/2.80 mm)	-do-	1.60
(v)	Size 10 Sqmm (1/3.50 mm)	-do-	2.00
(vi)	Size 16 Sqmm (7/1.70 mm)	-do-	2.50
(vii)	Size 25 Sqmm (7/2.24 mm)	-do-	3.80
(viii)	Size 35 Sqmm (7/2.50 mm)	-do-	5.40
Supply and erection of metal clad switches and erection of metal clad switches/ B.D. Bs with rag bolts on wall or on existing angle iron board/pedestal including bonding to earth and necessary connections:-			

Serial No.	Description	Unit	A	B	C
(i)	Double pole switch 16 amp 240 volts	Each	80.00	75.00	
(ii)	Double pole switch 32 amp 240 volts	-do-	153.00	147.00	
(iii)	Double pole switch 63 amp 240 volts	-do-	274.00		
(iv)	Double pole switch 16 amp 415 volts	-do-	156.00	150.00	
(v)	Double pole switch 32 amp, 415 volts	-do-	181.00	174.00	
(vi)	Double pole switch 63 amp 415 volts	-do-	372.00	332.00	
(vii)	Triple pole switch 16 amp 415 volts	Each	185.00	178.00	
(viii)	Triple pole switch 32 amp 415 volts	-do-	355.00	244.00	
(ix)	Triple pole switch 63 amp 415 volts	-do-	516.00	496.00	
(x)	Triple pole switch 100 amp 415 volts	-do-	1882.00	839.00	
(xi)	Triple pole switch 200 amp 415 volts	-do-	2594.00		
(xii)	Triple pole switch 300/320 amp 415 volts	-do-	3338.00		
(xiii)	Triple pole switch with neutral link 16 amp 415 volts.	-do-	192.00	184.00	
(xiv)	Triple pole switch with neutral link 32 amp 415 volts.	-do-	261.00	251.00	
(xv)	Triple pole switch with neutral link 63 amp 415 volts.	-do-	521.00	500.00	
(xvi)	Triple pole switch with neutral link 100 amp 415 volts.	-do-	1921.00	858.00	
(xvii)	Triple pole switch with neutral link 200 amp 415 volts.	-do-	2646.00		
(xviii)	Triple pole switch with neutral link 300/320 amp 415 volts.	-do-	3403.00		
(xix)	Double pole change over switch 16 amp 415 volts	-do-		175.00	
(xx)	Double pole change over switch 32 amp 415 volts	-do-		218.00	
(xxi)	Double pole change over switch 63 amp 415 volts	-do-		362.00	
(xxii)	Four pole change over switch 16 amp 415 volts	-do-			
(xxiii)	Four pole change over switch 32 amp 415 volts	-do-		335.00	
(xxiv)	Four pole change over switch 63 amp 415 volts	-do-		406.00	
(xxv)	Four pole change over switch 100 amp 415 volts	-do-		775.00	
(xxvi)	Four pole change over switch 200 amp 415 volts	-do-		2241.00	
(xxvii)	Four pole change over switch 300/320 amp 415 volts	-do-		2840.00	
(b)	Branch Distribution Boards				
(i)	B.D.B. double pole 16 amp, 240 volts per way 2 way each.	-do-		65.00	

Serial No.	Description	Unit	Through Rate (Rs.)
(i)	B.D.B. double pole 16 amp. 240 volts per way 3 way each.	Each	77.00
(iii)	B.D.B. double pole 16 amp. 240 volts per way 4 way each.	-do-	89.00
(iv)	B.D.B. double pole 16 amp. 240 volts per way 6 way each.	-do-	119.00
(v)	B.D.B. double pole 32 amp. 240 volts per way 2 way each.	-do-	107.00
(vi)	B.D.B. double pole 32 amp. 240 volts per way 3 way each.	-do-	138.00
(vii)	B.D.B. double pole 32 amp. 240 volts per way 4 way each.	Each	168.00
(viii)	B.D.B. double pole 32 amp. 240 volts per way 6 way each.	-do-	204.00
(c)	Moulded case circuit breakers Supply and erection of moulded case circuit breaker on wall or on existing pedestal including bonding to earth and necessary connections :-	Unit.	Through Rate (Rs.)
(i)	15 amp to 60 amp. 415 V. 10 K.A. 3 phase. Each	Each	1926.00
(ii)	100 amp to 220 amp. 415 V. 10 K.A. 3 phase. -do-	-do-	4246.00
(iii)	250 amp. 415 V. 35 K.A. 3 phase -do-	-do-	10212.00
(iv)	300 amp. to 400 amp. 415 V 35 K.A. 3 phase. -do-	-do-	10502.00
(v)	500 amp. to 600 amp. 415 V. 35 K.A. 3 phase. -do-	-do-	10720.00
Sheet steel enclosure			
(d)	Supply and erection of sheet steel enclosures on wall/existing board/pedestal with rag bolts including bonding to earth :-	Unit	Through Rate
(i)	Distribution board 1 way	Each	78.00
(ii)	Distribution board 2 way.	-do-	78.00
(iii)	Distribution board 3 way.	-do-	163.00
(iv)	Distribution board 4 way.	-do-	263.00
(v)	Distribution board 6 way.	-do-	279.00
(vi)	Distribution board 8 way.	-do-	293.00
(vii)	Distribution board 12 way	-do-	379.00
31.13	Supply and erection of M.S. angle iron frame duly welded for housing M.S. sheet & main switches etc. on it, fixed on wall by means of suitable size of rag bolts with cement concrete, duly painted with three coats of approved paint including one coat of red oxide.	Through Rate (Rs.)	1095.00

Serial No.	Description	Unit	Through Rate Category
A			B
B			C

Supply and erection of fittings and accessories:
 (i) Plain pendant complete with bakelite lamp holder and 1.75 sqmm. (24/0.20 mm) PVC sheathed copper flexible wire but without Lamp and shade.
 Each 12.20

Serial No.	Description	Unit	Through Rate (Rs.)
(b)	Isolators.	Each	164.00 238.00
(i)	40 amp		326.00
(ii)	63 amp.	-do-	181.00 284.00
(iii)	40 amp to 63 amp.	-do-	363.00
(i)	0.5 amp to 4 amp.	Each	112.00
(ii)	6 amp. to 32 amp	-do-	95.00
(iii)	40 amp to 63 amp.	-do-	113.00
(i)	Miniature Circuit Breakers of 9 K.A. breaking capacity.	Unit	197.00 315.00
(ii)		Double Pole	403.00
(iii)		Triple Pole	499.00
(iv)		Four Pole	

Supply and erection of miniature circuit breaker/isolator 240/415 V in the existing distribution board including making necessary connections :-
 (L) Miniature Circuit Breaker and Isolator

Serial No.	Description	Unit	Through Rate
(i)	S.P.N. enclosure for single pole MCB 10 amp	Single Pole with Neutral	240.00
(ii)	S.P.N. enclosure for single pole MCB 20 amp	Single Pole with Neutral	293.00
(iii)	T.P.N. enclosure for triple pole MCB 20 amp	Triple Pole with Neutral	486.00
(iv)	T.P.N. enclosure for triple pole MCB 30 amp.	Triple Pole with Neutral	737.00
(i)	Supply and erection of blanking sheet in existing distribution board.	-do-	2.25

Supply and erection of 3 mm thick mild steel sheet duly welded on existing M.S. angle iron frame for fixing the main switches etc. as required, duly painted with three coats of approved paint including one coat of red oxide.
 Distribution Board with Plug and Socket.
 Supply and erection of sheet steel enclosures 2 pole/3 pole with earth plug and socket suitable for incorporating single pole/triple pole MCB on wall/ on existing pedestal complete with necessary connections etc. :-
 (K)

Serial No.	Description	Unit	Through Rate (Rs.)
(i)	Size 50 mm x 50 mm x 6mm	Metre	55.90
(ii)	Size 40 mm x 40 mm x 6 mm	-do-	46.50
(iii)	Supply and erection of 3 mm thick mild steel sheet duly welded on existing M.S. angle iron frame for fixing the main switches etc. as required, duly painted with three coats of approved paint including one coat of red oxide.	Sq m	337.00

Serial No.	Description	Unit	Through Rate(Rs.)
(iii)	Stiff pendant complete with conduit pipe/oxidised brass lamp holder with 1.5 sqmm PVC cable including painting the rod.	Each	22.00
(iiii)	Wooden bracket of approved design complete with brass batten holder with 1.5 sqmm PVC cable.	-do-	15.20
(iv)	Anodised aluminium bracket made of square rod of section 18 mm, 140 mm long with aluminium base 80 mm dia, 1.2 mm thick 25 mm high complete with brass holder with necessary wire for connections etc. as per approved design.	-do-	27.70
(v)	Pole bracket of 15 mm diameter G.L. pipe complete with double cone reflector, brass lamp holder and 'B' clamp inc-hiding cost of 1.5 sqmm PVC sheathed cable.	Each	52.70
(vi)	Wall type bracket of 15 mm diameter G.L. pipe complete with double cone reflector brass lamp holder with 60 cm over hang and 45° inclination for bend including cost of 1.5 sqmm PVC sheathed cable.	-do-	44.00
(vii)	Call bell 220/230 volts A.C. bakelite with double coil.	-do-	21.00
(viii)	Electric buzzer 220/230 volts A.C. bakelite with double coil.	-do-	18.00
(ix)	(a) Bell push with 4 meters 2-core, 0.50 sqmm (16/0.20 mm) PVC flexible wire. (b) Bell push flush type (without flexible wire) in existing sheet.	-do-	22.00
(x)	Bed switch with 4 meters 2 core, 0.50 sqmm (16/0.20 mm) PVC flexible wire.	-do-	5.50
(xi)	Bakelite angle/straight button holder large size.	-do-	21.70
(xii)	Switch 5 amp. on existing sheet.	-do-	6.20
(xiii)	Wall socket 5 amp on existing sheet.	-do-	3.80
(xiv)	15 amp. switch on existing sheet.	-do-	4.40
(xv)	3 pin 15 amp. multi socket on existing sheet	-do-	10.30
(xvi)	3 pin 15 amp. ordinary socket on existing sheet	-do-	11.20
(xvii)	Ceiling rose flush/surface type	-do-	9.00
(xviii)	Bakelite sheet including fixing with brass screws and washers.	-do-	4.00
(xix)	(a) 5 mm thick (b) 3 mm thick. Erection only of 1x40 Walls or 2x40 Walls 1220 mm long/1x20 Walls or 2x20 Walls 610 mm long fluorescent tube with fittings by means of 2 Nos. suspension chains and 0.75 sq mm (24/0.20 mm) PVC copper flexible cable for connecting the fittings to the adjacent light point including supply and erection of suspension chains, flexible cable	Sq cm.	0.04
			0.03

Serial No.	Description	Unit	Through Rate(Rs.)
(xx)	Supply and erection of rectangular bulk head fitting of size 7cm x 14cm, aluminium casted with aluminium colour outside and white stove enamelled inside/complete with guard, glass etc. secured by brass screws suitable upto 100 Watts lamp with B.C. lamp holder but without lamp.	Each	19.10
(xxi)	Erection only of 1x40 Watts or 2x20 Watts 1220 mm long/1x20 Watts or 2x20 Watts 610 mm long fluorescent tube with fittings by means of 1 No. 20 mm diameter conduit pipe 1.60 mm thickness with spring loaded brass range of suitable size including 0.75 sqmm (24/0.20 mm) PVC copper flexible cable for connecting the fitting to the adjacent light point including cost of conduit pipe, PVC flexible cable and petty material required for the same (upto 1/2 metre length of pipe).	-do-	28.60
(xxii)	Erection only of 1x40 Watts or 2x40 Watts 1220 mm long/1x20 Watts or 2x20 Watts 610 mm long fluorescent tube with fittings by means of 2 No. 20 mm diameter conduit pipe 1.60 mm thickness conduit pipe with spring loaded brass range at both ends including 0.75 sqmm (24/0.20 mm) PVC copper flexible cable for connecting the tube to the adjacent light point including cost of conduit pipe flanges PVC flexible cable and petty material required for the same (upto 1/2 metre length of pipe).	Each	20.00
(xxiii)	Extra for additional length of 20 mm diameter conduit pipe for hanging of fitting (for item No. xxi, xxii).	-do-	28.50
(xxiv)	Erection only of 1x40 Watts or 2x40 Watts 1220 mm long/1x20 Watts or 2x20 Watts 610 mm long fluorescent tube fittings directly on wall including necessary connections with 0.75 sqmm (24/0.20 mm) PVC copper flexible cable for connecting the tube with the adjacent light point.	Metre	11.30
(xxv)	Supply and erection of ceiling fitting complete in all respect including cost of brass lamp holder, globe etc. without the cost of lamp.	Each	10.90
(xxvi)	Supply and erection of hexagonal M.S. box 1.60 mm thick having each side 8 cms, 7.5 cms deep, top covered with M.S. lid by means of screws including 10 mm dia 30 cm long mild steel rod made into suitable suspension	(a) 305 mm diameter (b) 250 mm diameter	29.80 26.00

Serial No. Description Unit Through Rate(Rs.)

(xxvii) Supply and erection of 10.5 cm dia M.S. Fan box including 10 mm dia 30 cm long M.S. Road made into suitable suspension hook and erected in R.C.C. slab for the erection of fan complete with all labour and material required to complete the job.
 26.30 -do-

(xxviii) Supply and erection of luminous bell indicator complete including making necessary connections and fixing the same on wall etc. to complete the job in all respects.
 15.50 Each

(xxix) Supply and erection upto 20 amp single phase A.C. energy meter with rag bolts on wall/existing pedestal including the cost of rag bolts required to complete the job in all respects with necessary connections and bonding to earth.
 70.00 Per way

(xxx) Supply and erection of night light fitting made of 16cm x 9cm x 8.5cm M.S. box covered with 3.15 mm thick acrylic sheet of bavelled shape of superior quality including cost of aluminium strip, brass holder cement sand, screws and other petty material required to complete the job.
 219.00 Each

(xxxi) Factory manufactured solid flush door shutters, with block board core as per I.S. No. 1659-1969 bonded with water proof type phenol formaldehyde synthetic resin, hot-pressed, conforming to I.S. 2202 Part-I and fixed in position, including iron hinges, screws, chocks/cleats and stops, etc. (excluding the cost of any fittings, other than specified above, but including labour for fixing the same in position) :-
 Commercial veneering with vertical grains or cross bands and face veneer on both sides commercial facing with laminated core and tipped edges.
 (a) 25 mm thick
 (b) 30 mm thick
 45.00 -do-

(xxxii) Making suitable size of wall niche including cement plastering of inside of niche for metal clad switches, branch distribution boards, bus bar chambers and energy meters.
 (xxxiii) Pdg. one extra junction box with 0.55 meter long 20 mm dia conduit pipe for the erection of fluorescent tube fitting complete with all required labour and material.
 13.20 Each

payable as per item 17.93(a) Chapter No. 17 wood work
 66.1X) Cum

Serial Description Unit Through Rate(Rs.)

Serial No.	Description	Unit	Through Rate(Rs.)
31.19	(i) Painting of ceiling fan complete with blades and suspension rod etc.		49.00
	(a) With stove enamelled paint.	-do-	33.00
	(b) With spray painting.	-do-	2.00
	(iii) Painting of fan rod with 2 coats of approved paint (Up to 0.50 metre in length)	-do-	
	(iii) Painting of pole with 2 coats of enamelled paint or other approved paint.	-do-	
	(a) Up to the height of 7 metres.	Each	30.00
	1. Single bracket	-do-	36.00
	2. Double bracket	-do-	42.00
	3. Triple bracket	-do-	47.00
	(b) Above 7 metres but upto the height of 8 metres	-do-	56.00
	1. Single bracket	-do-	65.00
	2. Double bracket	-do-	60.00
	3. Triple bracket	-do-	72.00
	1. Single bracket	-do-	84.00
	2. Double bracket	-do-	
	3. Triple bracket	-do-	
	(iv) Painting of light, fan, plug or call bell point in ballen wiring system including mains and sub mains with two coats of approved paint.	-do-	7.00
	(v) Painting of heater point in ballen wiring system with 2 coats of approved paint.	Metre	1.20
(O)	31.20 Erection and Carriage of Fans.		
	(i) Erection of ceiling fan complete with necessary earthing of fan and regulator including carriage from local railway station/Goods transport/PWD store to the site of work.	Each	13.00
	(iii) Carriage of table fan from local railway station/Goods transport/PWD store to the site of work.	-do-	2.00
	(iii) Erection of exhaust fan complete with necessary earthing of fan and regulator including carriage from local railway station/Goods transport/PWD store to the site of work.	-do-	25.00
	(iv) Erection of cabin fan complete with necessary earthing including carriage from local railway station/Goods transport/PWD store to the site of work.	-do-	14.60
	(v) Making suitable hole in the wall upto 450 mm sweep exhaust fan including finishing the same and fixing of wire mesh duly	-do-	

(Paint of 1st quality as given in Note No. 11 of Chapter 16)

Serial No.	Description	Unit	Through Rate(Rs.)
(i)	fixed with Deodar wood frame of section 40 mm x 25 mm thick.	-do-	53.00
(vi)	Pdg. and fixing required size of deodar wood frame of section 50 mm x 32 mm for fixing exhaust fan upto 450 mm sweep.	-do-	55.00
(vii)	Carriage of pedestal fan from local railway station/Goods transport/RWD store to the site of work.	-do-	3.70
(P)	Pipe laying		
31.21	Supply and erection of pipe for wiring purposes including bends inspection boxes etc. where necessary and painting as required :-		

Serial No.	Description	Unit	Labour Rate.	Through Rate(Rs.)
(i)	Galvanised iron pipe 15 mm dia on surface.	Metre	0.60	26.30
(ii)	Galvanised iron pipe 20 mm dia on surface.	-do-	0.60	30.90
(iii)	Galvanised iron pipe 25 mm dia on surface.	-do-	0.60	39.20
(iv)	Galvanised iron pipe 32 mm dia on surface.	-do-	0.80	53.80
(v)	Galvanised iron pipe 40 mm dia on surface.	-do-	1.00	59.00
(vi)	Galvanised iron pipe 50 mm dia on surface.	-do-	1.20	76.20
(vii)	Galvanised iron pipe 65 mm dia on surface.	-do-	1.60	90.80
(viii)	Galvanised iron pipe 15 mm dia on surface.	-do-	2.40	27.60
(ix)	Galvanised iron pipe 20 mm dia on surface.	-do-	2.40	32.20
(x)	Galvanised iron pipe 25 mm dia on surface.	-do-	2.40	40.40
(xi)	Galvanised iron pipe 32 mm dia on surface.	-do-	2.80	54.80
(xii)	Galvanised iron pipe 40 mm dia on surface.	-do-	3.30	60.70
(xiii)	Galvanised iron pipe 50 mm dia on surface.	-do-	4.00	77.30
(xiv)	Galvanised iron pipe 65 mm dia on surface.	-do-	4.30	90.10
(xv)	Heavy gauge welded conduit pipe 20 mm dia 1.60 mm thickness on surface.	-do-	6.10	14.90
(xvi)	Heavy gauge welded conduit pipe 25 mm dia 1.60 mm thickness on surface.	-do-	0.60	18.40
(xvii)	Heavy gauge welded conduit pipe surface.	-do-	0.80	

Serial No.	Description	Unit	Labour Rate	Through Rate (Rs.)
(xvii)	32 mm dia 1.60 mm thickness on surface.	Metre	1.00	23.20
(xviii)	Heavy gauge welded conduit pipe 40 mm dia 2.00 mm thickness on surface.	-do-	1.20	33.10
(xix)	Heavy gauge welded conduit pipe 50 mm dia 2.00 mm thickness on surface.	-do-	1.60	44.70
(xx)	Heavy gauge welded conduit pipe 63 mm dia 2.00 mm thickness on surface.	-do-	2.40	56.10
(xxi)	Heavy gauge welded conduit pipe 20 mm dia 1.60 mm thickness	-do-	2.40	16.30
(xxii)	Heavy gauge welded conduit pipe 25 mm dia 1.60 mm thickness	Metre	2.80	19.60
(xxiii)	Heavy gauge welded conduit pipe 32 mm dia 1.60 mm thickness	-do-	3.30	24.20
(xxiv)	Heavy gauge welded conduit pipe 40 mm dia 2.00 mm thickness	-do-	4.00	34.10
(xxv)	Heavy gauge welded conduit pipe 50 mm dia 2.00 mm thickness	-do-	4.30	44.90
(xxvi)	Heavy gauge welded conduit pipe 63 mm dia 2.00 mm thickness	-do-	6.10	56.50
(xxvii)	Galvanized Iron flexible pipe complete with socket nipples and check nuts etc. at both ends (Up to length of one metre):-	Metre	22.70	20.60
(a)	Size 15 mm dia	-do-	22.70	20.60
(b)	Size 20 mm dia	-do-	34.90	34.90
(c)	Size 25 mm dia	-do-	45.90	45.90
(d)	Size 32 mm dia	-do-	68.90	68.90
(e)	Size 40 mm dia	-do-	82.00	82.00
(f)	Size 50 mm dia	-do-	114.60	114.60
(g)	Size 65 mm dia	-do-		
(xxviii)	For additional length of Galvanized Iron flexible pipe more than 1 metre (the payment is to be made for additional length of pipe more than 1 metre only in item No. xxvii):-	-do-		
(a)	Size 15 mm dia	-do-	6.80	6.60
(b)	Size 20 mm dia	-do-	6.80	6.80
(c)	Size 25 mm dia	-do-	8.60	8.60

Serial No.	Description	Unit	Through Rate(Rs.)
(d)	Size 32 mm dia	-do-	10.90
(e)	Size 40 mm dia	-do-	14.70
(f)	Size 50 mm dia	-do-	19.40
(g)	Size 65 mm dia	-do-	33.30
(xxix)	Supply and erection of cast iron pipe laid 1 metre below ground level including digging and refilling of the trench completing with joining with Jute and cement etc.	-do-	77.00
(a)	Cast iron pipe 120 mm dia.	-do-	77.00
(b)	Cast iron pipe 80 mm dia	-do-	61.00
(xxx)	Supply and erection of PVC pipe of 6 kg. pressure, laid 1 metre below ground level complete, including digging refilling of the trench with joining etc. :-	-do-	77.00
(a)	PVC pipe 120 mm dia	Metre	59.00
(b)	PVC pipe 80 mm dia	-do-	42.00
(c)	PVC pipe 65 mm dia	-do-	31.00
(Q)	Earthing		31.22
(i)	Earthing with G.I. earth pipe 4.5 m long and 40 mm dia with masonry enclosures on the top etc. as required.	Each	378.00
(ii)	Extra for using salt and char coal/coke for pipe earth-electrode as required.	-do-	125.00
(iii)	Earthing with G.I. earth plate 600 mm x 600 mm x 6 mm thick including accessories and providing masonry enclosures with cover plate having locking arrangement and watering pipe etc. (but without char coal or coke and salt) complete as required.	-do-	453.00
(iv)	Earthing with lined copper earth plate 600mm x 600mm x 3mm thick including accessories and providing masonry enclosures with cover plate having locking arrangement and watering pipe etc. (but without char coal or coke and salt) etc. complete as required.	-do-	1149.00
(v)	Extra for charcoal or coke and salt for G.I. plate or copper plate earth electrode.	-do-	186.00
(vi)	Supplying and laying 8 S.W.G Copper wire at 0.5 metre below ground level as conductor earth electrode including thimble, soldering etc. as required.	Metre	12.20

Serial No.	Description	Unit	Through Rate(Rs.)
(vii)	Supplying and laying 6 S.W.G. G.I. wire at 0.50 m below ground level as strip earth electrode including timbles, soldering etc.	Metre	3.50
(viii)	Supplying and laying 25mm x 5mm G.I. strip at 0.5 metre below ground as strip earth electrode including soldering etc. as required.	-do-	16.20
(ix)	Supplying and laying 25mm x 6mm G.I. strip at 0.5 metre below ground as strip earth electrode including soldering etc. as required.	-do-	18.20
(x)	Providing and fixing 25 mm x 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode as required.	Metre	155.00
(xi)	Pdg. and fixing 25 mm x 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode as required.	-do-	65.10
(xii)	Pdg. and laying earth connections from earth electrode with 4.00 mm dia G.I. wire in 15 mm dia G.I. pipe from earth electrode as required.	-do-	24.50
(xiii)	Pdg. and laying earth connections from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode as required.	-do-	33.80
(xiv)	Pdg. and fixing 25 mm x 5mm copper strip on surface or in recess for connections etc. as required with all labour and material.	-do-	117.00
(xv)	Pdg. and fixing 25 mm x 5mm G.I. strip on surface or in recess for connections etc. as required with all labour and material.	-do-	20.30
(xvi)	Pdg. and fixing 4.00 mm dia G.I. wire on surface or in recess for loop earthing as required.	-do-	3.40
(xvii)	Pdg. and fixing 4.00 mm dia Copper wire on surface or in recess for loop earthing as required.	-do-	13.50
(xviii)	Supplying and drawing 4.00 sq. mm aluminium conductor wire for loop earthing in the existing surface/recessed conduit/wood batten along with other wires as required.	-do-	0.50
(xix)	Supply and erection of 20mm x 3 mm thick G.I. tape fixed with suitable G.I. staples of same size.	-do-	14.10
(xx)	Supply and erection of 20 mm x 3 mm thick copper tape fixed with suitable copper staples of same size.	-do-	60.00

Serial No. Description Unit Through Rate(Rs.)

(12)	Lightning Conductor		
31.23	(a) Copper		
	(i) Erection only of lightning conductor	Metre	9.90
	(iii) Excavation earth pit 180 cm round at top and 90 cm at bottom 4.5 m deep and refilling the same in plains including supply of necessary charcoal/coke and salt mixture.	Each	254.00
	(iii) Excavation earth pit 180 cm round at top and 90 cm at bottom 4.5 metres including supply of necessary charcoal/coke and salt mixture.	Each	254.00
	(iv) Supply and erection of 60 cm x 3mm thick copper plate including fixing with necessary bolts and nuts to copper tape.	Each	279.00
	(v) Providing standard-watering tank including down pipe and C.I. cover with locking arrangement etc.	-do-	959.00
	(vi) Supply and erection of 20mm x 3mm thick lightning conduction copper tape fixed with suitable copper staples of same size.	-do-	190.00
	(vii) Supply and erection of copper tape 32mm x 6mm thick from each electrode directly in ground and surface, fixed with suitable copper staples of same size.	Metre	60.00
	(viii) Supply and erection of 25mm diameter 1.5 metre long lightning solid copper rod tapered into a point at the top with 16cm x 3mm thick copper base plate and necessary nuts and bolts with washer.	Each	811.00
	(ix) Providing and fixing, testing joint made of 20mm x 3mm thick copper strips 125 mm long with 4 nos. brass bolts and nuts, checknuts with washer complete.	-do-	12.10
	(b) Galvanised iron.		
31.24	(i) Erection only of lightning conductor	Metre	6.90
	(ii) Excavation earth pit 180 cm round at top and 90 cm at bottom 4.5 metres including supply of necessary charcoal/coke and salt mixture.	Metre	6.90
	(iii) Excavation earth pit 180 cm round at top and 90 cm at bottom 4.5 metres	Each	254.00

(xv)	25 Sq mm 3 Core Cable	-do-	59.30	51.80
(xiii)	16 Sq mm 3 Core Cable	-do-	52.70	46.50
(xii)	10 Sq mm 3 Core Cable	-do-	44.90	34.60
(xi)	6 Sq mm 3 Core Cable	-do-	37.80	29.00
(x)	4 Sq mm 3 Core Cable	-do-	34.80	26.40
(ix)	2.5 Sq mm 3 Core Cable	-do-	31.80	24.20
(viii)	50 Sq mm 2 Core Cable	-do-	71.80	62.80
(vii)	35 Sq mm 2 Core Cable	-do-	61.10	52.70
(vi)	25 Sq mm 2 Core Cable	-do-	54.10	45.30
(v)	16 Sq mm 2 Core Cable	-do-	48.90	40.30
(iv)	10 Sq mm 2 Core Cable	-do-	41.80	31.40
(iii)	6 Sq mm 2 Core Cable	-do-	35.50	26.50
(ii)	4 Sq mm 2 Core Cable	-do-	32.70	24.30
(i)	2.5 Sq mm 2 Core Cable	Metre	30.40	22.90

Under Ground Cables.
 Supply and erection of under ground cable 1 metre below ground level covered with sand and bricks including necessary connections, digging and refilling of trenches:-

(S)	Under Ground Cables.			31.25
No.	Description	Unit	Through Rate (Rs.)	Unarmoured

(ix)	Providing and fixing testing joints made of 20mm x 3mm thick G.I. strips 125 mm long with 4 nos. G.I. bolts and nuts with washers complete.	-do-	6.70	
(viii)	Supply and erection of 25mm dia. G.I. base plate and necessary nuts and bolts with washers.	Each	108.00	
(vii)	Supply and erection of 25mm dia. G.I. base plate and necessary nuts and bolts with washers. Supply and erection of G.I. tape 32mm x 6mm thick from earth electrode directly in ground and surface fixed with G.I. staples of same size.	Metre	32.60	
(vi)	Supply and erection of 20mm x 3mm thick lightning conductor G.I. tape fixed with suitable G.I. staples of same size.	Metre	14.10	
(v)	Providing standard watering tank including down pipe and G.I. cover with locking arrangement etc.	-do-	190.00	
(iv)	Supply and erection of 60cm x 60cm x 6mm thick galvanised iron plate including necessary bolts and nuts to G.I. tape.	-do-	215.00	
	deep and refilling the same in hills including supply of necessary charcoal/coke and salt mixture.	Each	279.00	

Serial	Description	Unit	Through Rate (Rs.)	No.
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Serial No.	Description	Unit	Through Rate (Rs.)	Armoured	Unarmoured
(xv)	35 Sq mm 3 Core Cable	Metre	67.50		58.80
(xvi)	50 Sq mm 3 Core Cable		80.30		72.70
(xvii)	70 Sq mm 3 Core Cable		101.20		90.50
(xviii)	95 Sq mm 3 Core Cable		122.60		111.90
(xix)	120 Sq mm 3 Core Cable		140.10		131.50
(xx)	150 Sq mm 3 Core Cable		170.00		155.00
(xxi)	185 Sq mm 3 Core Cable		201.00		189.00
(xxii)	240 Sq mm 3 Core Cable		255.70		241.40
(xxiii)	300 Sq mm 3 Core Cable		314.00		295.00
(xxiv)	400 Sq mm 3 Core Cable		393.00		370.00
(xxv)	25 Sq mm 3 1/2 Core Cable		64.50		56.00
(xxvi)	35 Sq mm 3 1/2 Core Cable		74.80		66.20
(xxvii)	50 Sq mm 3 1/2 Core Cable	Metre	89.30		79.40
(xxviii)	70 Sq mm 3 1/2 Core Cable		115.00		101.40
(xxix)	95 Sq mm 3 1/2 Core Cable		135.50		126.60
(xxx)	120 Sq mm 3 1/2 Core Cable		161.50		147.90
(xxxi)	150 Sq mm 3 1/2 Core Cable		193.00		181.00
(xxxii)	185 Sq mm 3 1/2 Core Cable		228.00		219.00
(xxxiii)	240 Sq mm 3 1/2 Core Cable		298.60		280.80
(xxxiv)	300 Sq mm 3 1/2 Core Cable		360.00		340.00
(xxxv)	400 Sq mm 3 1/2 Core Cable		461.00		437.00
(xxxvi)	2.5 Sq mm 4 Core Cable		33.20		25.90
(xxxvii)	4 Sq mm 4 Core Cable		37.90		29.00
(xxxviii)	6 Sq mm 4 Core Cable		42.40		31.70
(xxxix)	10 Sq mm 4 Core Cable		47.30		39.00
(xl)	16 Sq mm 4 Core Cable		60.80		51.30
(xli)	25 Sq mm 4 Core Cable		70.50		58.60
(xlii)	35 Sq mm 4 Core Cable		80.40		69.20
(xliii)	50 Sq mm 4 Core Cable		99.00		85.70

Note :-
 Where the said is not provided the rate shall be reduced @ 4.00 per metre.
 31.26 Supply & erection of under ground cable, loose in existing pipe or trenches complete with necessary connections :-

(i)	2.5 Sq mm 2 Core Cable	-do-	17.40		9.90
(ii)	4 Sq mm 2 Core Cable	-do-	19.70		11.40
(iii)	6 Sq mm 2 Core Cable	-do-	22.50		13.50
(iv)	10 Sq mm 2 Core Cable	-do-	27.80		17.40
(v)	16 Sq mm 2 Core Cable	-do-	35.00		26.30
(vi)	25 Sq mm 2 Core Cable	-do-	39.40		30.60
(vii)	35 Sq mm 2 Core Cable	-do-	46.40		38.00
(viii)	50 Sq mm 2 Core Cable	-do-	57.20		48.20
(ix)	2.5 Sq mm 3 Core Cable	-do-	18.80		11.20
(x)	4 Sq mm 3 Core Cable	-do-	21.80		13.40

(314)

13.40	Metre	(i)	2.5 Sq mm to 6 Sq mm 2 to 4 Core	-do-	14.90
15.90	-do-	(iii)	10 Sq mm to 16 Sq mm 2 to 4 Core	-do-	15.90
16.40	-do-	(iv)	25 Sq mm to 50 Sq mm 2 Core	-do-	16.40
17.90	-do-	(v)	70 Sq mm to 95 Sq mm 3 to 3 1/2 Core	-do-	18.90
18.90	-do-	(vi)	120 Sq mm to 150 Sq mm 3 to 3 1/2 Core	-do-	20.90
20.90	-do-	(vii)	185 Sq mm to 240 Sq mm 3 to 3 1/2 Core	-do-	

Laying of underground cable 1 metre below ground level covered with sand and bricks including excavation and refilling of trenches:-

Serial No.	Description	Unit	Through Rate (Rs.)
(xi)	6 Sq mm 3 Core Cable	Metre	16.00
(xii)	10 Sq mm 3 Core Cable	-do-	20.60
(xiii)	16 Sq mm 3 Core Cable	-do-	32.40
(xiv)	25 Sq mm 3 Core Cable	-do-	37.20
(xv)	35 Sq mm 3 Core Cable	-do-	44.20
(xvi)	50 Sq mm 3 Core Cable	-do-	58.10
(xvii)	70 Sq mm 3 Core Cable	-do-	76.10
(xviii)	95 Sq mm 3 Core Cable	-do-	95.60
(xix)	120 Sq mm 3 Core Cable	-do-	117.60
(xx)	150 Sq mm 3 Core Cable	-do-	141.20
(xxi)	185 Sq mm 3 Core Cable	-do-	176.50
(xxii)	240 Sq mm 3 Core Cable	-do-	228.80
(xxiii)	300 Sq mm 3 Core Cable	Metre	284.30
(xxiv)	400 Sq mm 3 Core Cable	-do-	359.00
(xxv)	25 Sq mm 3 1/2 Core Cable	-do-	41.40
(xxvi)	35 Sq mm 3 1/2 Core Cable	-do-	51.60
(xxvii)	50 Sq mm 3 1/2 Core Cable	-do-	64.80
(xxviii)	70 Sq mm 3 1/2 Core Cable	-do-	87.00
(xxix)	95 Sq mm 3 1/2 Core Cable	-do-	112.30
(xxx)	120 Sq mm 3 1/2 Core Cable	-do-	134.00
(xxxi)	150 Sq mm 3 1/2 Core Cable	-do-	167.00
(xxxii)	185 Sq mm 3 1/2 Core Cable	-do-	206.50
(xxxiii)	240 Sq mm 3 1/2 Core Cable	-do-	268.30
(xxxiv)	300 Sq mm 3 1/2 Core Cable	-do-	329.00
(xxxv)	400 Sq mm 3 1/2 Core Cable	-do-	426.00
(xxxvi)	2.5 Sq mm 4 Core Cable	-do-	12.90
(xxxvii)	4 Sq mm 4 Core Cable	-do-	16.00
(xxxviii)	6 Sq mm 4 Core Cable	-do-	18.70
(xxxix)	10 Sq mm 4 Core Cable	-do-	25.00
(xl)	16 Sq mm 4 Core Cable	-do-	37.30
(xli)	25 Sq mm 4 Core Cable	-do-	44.50
(xlii)	35 Sq mm 4 Core Cable	-do-	54.60
(xliii)	50 Sq mm 4 Core Cable	-do-	71.00

Serial	Description	Unit	Through	No.	Rate (Rs.)
	(viii) 300 Sqmm to 400 Sqmm 3 to 3 1/2 Core	Metre	23.50		
Note :- Where the said is not provided, the rate shall be reduced @ 4.00 per metre.					
31.28	Supply and erection of suitable compression type brass cable glands for underground Cable :-				
	(i) Up to 6 Sq mm cable 2 to 4 Core	-do-	6.70		
	(ii) 10 Sqmm to 16 Sqmm Cable 2 to 4 Core	-do-	9.20		
	(iii) 25 Sqmm to 50 Sqmm Cable 2 to 4 Core	-do-	16.80		
	(iv) 70 Sqmm to 95 Sqmm Cable 3 to 3 1/2 Core	-do-	22.50		
	(v) 120 Sqmm to 185 Sqmm Cable 3 to 3 1/2 Core	-do-	28.60		
	(vi) 240 Sqmm to Cable 3 to 3 1/2 Core	-do-	35.00		
	(vii) 300 Sqmm to 400 Sqmm Cable 3 to 3 1/2 Core	-do-	62.30		
31.29	Supply and erection of PVC tee/straight through joint (cable joining kit) complete with required quantity of resin, hardner, plastic mould G.P. Putty, adhesive, earth continuity, connections and fixing the same in position complete with joint etc.				
	(i) PVC Tee.				
	(a) For 6 Sqmm to 16 Sqmm Cable 4 Core	Each	261.00		
	(b) For 25/35 Sqmm Cable 3 1/4 Core	-do-	355.00		
	(c) For 50 Sqmm Cable 3 1/4 Core	-do-	576.00		
	(ii) Straight through joint.				
	(a) For 6 Sqmm Cable 2 to 4 Core	-do-	242.00		
	(b) For 10/16 Sqmm Cable 2 to 4 Core	-do-	291.00		
	(c) For 25/35 Sqmm Cable 2 to 4 Core	-do-	346.00		
	(d) For 50 Sqmm Cable 3 to 4 Core	-do-	396.00		
	(e) For 70 Sqmm Cable 3 1/2 Core	-do-	465.00		
	(f) For 95 Sqmm Cable 3 1/2 Core	-do-	489.00		
	(g) For 120/150 Sqmm Cable 3 1/2 Core	-do-	752.00		
	(h) For 185 Sqmm Cable 3 1/2 Core	-do-	802.00		
	(i) For 240 Sqmm Cable 3 1/2 Core	-do-	1004.00		
	(j) For 300 Sqmm Cable 3 1/2 Core	-do-	1064.00		
	(k) For 400 Sqmm Cable 3 1/2 Core	-do-	1415.00		
(1)	Street Light				
31.30	1. Supply and erection of mild steel pipe pole 10cm dia, 3.25 mm thick, welded with M.S. base plate of size 30 cm x 30 cm x 6.00 mm thick, pole fitted with pole mounting bracket 2 mm thick (10 cm dia on the pole side, gradually tapered to 40 mm dia, with proper sleeve on fitting side) 1.5 metres long including erection of pole in ground, surrounded with 30 cm dia of 1:3:6 cement concrete and a plate form 10 cm thick to the size of base plate at the bottom including painting (Amended vide A & C slip No. 10 dt. 10-12-92)				
	(1) M.S. pipe pole 5 metres long buried 1.0 m in ground.	-do-	740.00		

Serial Description Unit Through Rate (Rs.) No.

(iii) M.S. pipe pole 6 metres long buried 1.20 m in ground Each 853.00

11. Supply and erection of Galvanised iron pipe (B-Class) pole welded with M.S. base plate of size 15cm x 15 cm x 3.00 mm thick, erection of the pole in ground surrounded with 15 cm dia of 1:3:6 cement concrete and a platform 10cm thick to the size of base plate at the bottom including painting (Amended vide A & C slip 10, dt. 10/12/92.

(i) 3.5 metres long 50 mm dia pole duly embedded 0.7 m below ground level. -do- 293.00

(ii) 4.5 metres long 50 mm dia pole duly embedded 0.9 m below ground level. -do- 361.00

(iii) 4.5 metres long 65 mm dia pole duly embedded 0.9 m below ground level. -do- 409.00

111 Supply and erection of 3 stepped steel tubular pole (waged type) conforming to I.S.S. welded with mild steel base plate of size 30cm x 30cm x 6.00 mm thick including erection of pole in ground surrounded with 30 cm dia of 1:3:6 cement concrete and a platform of 10 cm thick to the size of base plate at the bottom including painting (Amended vide A & C slip No. 10 dt. 10-12-92)

(i) 7 metre long single bracket pole duly embedded 1.25 metre below ground level conforming to 410-SP-2 of IS: 2713 (part-III) 1980, extending the top section by 1.25 m and smoothly curved making an angle of 10° to 15° with the horizontal plane, bracket fitted with suitable size of mild steel nipple (minimum 10cm in the bracket) to hold the fitting.

(ii) 7 metre long double bracket pole duly embedded 1.25 metre below ground level conforming to 410-SP-2 of IS: 2713 (part-III) 1980, extending the top section by 1.25 m smoothly curved double bracket each making an angle of 10° to 15° with the horizontal plane, bracket fitted with suitable size of mild steel nipple (minimum 10cm in the bracket) to hold the fitting.

(iii) 7 metre long triple bracket pole duly embedded 1.25 metre below ground level conforming to 410-SP-2 of IS: 2713 (part-III) 1980, extending the top section by 1.25 m smoothly curved triple bracket each making an angle of 10° to 15° with the horizontal plane, brackets fitted with suitable size of mild steel nipples (minimum 10cm in fitting.

Serial	Description	Unit	Through	No.	Rate (Rs.)
(iv)	8 metre long single bracket pole duly embedded 1.25 metre below ground level conforming to 410-SP-II of IS : 2713 (part-II) 1980, extending the top section by 2 metre and smoothly curved making an angle of 10° to 15° with the horizontal plane, bracket fitted with suitable size of mild steel nipple (minimum 10cm in the bracket) to hold the fitting.	Each	1736.00		
(v)	8 metre long double bracket pole duly embedded 1.25 metre below ground level conforming to 410-SP-II of IS : 2713 (part-II) 1980, extending the top section by 2 metre and smoothly curved each making an angle of 10° to 15° with the horizontal plane, brackets fitted with suitable size of mild steel nipple (minimum 10cm in the bracket) to hold the fitting.	-do-	1523.00		
(vi)	8 metre long triple bracket pole duly embedded 1.25 metre below ground level conforming to 410-SP-II of IS : 2713 (part-II) 1980, extending the top section by 2 metre and smoothly curved each making an angle of 10° to 15° with the horizontal plane, brackets fitted with suitable size of mild steel nipples (minimum 10cm in the bracket) to hold the fitting.	-do-	1829.00		
(vii)	11 metres long straight pole duly embedded 1.8 metre below ground conforming to 410-SP-51 of IS:2713 (part-II) 1980 extending the top section by 0.5 metre.	Each	2135.00		
(viii)	11 metres long single bracket pole duly embedded 1.8 metres below ground conforming to 410-SP-51 of IS:2713 (part-II) 1980 extending the top section by 2.40 metres and smoothly curved making an angle of 10° to 15° with horizontal plane bracket fitted with suitable size of mild steel nipple (minimum 10 cm in the bracket) to hold the fitting.	-do-	2587.00		
(ix)	11 metres long double bracket pole duly embedded 1.8 metres below ground conforming to 410-SP-51 of IS:2713 (part-II) 1980 extending the top section by 2.40 metres and smoothly curved each making an angle of 10° to 15° with horizontal plane brackets fitted with suitable size of mild steel nipples (minimum 10 cm in the bracket) to hold the fitting.	-do-	2779.00		
(x)	11 metres long triple bracket pole duly embedded 1.8 metres below ground conforming to 410-SP-51 of IS:2713 (part-II) 1980 extending the top section by 2.40 metres and smoothly curved each making an angle of	-do-	3185.00		

Serial No.	Description	Unit	Through Rate (Rs.)
(xi)	10" to 15" with horizontal plane brackets fitted with suitable size of mild steel nipples (minimum 10 cm in the bracket) to hold the fitting.	Each	3591.00
(xii)	11 metres long single bracket pole duly embedded 1.8 metres below ground conforming to 410-SP-51 to IS : 2713 (part-II) 1980 with sleeve and C.I. pole cap at the top. The pole welded at the top with 2.50 metre long single mild steel bracket of section 60.3 mm dia, 3.65 mm thick making an angle of 10° to 15° with the horizontal plane, the bracket is supported with 6 mm thick mild steel tapered rib welded to the bracket and sleeve, 850mm long in such a way that it is 75 mm at sleeve side and 31 mm at the bracket side.	-do-	2790.00
(xiii)	11 metres long double bracket pole duly embedded 1.8 metres below ground conforming to 410-SP-51 to IS : 2713 (part-II) 1980 with sleeve and C.I. pole cap at the top. The pole welded at the top with 2.50 metre long two mild steel bracket of section 60.3 mm dia, 3.65 mm thick making an angle of 10° to 15° with the horizontal plane. Each bracket is supported with 6 mm thick mild steel tapered rib welded to the bracket and sleeve, 850mm long in such a way that it is 75 mm at sleeve side and 31 mm at the bracket side.	Each	2993.00
(xiv)	11 metres long triple bracket pole duly embedded 1.8 metres below ground conforming to 410-SP-51 to IS : 2713 (part-II) 1980 with sleeve and C.I. pole cap at the top. The pole welded at the top with 2.50 metre long three mild steel brackets of section 60.3 mm dia, 3.65 mm thick each making an angle of 10° to 15° with the horizontal plane. Each bracket is supported with 6 mm thick mild steel tapered rib welded to the bracket and sleeve, 850mm long in such a way that it is 75 mm at sleeve side and 31 mm at the bracket side.	-do-	3197.00
(xv)	Erection of street light fitting on the pole including the cost of pelly material required (respective of height/length of bracket)- (a) Pole upto the height of 4.9 metres (b) Pole above 4.5 metres but upto the height of 7 metres. (c) Pole above 7 metres but upto the height of 8 metres. (d) Pole above 8 metres	-do-	38.00
	Supply and erection of 32mm dia meter 1.5 m long bracket (B-class) making an angle of 10° to 15° with horizontal plane for mounting street light fitting of G.L. bracket on wall with 2 nos. 32 mm x 3 mm		25.00

Serial No.	Description	Unit	Through Rate (Rs.)
	thick M.S. clamps including cost of cutting, welding of G.I. pipe complete with cement sand mixture, bolts and nuts etc, including necessary connections.	Each	102.00
(IV)	Supply and erection of weather proof M.S. box of size 20 cm x 15 cm x 10 cm covered with 3.00 mm thick M.S. sheet hinged cover, locking arrangements, housed in wall, including the cost of 1 no. 16 amp. 415 volts kit kat and 2 Nos. 63 amp. 415 volts neutral links fixed on hardwood board in the M.S. box including painting and necessary connections.	-do-	85.00
(V)	Supply and erection of weather proof M.S. box of size 20 cm x 15 cm x 10 cm covered with 3.00 mm thick M.S. sheet hinged cover housed in 1:2:4 cement concrete mull including suitable size of PVC pipe for incoming and outgoing cables, including the cost of 1 no. 16 amp. 415 volts Kit Kat and 2 nos. 63 amp. 415 volts neutral links, fixed on hard wood board in the M.S. box including the cost of locking arrangements, painting and necessary connections etc.	Each	120.00
	(i) Muff size 40 cm dia 50 cm high (ii) Muff size 40 cm dia 55 cm high	-do-	124.00
<p>Note :- Where more than one Kit-Kat of 16 amp. 415 volts capacity is provided, the rate shall be increased by Rs. 13.20 each for additional kit kat.</p>			
	V1. Supply and erection of prestressed cement concrete pole as per IS : 1678-1960.		
(i)	8 metres long 90 mm x 145 mm at top and 90 mm x 290 mm at bottom with working load of 200 Kg. buried 1.6 m in ground.	-do-	630.00
(ii)	9 metres long 105 mm x 115 mm at top and 105 mm x 315 mm at bottom with working load of 200 Kg. buried 1.8 m in ground.	-do-	829.00
(iii)	11 metres long 152 mm x 203 mm at top and 152 mm x 368 mm at bottom with working load of 360 Kg. buried 2.20 m in ground.	-do-	1987.00
(U)	Bus Bar Chamber		
(a)	Copper		
	Supply and erection of metal clad bus bar chamber made from 1.6 mm thick M.S. sheet fixed with rag bolts on wall or on existing pedestal/angle iron frame including bonding to earth, detachable top and bottom painting and necessary connections etc. (Copper bars duly lined).		
(i)	100 amp. 2 bars of 40 cm each (cross section 25 mm x 3 mm), chamber over all size 45 cm x 20 cm x 18 cm.	-do-	257.00
(ii)	100 amp. 4 bars of 55 cm each (cross section 25 mm x 3 mm), chamber over all size 60 cm x 45 cm x 18 cm.	-do-	485.00

Serial No.	Description	Unit	Through Rate (Rs.)
(iii)	200 amp. 2 bars of 40 cm each (cross section 25 mm x 5 mm), chamber over all size 45 cm x 20 cm x 18 cm.	Each	297.00
(iv)	200 amp. 4 bars of 55 cm each (cross section 25 mm x 5 mm), chamber over all size 60 cm x 45 cm x 18 cm.	-do-	524.00
(v)	200 amp. 4 bars of 100 cm each (cross section 25 mm x 5 mm), chamber over all size 1.10 m x 45 cm x 18 cm.	-do-	915.00
(vi)	300 amp. 2 bars of 55 cm each (cross section 40 mm x 5 mm), chamber over all size 60 cm x 25 cm x 23 cm.	-do-	465.00
(vii)	300 amp. 4 bars of 55 cm each (cross section 40 mm x 5 mm), chamber over all size 60 cm x 55 cm x 23 cm.	-do-	822.00
(viii)	300 amp. 4 bars of 100 cm each (cross section 40 mm x 5 mm), chamber over all size 1.10 m x 55 cm x 23 cm.	-do-	1291.00
(ix)	400 amp. 4 bars of 55 cm each (cross section 50 mm x 5 mm), chamber over all size 60 cm x 55 cm x 23 cm.	Each	924.00
(x)	400 amp. 4 bars of 100 cm each (cross section 50 mm x 5 mm), chamber over all size 1.10 m x 55 cm x 23 cm.	-do-	1464.00
(xi)	500/600 amp. 4 bars of 55 cm each (cross section 60 mm x 5 mm), chamber over all size 60 cm x 60 cm x 30 cm.	-do-	1087.00
(xii)	500/600 amp. 4 bars of 100 cm each (cross section 60 mm x 5 mm), chamber over all size 1.10 m x 60 cm x 30 cm.	-do-	1733.00
(xiii)	800 amp. 4 bars of 55 cm each (cross section 50 mm x 10 mm), chamber over all size 60 cm x 70 cm x 38 cm.	-do-	1573.00
(xiv)	800 amp. 4 bars of 100 cm each (cross section 50 mm x 10 mm), chamber over all size 60 cm x 70 cm x 38 cm.	-do-	2551.00
(xv)	1000 amp. 4 bars of 55 cm each (cross section 60 mm x 10 mm), chamber over all size 1.10 m x 70 cm x 38 cm.	-do-	1764.00
(xvi)	1000 amp. 4 bars of 100 cm each (cross section 60 mm x 10 mm), chamber over all size 1.10 m x 70 cm x 38 cm.	-do-	2928.00
(b) Aluminum	Supply and erection of metal clad bus bar chamber made from 1.6 mm thick M.S. sheet and fixing with rag bolts on wall or on existing pedestal/angle iron frame including bonding, detachable top and bottom including painting and necessary connection etc. (Aluminium bars).		
(i)	100 amp 2 bars of 40 cm each (cross section 25 mm x 6 mm) chamber over all size 45 cm x 20 cm x 18 cm.	-do-	217.00

31.32

Serial No.	Description	Unit	Through	Rate (Rs.)
(iii)	100 amp 4 bars of 55 cm each (cross section 25 mm x 6 mm) chamber over all size 60 cm x 45 cm x 18cm	Each	376.00	
(iv)	200 amp 2 bars of 40 cm each (cross section 38 mm x 6 mm) chamber over all size 45 cm x 20 cm x 18cm	-do-	545.00	
(v)	200 amp 4 bars of 55 cm each (cross section 38 mm x 6 mm) chamber over all size 60 cm x 45 cm x 18cm	-do-	232.00	
(vi)	200 amp 4 bars of 100 cm each (cross section 38 mm x 6 mm) chamber over all size 1.10 m x 45 cm x 18cm	-do-	397.00	
(vii)	300 amp 2 bars of 55 cm each (cross section 51 mm x 6 mm) chamber over all size 60 cm x 25 cm x 23 cm	-do-	576.00	
(viii)	300 amp 4 bars of 55 cm each (cross section 51 mm x 6 mm) chamber over all size 60 cm x 55 cm x 23 cm	-do-	309.00	
(ix)	300 amp 4 bars of 100 cm each (cross section 51 mm x 6 mm) chamber over all size 1.10 m x 55 cm x 23 cm	Each	511.00	
(x)	400 amp 4 bars of 55 cm each (cross section 63 mm x 6 mm) chamber over all size 60 cm x 55 cm x 23 cm	-do-	724.00	
(xi)	400 amp 4 bars of 100 cm each (cross section 63 mm x 6 mm) chamber over all size 1.10 m x 55 cm x 23 cm	-do-	534.00	
(xii)	500 amp 4 bars of 55 cm each (cross section 76 mm x 6 mm) chamber over all size 1.10 m x 55 cm x 23 cm	-do-	755.00	
(xiii)	500 amp 4 bars of 100 cm each (cross section 76 mm x 6 mm) chamber over all size 1.10 m x 60 cm x 30 cm	-do-	619.00	
(xiv)	600/700 amp 4 bars of 55 cm each (cross section 102 mm x 6 mm) chamber over all size 60 cm x 70 cm x 38 cm	-do-	883.00	
(xv)	600/700 amp 4 bars of 100 cm each (cross section 102 mm x 6 mm) chamber over all size 60 cm x 70 cm x 38 cm	-do-	753.00	
(xvi)	800/900 amp 4 bars of 55 cm each (cross section 127 mm x 6 mm) chamber over all size 1.10 m x 70 cm x 38 cm	-do-	1087.00	
(xvii)	800/900 amp 4 bars of 100 cm each (cross section 127 mm x 6 mm) chamber over all size 60 cm x 70 cm x 38 cm	-do-	804.00	
(v)	Pedestal size 1.10 m x 70 cm x 38 cm	-do-	1175.00	
31.33	Supply and erection of Godrej almira type M.S. pedestal made of 50 mm x 50 mm x 6 mm angle iron frame with 3.00 mm thick M.S. sheet covering			

Serial Description No.
Through Rate (Rs.) Unit

including shutters with suitable hinges and locking arrangement with Godrej type handle including round bars. The top covering should have downward overhang of 75 mm on all sides of pedestal, having two sets of water proof ventilation holes of suitable size on the sides, at top and bottom, each set containing four Nos. holes to discharge the heat produced by the current. The shutters fixed with rubber gasket of superior quality and of suitable size to make it water proof. The pedestal duly painted both inside and outside with two coats of approved paint and primary coat and its legs are embedded upto the entire depth in 1:2:4 cement concrete block, projected 75 mm all around the pedestal and 200 mm above the ground level including the cost of all labour and material required to complete the job in all respect upto the entire satisfaction of Engineer-in-charge of work :-

(i)	M.S. Pedestal of size 600mm wide, 750mm high 300 mm deep and bottom totally open duly embedded in cement concrete block of size 750 mm x 450 mm x 200 mm above ground level duly plastered with 12 mm thick 1 : 4 cement plaster, having a base of size 900 mm x 600 mm x 250 mm below ground level.	Each	1202.00
(ii)	M.S. Pedestal of size 750mm wide, 900mm high 300 mm deep and bottom totally open duly embedded in cement concrete block of size 900 mm x 450 mm x 200 mm above ground level duly plastered with 12 mm thick 1 : 4 cement plaster, having a base of size 1050 mm x 600 mm x 250 mm below ground level.	-do-	1492.00
(iii)	M.S. Pedestal of size 750mm wide, 1200mm high 300 mm deep and bottom totally open duly embedded in cement concrete block of size 900 mm x 450 mm x 200 mm above ground level duly plastered with 12 mm thick 1 : 4 cement plaster, having a base of size 1050 mm x 600 mm x 250 mm below ground level.	-do-	1763.00
(iv)	M.S. Pedestal of size 900mm wide, 1500mm high 450 mm deep and bottom totally open duly embedded in cement concrete block of size 1050 mm x 600 mm x 200 mm above ground level duly plastered with 12 mm thick 1 : 4 cement plaster, having a base of size 1200 mm x 750 mm x 250 mm below ground level.	-do-	2527.00
(v)	M.S. Pedestal of size 1200mm wide, 1500mm high 450 mm deep and bottom totally open duly embedded in cement concrete block of size 1350 mm x 600 mm x 200 mm above ground level.	-do-	

Serial No. Description Unit Through Rate (Rs.)

(vi)	M.S. Pedestal of size 1500mm wide, 1800mm high 450 mm deep and bottom totally open duly embedded in cement concrete block of size 1650 mm x 600 mm x 200 mm above ground level duly plastered with 12 mm thick 1 : 4 cement plaster, having a base of size 1500 mm x 750 mm x 250 mm below ground level.	Each	3003.00
(v)	Repairing of Fans	-do-	3862.00
(i)	Full stator re-winding of a ceiling fan (condenser type) including cleaning and insulating the stator slots, sleeving, soldering, wrapping of cotton tape, varnishing, re-assembly and testing etc. complete.	Each	86.00
(a)	900 mm sweep	-do-	104.00
(b)	1200 mm sweep	-do-	122.00
(c)	1400/1500 mm sweep	-do-	7.40
(ii)	Replacement of a single stator coil of ceiling fan (condenser type) including connections, providing insulating, varnishing, re-assembly and testing etc. -	-do-	9.30
(a)	900 mm sweep	-do-	12.40
(b)	1200 mm sweep	-do-	88.00
(c)	1400/1500 mm sweep	-do-	129.00
(iii)	Full stator re-winding of an exhaust fan (condenser type) including cleaning and insulating the stator slots, sleeving, soldering, wrapping of cotton tape varnishing, re-assembly and testing etc. complete -	-do-	158.00
(a)	230/300 mm sweep 900 RPM	-do-	165.00
(b)	230/300 mm sweep 1400 RPM	-do-	173.00
(c)	380/450 mm sweep 900 RPM	-do-	214.00
(d)	380/450 mm sweep 1400 RPM	-do-	19.00
(e)	610 mm sweep 900 RPM	-do-	25.50
(f)	610 mm sweep 1400 RPM	-do-	31.40
(iv)	Replacement of single stator coil of an exhaust fan (condenser type) including connections, providing insulation, varnishing re-assembly and testing etc. complete.	-do-	
(a)	230/300 mm sweep (any RPM)	-do-	
(b)	380/450 mm sweep (any RPM)	-do-	
(c)	610 mm sweep (any RPM)	-do-	
(v)	Full stator re-winding of an table/pedestal fan (condenser type) of any sweep including cleaning insulating the stator slots, slee-	-do-	

Serial No.	Description	Unit	Through Rate (Rs.)
(a)	1440 RPM complete - vining soldering wrapping of cotton tape varnishing re-assembly and testing etc.	Each	80.00
(vi)	Replacement of single stator coil of table pedestal fan (condenser type) of 1440 RPM of any seep including connections provid- ing insulation, varnishing, re-assembly and testing etc. complete.	-do-	21.00
(vii)(a)	Replacement of ball bearing of a ceiling fan including greasing, re-assembly and test- ing etc.	-do-	46.00
(b)	Replacement of a bush bearing of any fan including turning, oiling, re-assembly & testing etc.	-do-	16.00
(c)	Replacement of thrust bearing (small size) of any fan including oiling, greasing re-assem- bling and testing etc.	-do-	37.00
(d)	Replacement of thrust bearing (large size) of any fan including oiling, greasing, re- assembly and testing etc.	Each	50.00
(viii)	Providing and fixing locking/split pins in ceiling fan of any size including drilling of holes reassembly and testing etc.	-do-	3.40
(ix)	Replacement of blades shank of suitable size of a ceiling fan with screws, nuts spring washers etc. as required.	-do-	7.00
(x)	Replacement of hanger shake with nuts and bolts and split pins for a ceiling fan of any size.	-do-	10.00
(xi)	Replacement of rubber reel.	-do-	2.80
(xii)	Replacement of a fan-socket for a ceiling fan including drilling of holes for split pin etc.	-do-	20.00
(xiii)	Replacement of a fan condenser complete with connections and testing etc.	-do-	21.50
(a)	2 to 2.5 mfd.	-do-	24.50
(b)	3 mfd	-do-	29.50
(c)	4 mfd	-do-	42.00
(d)	6 mfd	-do-	52.00
(e)	8 mfd	-do-	1.60
(xiv)	Replacement of speed regulator knob.	-do-	10.50
(xv)	Replacement of speed regulator rotary switch without knob including connec- tions and testing etc.	-do-	8.80
(xvi)	Replacement of speed regulator resistance coils including connections etc.	-do-	6.70
(xvii)	Replacement of speed regulators china plate complete with nuts and screws etc.	-do-	6.70
(i)	Miscellaneous. Supply of M.S. pipe (B-Class) for suspen-		

Serial No.	Description	Unit	Through	Rate (Rs.)
	tion rod of ceiling fan including threading if required.			
(a)	15 mm dia	Metre	24.90	
(b)	20 mm dia	-do-	33.20	
(ii)	Supply and erection of girder clamp for ceiling fan including painting (upto 15 cm section)	Each	29.30	
(iii)	Supply and erection of caution notice plate in three languages.	Job.	2.00	
(iv)	Supply and erection of shock restoration chart in glass frame.	-do-	37.50	
(v)	Providing and fixing 12 mm dia meter fan hook 80 cm long of required shape and size	Each.	37.50	Payable as per Item No.18,18 of chapter No. 18
(vi)	Supply and erection of 15 amp, 250 volts switch in 75 mm x 75 mm x 60 mm deep M.S. box including cost of bakelite sheet.	-do-	29.00	
(vii)	Supply and erection of 75mm x 75mm x 60 mm deep M.S. box for telephone and inter-communication system including 2 pin 5 amp socket including cost of bakelite sheet.	Each	18.00	
(viii)	Supply and erection of suitable mild steel rod 10mm dia suspension hook for fan with 75mm x 12.5mm thick and 45 cm long iron plate including covering the same with cement concrete mixture 1:3:6.	-do-	48.00	
(ix)	Supply and erection of aluminium lugs heavy duty including crimping etc. upto the entire satisfaction of the Engineer-in-charge of the work.	-do-		
(u)	1.5 Sqmm to 2.5 Sqmm	-do-	0.60	
(b)	4 Sqmm to 6 Sqmm	-do-	0.80	
(c)	10 Sqmm	-do-	1.10	
(d)	16 Sqmm	-do-	1.60	
(e)	25 Sqmm	-do-	1.80	
(f)	35 Sqmm	-do-	2.50	
(g)	50 Sqmm	-do-	2.60	
(h)	70 Sqmm	-do-	5.10	
(i)	95 Sqmm	-do-	5.60	
(j)	120 Sqmm	-do-	7.90	
(k)	150 Sqmm	-do-	8.40	
(l)	185 Sqmm	-do-	11.20	
(m)	240 Sqmm	-do-	18.50	
(n)	300 Sqmm	-do-	24.50	
(o)	400 Sqmm	-do-	35.20	
(x)	Providing ferrule over the wires for distribution complete with all labour and material required to complete the job.			

Serial No.	Description	Unit	Through Rate (Rs.)
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-do-	(a) 1.5 Sqmm to 2.5 Sqmm	-do-	0.05
-do-	(b) 4 Sqmm to 10 Sqmm	-do-	0.10
-do-	(c) 16 Sqmm	-do-	0.20
-do-	(d) 25 Sqmm	-do-	0.25
-do-	(e) 35 Sqmm	-do-	0.30
(xi)	Supply and erection of cable route marker made of 50 cm long 10 mm dia M.S. Rod welded/revilted at the top with 10 cm dia 5 mm thick G.I. plate inscribed with 'cable' word on it, having a cross arm 30 cm long of the same dia welded at the bottom, in existing trench 45 cm below ground level.	-do-	17.00
(xii)	Dismantling old wiring points (not recessed) including necessary repairs to wall etc.	-do-	2.80
-do-	(a) Light, fan or call bell Point	-do-	1.60
-do-	(b) Wall socket point	-do-	1.60

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WORKING CHARGES OF MACHINERY

CHAPTER NO. 32

NOTES :

- (i) These rates are applicable to Departmental works only.
- (ii) The rates of hire charges of machinery include the cost of working of road machinery including running charges i.e. cost of fuel, lubricant, stores, washout, servicing, periodical maintenance and establishment charges and other charges like depreciation, interest and garage charges etc.
- (iii) These rates are for estimating/analysing purposes only and not for hiring private machinery from the market for which competitive tenders/quotations shall be called and approval of the competent authority is obtained.

Serial No.	Description	Unit	Rate (Rs.)	Remarks
32.1	Excavators			
	(i) Shovel 3/4 Cyd.	Hour	194.00	
	(ii) L & T Pochain			
32.2	Loaders			
	(i) Front-end-loader			
	(ii) Wheel dozer (Tiger)			
	(iii) Bull Dozers			
32.3	(i) Crawler D 50 A/15			
	(ii) Cable dozer			
	(iii) Motor Grader			
32.4	Mobile crane 8 tonne			
32.5	Bitumen Laying Machinery			
32.6	Hotmix plant 6/10 Tonne			
32.7	Hotmix plant 20/30 Tonne			
32.8	Paver Finisher			
	-do-		60.00 per tonne	
	-do-		175.00 or	
	-do-		1500.00 or	
	-do-		156.00	
(C)	Carrage and Transport Machinery			
32.9	Tata Dumper	Km.	4.20	
32.10	Water lorry	Hour	55.40	
32.11	Truck	Km	3.50	
32.12	Tractor	Hour	36.15	
	(a) Escort-37			
	(b) Escort-335			
(D)	Road and Building Construction Machinery			
32.13	Road Roller			
32.14	Concrete mixer			
32.15	Tractor Trolley			
32.16	Water tanker			
32.17	Vibrator			
32.18	Sheep Foot Roller			
32.19	(a) Pumping set 5 H.P.			
	(b) Pumping set 3 H.P.			
32.20	Tair boiler capacity 250 litres			
	-do-		3.00	(without fuel & pay of operator)
	-do-		12.95	
	-do-		14.20	
	-do-		1.15	
	-do-		15.80	
	-do-		5.50	
	-do-		4.10	
	-do-		17.55	running charges)
	-do-		46.25	(This includes Rs. 12/- per hour as running charges)

CHAPTER NO. 33
HORTICULTURE

NOTE: (1) Fard-yard manure and sludge measured in stacks will be reduced by 8% for payment.

Serial No.	Description	Unit	Labour Rate	Through Rate(Rs.)
33.1	Supply at site of work well-decayed farm-yard manure, from any available source; approved by the Engineer-in-charge including screening and stacking.	cu m	--	61.60
33.2	Supplying at site of work-Decayed Neem-Cake duly packed in used gunny bags.	quintal	--	121.00
33.3	Supplying at site of work sludge duly stacked at site.	cu m	--	87.90
33.4	Trenching in all kinds of soil upto a depth of 60 cm including removal and stacking of serviceable materials and then disposing of by spreading and neatly leveling with in a lead of 50 metres and making up the trenched area to proper levels by filling with earth or manure before and after flooding trench with manure (excluding cost of imported earth and sludge or farm-yard manure)	100 sq m	2.75	--
33.5	Rough dressing the trenched ground including breaking clods.	100 sq m	5.10	--
33.6	Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation.	-do-	17.00	--
33.7	Fine dressing the ground	-do-	12.90	--
33.8	Spreading of sludge, farm-yard manure or good earth in required thickness (Cost of sludge, farm-yard manure or good earth to be paid for separately).	cu m	1.85	--
33.9	Mixing earth and sludge or farm yard manure in proportion specified or as directed.	-do-	1.30	--
33.10	Grassing with 'Doob' grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for moving including supplying good earth if needed-	(i) In rows 15 cm apart in either direction. (ii) In rows 7.5 cm apart in either direction.	19.30	40.20
33.11	Uprooting rank vegetation and weeds by digging the area to a depth of 60 cm removing all weeds and other growth with roots by forking repeatedly, breaking clods, rough dressing, flooding with water, uprooting fresh growths after 10 to 15 days and then	100 sq m	19.30	40.20

Serial No.	Description	Unit	Labour Rate.	Through Rate(Rs.)
33.12	Line dressing for planting new grass, including disposal of all rubbish with all leads and lifts.	100 sq m		216.30
33.13	Filling mixture of earth and sledge or farm-yard manure in the desired proportion in trenches, flooding with water and leveling (cost of supplying earth and sledge or farm-yard manure and mixing does not include in this rate).	cu m		0.65
33.14	Turning slopes of old banks, with rough grassing including preparation of ground, supplying and planting doob grass roots, at 15 cm apart, supplying and spreading farm-yard manure at the rate of 0.18 cu m per 100 sq m.	100 sq m		55.20
33.15	Making lawns including ploughing and dressing with swags, breaking of clods, removal of rubbish, dressing and supplying doob grass roots, and planting at 15 cm apart, including supplying and spreading of farm-yard manure at the rate of 0.18 cu m per 100 sq m and loosening soil with kassi.	100 sq m		68.60
33.16	Maintenance of lawns or turning of slopes (rough grassing), for a period of one year including watering etc.	-do-		63.25
33.17	Turning lawns with fine grassing including ploughing, dressing including breaking of clods, removal of rubbish, dressing and supplying doob grass roots at 10 cm apart including supplying and spreading of farm-yard manure at the rate of 0.60 cu m per 100 sq m.	-do-		119.10
33.18	Maintenance of lawns with fine grassing for the first year including watering etc.	-do-		155.85
33.19	Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep refilling the excavated earth, mixed with farm-yard manure, supplied at the rate of 4.65 cu m per 100 metres and supplying and planting hedge plants at 30 cm apart.	100 metres		2278.35
33.20	Maintaining the hedges for the first two years including watering, etc. complete.	-do-		1031.00
33.21	Digging holes in all kinds of soil, and refilling the same, with the excavated earth, mixed with well decayed farm-yard manure (cost of well decayed farm-yard manure to be paid separately).	Each		16.80
	(i) hole 1.2 metre dia and 1.2 metre deep.			
	(ii) hole 0.60 metre dia and 0.60 metre deep.	-do-		2.40

Serial No. Description Unit Labour Rate Through Rate(Rs.)

33.22	Renovating lawns including, weeding, chisel- ing the grass, forking the ground, top dress- ing with forked soil, watering and maintain- ing the lawns, for 30 days or more, till the grass forms a thick lawn, free from weeds, and fit for moving and disposal of rubbish, as directed, including supplying good earth, if needed, but excluding the cost of well decayed farm-yard manure.	100 sq m	119.20	
33.23	Half-brick circular tree guard, in 2nd class bricks, internal dia 1.25 metres, and height 1.2 metres, above ground and 0.20 metre below ground bottom two courses laid dry and top three courses in cement mortar 1:6 (1 cement, 6 sand) and the intermediate courses being in dry honey comb masonry as per design complete.	Each	15.80	135.50
33.24	Edging with 2nd class bricks, laid dry leng- thwise, including excavation, refilling con- solidating with hand packing, and spreading neatly surplus earth, within a lead of 50 metre	Metre	0.70	3.15
33.25	Providing and fixing M.S. flat iron tree guard 60 cm dia and 2 m high above ground level formed of 4 Nos. 25x6mm and 8Nos 25 x 3mm vertical M.S. flat, revealed/welded to 3 Nos. 25x6mm M.S. flats iron rings in two halves, bolted together with 8mm dia and 30mm long bolts complete in all res- pects (including welding rods) or any design of tree guard specified.	Quintal	147.70	1040.35
33.26	Making tree guard 53cm dia and 1.5m high as per design from empty bitumen drums (supplied by the department) at stock issue rate) including providing and fixing 2 nos. M.S. sheet piling 50x0.5mm with reveals, complete in all respects.	Each	7.10	35.00
33.27	Making tree guard, 53cm dia and 2m high as per design from empty bitumen drums (supplied by the department at stock issue rate) including providing and fixing four legs 40cm long of 30x3mm M.S. flat revealed to tree guard and providing and fixing 2 nos. M.S. sheet rings 50x0.5mm with reveals complete in all respects.	-do-	12.75	68.85

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CHAPTER NO. 34

BEARINGS FOR BRIDGES

Serial No.	Description	Unit	Through Rate(Rs.)
34.1	P & F sliding plate bearing of two Nos. M.S. Plate approximate thickness 12mm to 25mm, below girders plain or curved surface with hard lead sheet or phosphore bronze plate of approximately 2x6mm thick in between including 2 Nos. M.S. rods or bolts welded to plates for spans from 8m to 15m complete in all respects as per design and specifications.		500.00
34.2	P & F bearing with base and top plate (plain or curved) with M.S. dowel rods for anchoring 6mm hard lead sheet or phosphore bronze plate in between, thickness of plates to be 12mm to 20mm complete in all respects for spans from 8m to 10m as per design and specifications.	10 Kg.	500.00
34.3	P & F Roller sliding bearing with top and base M.S. plates and M.S. Rollers full or segmental as per design complete in all respects for span upto 30 m.	-do-	500.00
34.4	Deduct for any part if provided of cast iron instead of mild steel on item (1,2,3)	-do-	550.00
34.5	Add extra if any part is provided of cast steel instead of mild steel on item (1,2,3).	-do-	50.00
34.6	Add extra for R.C.C. bearing over normal R.C.C. rates in the Schedule.	-do-	200.00
34.7	Neoprene or equivalent rubberised bearing made to design.	--	50%
34.8	Grease boxes (full) for bearings.	cu cm	0.25
34.9	Providing paper bearing of reinforced bitumen laminated craft 140 G.S.M. paper conforming to IS. 1398.	Each	1200.00
34.10	Supplying and fixing in position M.S. Precision machined finger type expansion joint conforming to detailed drawings.	sq m	50.00
34.11	Supplying & fixing in position plate type bearings angle & plate type expansion joint & other structural members requiring precision machined members with good workmanship complete in all respects as per approved drawing.	10 Kg.	150.00
		-do-	130.00

Note:- The rates given in this chapter are for the purpose of estimating only and not for letting out works on these rates.

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LIST OF AMENDMENT IN PREMIUM ISSUED IN
HARYANA SCHEDULE OF RATES FROM APRIL 1991 TO AUGUST 2007

(11) Amendment inscribed in the premium of HSR vide Hr. Govt. Gazette Notification No. SE/PWD B&R/Ambala/CZC/1690 dated 15-4-1991 applicable from 15-4-1991.

Sr. No.	Chapter No.	Description	Premium Fixed
1.	Chapter No. 1	Daily wages	
2.	Chapter No. 2	Monthly Wages	Nil
3.	Chapter No. 3	Materials	Nil
4.	Chapter No. 4	Loading and unloading :	
		(i) Item No. 4.1 and 4.2	35 per cent above
		(ii) Item No. 4.5, 4.9, 4.10(b) 4.13 and 4.20 to 4.24	35 per cent above
		(iii) All other items except 4.1, 4.2, 4.5, 4.9, 4.11(b) 4.13 and 4.20 to 4.24.	20 per cent above
5.	Chapter No. 5	Cartage :	
		(i) Item No. 5.1 and 5.3 to 5.11	10 per cent above
		(ii) Item No. 5.2	As per separate sheet attached (see Annexure I)
6.	Chapter No. 6	Earth Work.	
		(i) Item No. 6.2(g) (iv) and (v)	5 per cent above
		(ii) 35 per cent above	(i) 35 per cent above
		(iii) If any work is done departmentally the premium may be fixed as per merits.	(ii) If any work is done
7.	Chapter No. 7	Rock Cutting	35 per cent above
8.	Chapter No. 8	Demolition	35 per cent above
9.	Chapter No. 9	Centring and Shuttering	I Through rate : 20 per cent above II Labour rate : 45 per cent above.

Sr. No.	Chapter No.	Description	Premium Fixed
10.	Chapter No. 10	Concrete	I Through rate : 40 per cent above II Labour rate : 35 per cent above
11.	Chapter No. 11	Brick Work.	I Through rate : 70 per cent above II Labour rate : 50 per cent above
12.	Chapter No. 12	Stone Masonry.	I Through rate : 40 per cent above II Labour rate : 50 per cent above
13.	Chapter No. 13	Hoisting and Roofing.	I Through rate : 70 per cent above II Labour rate : 50 per cent above (i) Item No. 13.11, 13.13 and 13.14 (ii) Item No. 13.43 to 13.49
14.	Chapter No. 14	Flooring and Dado	I Through rate : 70 per cent above II Labour rate : 50 per cent above (iii) All other items except 13.11, 13.13, 13.14, and 13.43 to 13.49
15.	Chapter No. 15	Plastering and Pointing	I Through rate : 35 per cent above II Labour rate : 45 per cent above
16.	Chapter No. 16	Painting, Varnishing, White Washing and Distemping	I Through rate : 50 per cent above II Labour rate : 50 per cent above
17.	Chapter No. 17	Wood Work.	I Through rate : At par II Labour rate : 45 per cent above

Sr. No.	Chapter No.	Description	Premium Fixed
18.	Chapter No. 18	Steel and Iron work (i) For the items of steel where steel is to be supplied by the Department on Stock issue rate. (ii) For remaining items of structural steel and others	I Through rate : 45 per cent above. II Labour rate : 40 per cent above.
19.	Chapter No. 19	Lining (i) Item No. 19.7, 19.8, 19.24 and 19.26 (iii) Item No. 19.9, 19.25, 19.27 and 19.28	I Through rate : 70 per cent above. II Labour rate : 40 per cent above.
20	Chapter No. 20	Outlets	I Through rate : 40 per cent above. II Labour rate : 35 per cent above.
21	Chapter No. 21	Pile foundations	40 per cent above
22.	Chapter No. 22	Well Sinking	40 per cent above
23.	Chapter No. 23	River and Canal Protection work	30 per cent above.
24.	Chapter No. 24	Road work	45 per cent above.
25.	Chapter No. 25	Maintenance of Furniture.	I Through rate :
26.	Chapter No. 26	Miscellaneous	20 per cent above.
27.	Chapter No. 27	Quantities of Materials	Nil
28.	Chapter No. 28	Water Supply.	45 per cent above.
29.	Chapter No. 29	For Plains :	125 per cent above.
		(i) Item No. 28.50(a) only	25 per cent above.
		(ii) Item No. 28.50(b) to (e)	At par
		(iii) All other items except item No. 28.50 (a to e)	10 per cent above.
		(b) For hilly areas higher than 460 metres above mean sea level	10 per cent above.

Sr. No.	Chapter No.	Description	Premium Fixed
29.	Chapter No. 29	Sewerage and Drainage	
		(i) Item No. 29.1, 29.2 and 29.25 to 29.51	At par.
		(ii) Item No. 29.52 to 29.56	I Through rate : 40 per cent above II Labour rate :
		(iii) All other items except item No. 29.1, 29.2 and 29.25 to 29.56	I Through rate : 70 per cent above II Labour rate : 50 per cent above.
30.	Chapter No. 30	Sanitary Installations.	
		(a) Item No. 30.84 to 30.86, 30.88 to 30.91, 30.114(b) and (d)	50 per cent above.
		(b) Item No. 30.87, 30.92, to 30.94	100 per cent above.
		(c) All other items except No. 30.84 to 30.94 and 30.114 (b) and (d).	25 per cent above.
31.	Chapter No. 31.	Electric Installation.	
		(i) Item No. 31.12(a) Main switches category (A) type.	45 per cent above.
		(ii) Item Nos. 31.12(b) (main switches and BDB's category B and C only) 31.8 to 31.11, 31.21, 31.23 and 31.24	35 per cent above
		(iii) Item No. 31.12 (c) and (d), 31.15 to 31.17	20 per cent above.
		(iv) Item No. 31.13, 31.14, 31.30 & 31.33	30 per cent above.
		(v) Item No. 31.18,	At par
		(vi) Item No. 31.25 to 31.29	20 per cent above.
		(vii) Item No. 31.34	30 per cent above.
		(viii) All other items except 31.8 to 31.17, 31.18, 31.21, 31.23 to 31.30 and 31.34.	40 per cent above.
32.	Chapter No. 32	Working charges of Machinery.	Nil
33.	Chapter No. 33	Horticulture	At Par
34.	Chapter No. 34	Beaming of bridges	--

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STOCK ISSUE RATE

(a) Cement :- @ Rs. 90 per bag of 50 Kg, including cost of empty cement bag plus 3% storage charges.

(i) Tor Steel @ Rs. 11,000 per Tonne plus 3% storage charges.

(ii) Mild Steel @ Rs. 10,700 per Tonne plus 3% storage charges.

Note :- 1 The above premia where not specifically mentioned as such shall also be applicable for work in hilly areas higher than 460 metres above mean sea level.

2. The labour rates are only operative if the estimate comprising of material, carriage and labour involved in the work are worked out separately and the estimate is got technically sanctioned from the competent authority before letting out the work on labour rates.

3. The output norms of labour for each item of work as contained in the statement issued by the department/HSR 1988 will have to be achieved while getting the work done on labour rates departmentally.

4. The above premia of labour rates fixed are subject to the following savings for departmental works as the case may be :-

(i) 21.5% on account of contractors profit and over head charges on labour wages.

(ii) Rs. 90/- per day provided for running charges of road rollers, if not considered while comparing progress of work done by labour.

(iii) Hire charges of mechanical mixer if not actually paid to the mechanical wing.

(iv) Cost of sundries, water, tar boiler, scaffolding etc. not taken into account while comparing the cost of muster rolls.

(v) Rs. 7 per cum of concrete provided as hire and running charges of vibrator if not considered while comparing progress of work done by labour.

(vi) Rs. 7 per cum of concrete provided as hire and running charges of mixer if not considered while comparing progress of work done by labour.

ANNEXURE - I

CHAPTER NO. 5

Carriage (Item No. 5.2)

Serial No.	Lead upto	Premium Fixed.
1.	1 Km.	40 per cent above.
2.	2 Kms	37 per cent above.
3.	3 Kms	34 per cent above.
4.	4 Kms	32 per cent above.
5.	5 Kms	30 per cent above.
6.	6 Kms	30 per cent above.
7.	7 Kms	30 per cent above.
8.	8 Kms	30 per cent above.
9.	9 Kms	30 per cent above.
10.	10 Kms	30 per cent above.
11.	11 Kms	30 per cent above.
12.	12 Kms	30 per cent above.
13.	13 Kms	30 per cent above.
14.	14 Kms	30 per cent above.

Serial No.	Lead upto	Description	Premium Fixed.
15.	15 Kms		30 per cent above.
16.	16 Kms		29 per cent above.
17.	17 Kms		28 per cent above.
18.	18 Kms		27 per cent above.
19.	19 Kms		26 per cent above.
20.	20 and above Kms.		25 per cent above.
(2)		Amendment inserted in the HSR vide Hr. Govt. Gazette Notification No. SE/PWD B&R/Ambala/CZC/1705 dated 13-11-1991 applicable from 13-11-1991.	
Sr. No.	Chapter No.	Description	Premium Fixed
1.	Chapter No. 1	Daily wages	
		(a) The rate to be paid as per minimum wages fixed by the labour Department, Haryana Government from time to time where minimum wages are not fixed, D.C's rates will be applicable.	
		(b) The daily wages of skilled labour of item No. 1 to 6 are fixed as under :-	
		(1) White washing and colour washing man.	Rs. 40.00 per day.
		(2) Mason/Plasterer Class-I	Rs 70.00 per day.
		(3) Mason Class-II and stone dresser	Rs. 60.00 per day
		(4) Carpenter Class-I.	Rs. 75.00 per day
		(5) Carpenter Class-II	Rs. 60.00 per day
		(6) Painter and Paper Hanger Class-I.	Rs. 65.00 per day
2.	Chapter No. 2	Monthly Wages	
3.	Chapter No. 3	Materials	Nil
4.	Chapter No. 4	Loading and unloading :	Nil
		(i) Item No. 4.1 and 4.2	60 per cent above
		(ii) Item No. 4.5, 4.9, 4.10(b) 4.13 and 4.20 to 4.24	60 per cent above.
		(iii) All other items except 4.1, 4.2, 4.5 4.9, 4.10(b) 4.13 and 4.20 to 4.24.	50 per cent above.
5.	Chapter No. 5	Cartage :	
		(i) Item No. 5.1 and 5.3 to 5.11	15 per cent above
		(ii) Item No. 5.2	As per separate sheet attached (see Annexure I)
6.	Chapter No. 6	Earth Work.	
		(i) Item No. 6.2(g) (iv) and (v)	15 per cent above
		(ii) Item No. 6.1 and 6.2, 6.3, 6.5 and 6.6 except item No. 6.2(g)(iv) and (v)	(i) 60 per cent above (ii) If any work is done departmentally the premium may be fixed as per merits.

35 per cent above.

I Through rate :
40 per cent above
II Labour rate :

(!!!!) Item No. 14, 48, 14, 49, 14, 52,
14, 55, 14, 56, 14, 59 to 14, 62 & 14, 66

I Through rate :
70 per cent above
II Labour rate :

(!!!) All items except 14, 19 to 14, 24
14, 48, 14, 49, 14, 52, 14, 55
14, 56, 14, 59 to 14, 62 & 14, 66

I Through rate :
90 per cent above
II Labour rate :

(!!) Item No. 14, 19 to 14, 24

I Through rate :
60 per cent above
II Labour rate :

(!!!!) All other items except 13, 11,
13, 13, 13, 14, and 13, 43 to 13, 49

I Through rate :
70 per cent above
II Labour rate :

(!!!) Item No. 13, 43 to 13, 49

I Through rate :
90 per cent above
II Labour rate :

(!) Item No. 13, 11, 13, 13 and 13, 14

I Through rate :
50 per cent above
II Labour rate :

Stone Masonry.

I Through rate :
90 per cent above
II Labour rate :

Brick Work.

I Through rate :
70 per cent above
II Labour rate :

Concrete

I Through rate :
45 per cent above
II Labour rate :

Centring and Shuttering

I Through rate :
60 per cent above

Demolition

I Through rate :
55 per cent above

(iv) All other items except item No.
6, 1, 6, 2, 6, 3, 6, 4, 6, 5 and 6, 6

All par

Premium Fixed

Description

Sr. Chapter No.

No.

Chapter No. 7

Chapter No. 8

Chapter No. 9

Chapter No. 10

Chapter No. 11

Chapter No. 12

Chapter No. 13

Chapter No. 14

Flooring and Dado

Sr. Chapter No.	Description	Premium Fixed
15	Chapter No. 15 Plastering and Pointing	I Through rate : 65 per cent above II Labour rate : 70 per cent above
16	Chapter No. 16 Painting, Varnishing, White Washing and Dis-tempering	I Through rate : 70 per cent above II Labour rate : 70 per cent above
17	Chapter No. 17 Wood Work	I Through rate : 45 per cent above II Labour rate : 70 per cent above
18	Chapter No. 18 Steel and Iron work	(i) For the items of steel where steel is to be supplied by the Department on Stock issue rate, 45 per cent above II Labour rate : 45 per cent above I Through rate : 50 per cent above (ii) For remaining items of structural steel and others I Through rate : 60 per cent above II Labour rate : 50 per cent above
19	Chapter No. 19 Lining	(i) Item No. 19.7, 19.8, 19.24 and 19.26 19.26 II Labour rate : 90 per cent above I Through rate : 90 per cent above (iii) All other items except item Nos. 19.7, 19.8, 19.24 and 19.26 I Through rate : 70 per cent above II Labour rate : 70 per cent above
20	Chapter No. 20 Outlets	I Through rate : 70 per cent above II Labour rate : 60 per cent above

The members of Central Zonal Committee felt that there is generally problem for procure-ment of paint etc. to justify proceeding as such, the restriction for doing the work on labour rate only as per Note No. 1 Chapter 16 is required to be decided. The committee recommends accordingly.

After detailed discussion the Direction Committee arrived at a consensus decision that the system allowed in Note No. 1 of Chapter No. 16 "Painting, Varnishing, White Washing and Dis-tempering" of H.S.R. 1988 should continue.

While deciding the premium on Chapter No. 19 "Lining" of Haryana P.W.D. Schedule of Rates, 1988 the Engineer-in-Chief, P.H. pointed out that item of double brick lining is being got done in his department but rates and the specifications of the same do not find place in the revised schedule and specifications issued recently. It was decided that complete data/analysis will be sup-plied by Public Health Branch to the B & R Branch for incorporating the rates and specifications of the items of Brick Lining in the schedule and specification by issuing A & C slips as required.

Sr. Chapter No. Description
 Premium Fixed

21	Chapter No. 21	Pile foundations	70 per cent above
22	Chapter No. 22	Well Sinking	70 per cent above
23	Chapter No. 23	River and Canal Protection work	50 per cent above on litrough & labour rate
24	Chapter No. 24	Road work	60 per cent above.
25	Chapter No. 25	Maintenance of Furniture.	I Through rate : 55 per cent above II Labour rate : 65 per cent above.
26	Chapter No. 26	Miscellaneous	30 per cent above.
27	Chapter No. 27	Quantities of Materials	Nil
28	Chapter No. 28	Water Supply.	
29	Chapter No. 29	Sewerage and Drainage.	(a) For Plains : (i) Item No. 28.50(a) only (ii) Item No. 28.50(b) to (e) (iii) All other items except item No. 28.50 (a to e) (b) For hilly areas higher than 460 metres above mean sea level (i) Item No. 29.1, 29.2 and 29.25 to 29.51 (ii) Item No. 29.52 to 29.56 (iii) All other items except item No. 29.1, 29.2 and 29.25 to 29.56 I Through rate : 70 per cent above II Labour rate : 60 per cent above.
30	Chapter No. 30	Sanitary Installations.	(a) Item No. 30.84 to 30.86, 30.88 to 30.91, 30.114(b) and (d) (b) Item No. 30.87, 30.92, to 30.94 (c) All other items except No. 30.84 to 30.94 and 30.114 (b) and (d). 70 per cent above. 100 per cent above. 40 per cent above.
31	Chapter No. 31	Electric Installation.	(i) Item No. 31.12(a) Main switches category (A) type. (ii) Item Nos. 31.12(a) & (b) (main switches and BD's category B and C only) 31.8 to 31.11, 31.21, 31.23 & 31.24 40 per cent above (iii) Item Nos. 31.12(a) & (b) (main switches category (A) type). 45 per cent above.

Note:- The rate of pig lead and spun yarn has been taken @ Rs. 45/- per kg. and Rs. 15/- per kg. respectively.

- (ii) Rs. 104.00 per day provided for running charges of road rollers, if not considered while comparing progress of work done by labour.
- (i) 21.5% on account of contractors profit and overhead charges on labour wages.

4. The above premia of labour rates fixed are subject to the following savings for departmental works as the case may be :-
 done on labour rates departmentally.

3. The output norms of labour for each item of work as contained in the statement issued by the department/HSR 1988 will have to be achieved while getting the work done on labour rates departmentally.

2. The labour rates are only operative if the estimate comprising of material, carriage and labour, involved in the work are worked out separately and the estimate is got technically sanctioned from the competent authority before letting out the work on labour rates.

Note :- 1. The above premia where not specifically mentioned as such shall also be applicable for work in hilly areas higher than 460 metres above mean sea level.

(a) Cement :- @ Rs. 90 per bag of 50 kg. including cost of empty cement bag plus 3% storage charges.

(b) Steel :- (i) Tor Steel @ Rs. 11,000 per Tonne plus 3% storage charges.
 (ii) Mild Steel @ Rs. 10,700 per Tonne plus 3% storage charges.

STOCK ISSUE RATES

(ii) The nomenclature of item No.34.7 of HSR 1988 was decided to be modified as proposed in the agenda of meeting. It was also decided to incorporate this change in A & C slip No. 2 to be issued to Hariana P.W.D. Schedule of Rates 1988 as shown now in the attached A & C slip.

Note:- (i) The Premium for item No.(i) and (ii) above is subject to verification of rates at the time of actual preparation of estimate. Difference in rates to be considered in the estimates.

Sr. No.	Chapter No.	Description	Premium Fixed
32	Chapter No. 32	Working charges of Machinery.	Nil
33	Chapter No. 33	Horticulture	40 per cent above.
34	Chapter No. 34	Bearing of bridges	40 per cent above.
		Item No. 34.7 (Providing and fixing Neoprene rubberised bearing)	60 per cent above.
		Item No. 34.10 and 34.11	30 per cent above
		(iii) All other items except item No. 34.7, 34.10 and 34.11	At par.
		(iii) Item No. 31.12 (c) and (d), 31.15 to 31.17	30 per cent above.
		(iv) Item No. 31.13, 31.14, 31.30 and 31.33	40 per cent above.
		(v) Item No. 31.18 (xxx1)	45 per cent above
		(vi) Item No. 31.25 to 31.29, 31.34	30 per cent above.
		(vii) All other items except 31.8 to 31.17, 31.18 (xxx1), 31.21, 31.23 to 31.30, 31.33 and 31.34.	40 per cent above.

(a) The rate to be paid as per minimum wages fixed by the labour Department, Haryana Government from time to time where minimum wages are not fixed, D.C's rates will be applicable.

(b) The daily wages of skilled labour of item No. 1 to 6 are fixed as under :-

Sr. No.	Chapter No.	Description	Premium Fixed
1.	Chapter No. 1	Daily wages	

(3) Amendment inserted in the HSR vide Hr. Govt. Gazette Notification No. SE/PWD B&R/Ambala/CZC/1726 dated 4-2-1993 applicable from 4-2-1993.

Serial No.	Lead upto	Premium Fixed.
1.	1 Km.	40 per cent above.
2.	2 Kms	37 per cent above.
3.	3 Kms	34 per cent above.
4.	4 Kms	32 per cent above.
5.	5 Kms	30 per cent above.
6.	6 Kms	30 per cent above.
7.	7 Kms	30 per cent above.
8.	8 Kms	30 per cent above.
9.	9 Kms	30 per cent above.
10.	10 Kms	30 per cent above.
11.	11 Kms	30 per cent above.
12.	12 Kms	30 per cent above.
13.	13 Kms	30 per cent above.
14.	14 Kms	30 per cent above.
15.	15 Kms	30 per cent above.
16.	16 Kms	29 per cent above.
17.	17 Kms	28 per cent above.
18.	18 Kms	27 per cent above.
19.	19 Kms	26 per cent above.
20.	20 Kms and above	25 per cent above.

CHAPTER NO. 5
ANNEXURE - I
Carriage (Item No. 5.2)

- (iii) Hire charges of mechanical mixer if not actually paid to the mechanical wing.
- (iv) Cost of sundries, water, tar boiler, scaffolding etc. not to be taken into account while comparing the cost of moulder rolls.
- (v) Rs. 7 per cum of concrete provided as hire and running charges of vibrator if not considered while comparing progress of work done by labour.
- (vi) Rs. 7 per cum of concrete provided as hire and running charges of mixer if not considered while comparing progress of work done by labour.

Sr. No.	Chapter No.	Description	Premium Fixed
		(1) White washing and colour washing man.	Rs.40.00 per day.
		(2) Mason/Plasterer Class-I	Rs.70.00 per day.
		(3) Mason Class-II and stone dresser	Rs.60.00 per day
		(4) Carpenter Class-I.	Rs.75.00 per day
		(5) Carpenter Class-II	Rs.60.00 per day
		(6) Painter and Paper Hanger Class-I.	Rs.65.00 per day
2.	Chapter No. 2	Monthly Wages	Nil
3.	Chapter No. 3	Materials	Nil
4.	Chapter No. 4	Loading and unloading :	
		(i) Item No. 4.1 and 4.2	75 per cent above
		(ii) Item No.4.5,4.9, 4.10(b) 4.13 and 4.20 to 4.24	75 per cent above.
		(iii) All other items except 4.1, 4.2, 4.5 4.9, 4.10 (b), 4.13 and 4.20 to 4.24.	65 per cent above.
5.	Chapter No. 5	Cartage :	
		(i) Item No. 5.1 and 5.3 to 5.11	20 per cent above
		(ii) Item No. 5.2	As per separate sheet attached (See Annexure I)
6.	Chapter No. 6	Earth Work.	
		(i) Item No.6.2(g),(iv) and (v)	20 per cent above
		(ii) Item No.6.1 and 6.2, 6.3, 6.5 and 6.6 except item No. 6.2(g)(iv) and (v)	80 per cent above.
		(iii) Item No. 6.4	At par
		(iv) All other items except item No. 6.1, 6.2, 6.3, 6.4, 6.5 and 6.6	75 per cent above.
7.	Chapter No. 7	Rock Cutting	75 per cent above
8.	Chapter No. 8	Demolition	75 per cent above
9.	Chapter No. 9	Centring and Shuttering	I Through rate : 55 per cent above II Labour rate :
10.	Chapter No. 10	Concrete	I Through rate : 85 per cent above II Labour rate : 75 per cent above.
11.	Chapter No. 11	Brick Work	I Through rate : 100 per cent above II Labour rate : 90 per cent above.

Premium Fixed Chapter No. Description

Sr. No.	Chapter No.	Description
12.	Chapter No. 12	Stone Masonry.
13.	Chapter No. 13	Floisting and Roofing. - (i) Item No. 13.11, 13.13 and 13.14 (ii) Item No. 13.43 to 13.49 (iii) All other items except 13.11, 13.13, 13.14, and 13.43 to 13.49
14.	Chapter No. 14	Flooring and Dados (i) Item No. 14.19 to 14.24 (ii) All items except 14.19 to 14.24, 14.48, 14.49, 14.52, 14.55, 14.56, 14.59 to 14.62 & 14.66 (iii) Item No. 14.48, 14.49, 14.52, 14.55, 14.56, 14.59 to 14.62 & 14.66 (iiii) Item No. 14.48, 14.49, 14.52, 14.55, 14.56, 14.59 to 14.62 & 14.66
15	Chapter No. 15	Plastering and Pointing
16.	Chapter No. 16	Painting, Varnishing, White Washing and Distemping
17.	Chapter No. 17	Wood Work.
18.	Chapter No. 18	Steel and Iron work (i) For the items of steel where steel is to be supplied by the Department on Stock issue rate.

I Through rate : 55 per cent above
II Labour rate : 60 per cent above.

I Through rate : 45 per cent above
II Labour rate : 70 per cent above.

I Through rate : 80 per cent above
II Labour rate : 80 per cent above.

I Through rate : 80 per cent above
II Labour rate : 80 per cent above.

I Through rate : 45 per cent above
II Labour rate : 40 per cent above.

I Through rate : 85 per cent above
II Labour rate : 75 per cent above.

I Through rate : 100 per cent above
II Labour rate : 90 per cent above.

I Through rate : 85 per cent above
II Labour rate : 50 per cent above.

I Through rate : 100 per cent above
II Labour rate : 90 per cent above.

I Through rate : 60 per cent above
II Labour rate : 80 per cent above.

Sr. No.	Chapter No.	Description	Premium Fixed
		(ii) For remaining items of structural steel and others	I Through rate : 70 per cent above II Labour rate :
19.	Chapter No. 19	Lining (i) Item No. 19.7, 19.8, 19.24 and 19.26 19.26	I Through rate : 100 per cent above II Labour rate : 90 per cent above
		(iii) All other items except item Nos. 19.7, 19.8, 19.24 and 19.26	I Through rate : 85 per cent above II Labour rate : 75 per cent above
20	Chapter No. 20	Outlets	I Through rate : 85 per cent above II Labour rate : 75 per cent above
21	Chapter No. 21	Pile foundations	70 per cent above
22.	Chapter No. 22	Well Sinking	70 per cent above
23.	Chapter No. 23	River and Canal Protection Work.	
		(i) Item No. 23.39 only.	100 per cent above.
		(ii) All other items except item No. 23.39	65 per cent above on labour rate.
24.	Chapter No. 24	Road work	75 per cent above.
25.	Chapter No. 25	Maintenance of Furniture.	I Through rate : 70 per cent above II Labour rate : 80 per cent above.
26.	Chapter No. 26	Miscellaneous	35 per cent above.
27.	Chapter No. 27	Quantities of Materials	Nil
28.	Chapter No. 28	Water Supply.	
		(a) For Plains :	
		(i) Item No. 28.1 to 28.6	50 per cent above.
		(ii) Item No. 28.50(a) only	150 per cent above
		(iii) Item No. 28.50(b) to (e)	40 per cent above
		(iv) All other items except item No. 28.1 to 28.6 and item No. 28.50	30 per cent above.
29.	Chapter No. 29	Sewerage and Drainage.	
		(i) Item No. 29.1, 29.2 and 29.25 to 29.51	5 per cent above.
		(iii) Item No. 29.52 to 29.56	I Through rate : 85 per cent above

Sr. No.	Chapter No.	Description	Premium Fixed
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(!!!!) All other items except item No. 29.1, 29.2 and 29.25, 29.56
 I-Through rate : 100 per cent above
 II Labour rate : 75 per cent above

II Labour rate : 90 per cent above

30. Chapter No. 30 Sanitary Installations.

- (a) Item No. 30.84 to 30.86, 30.88 to 30.91, 30.114(b) and (d) 85 per cent above.
- (b) Item No. 30.87, 30.92, to 30.94 110 per cent above.
- (c) All other items except No. 30.84 to 30.94 and 30.114 (b) and (d). 65 per cent above.

Note:- The rate Pig lead and spun yarn has been taken @ Rs. 45 per Kg. and Rs. 15 per Kg. respectively.

31. Chapter No. 31. Electric Installation.

- (i) Item No. 31.12(a) Main switches category (A) type. 65 per cent above.
- (ii) Item Nos. 31.12(a) & (b) (main switches & BDB's category B and C only) 31.8 to 31.11, 31.21, 31.23 and 31.24
- (iii) Item No. 31.12 (c) and (d). 31.15 to 31.16 60 per cent above
- (iv) Item No. 31.13, 31.14, 31.30 and 31.33 60 per cent above.
- (v) Item No. 31.18(xxxi) 45 per cent above.
- (vi) Item No. 31.25 to 31.29 50 per cent above.
- (vii) Item No. 31.17 and 31.34 30 per cent above.
- (viii) All other items except 31.8 to 31.17, 31.18(xxxi), 31.21, 31.23 to 31.30, 31.33 and 31.34. 60 per cent above.

32. Chapter No. 32 Working charges of Machinery. Nil

33. Chapter No. 33 Horticulture. 50 per cent above.

34. Chapter No. 34 Bearings of bridges. 60 per cent above.

- (i) Item No. 34.7 (Providing and fixing Neoprene rubberised bearing) 60 per cent above.
- (ii) Item No. 34.10 and 34.11 30 per cent above.
- (iii) All other items except item No. 34.7, 34.10 and 34.11 All par.

STOCK ISSUE RATES

(a) Cement :- (i) Rs. 95 per bag of 50 kg. including cost of empty cement bag plus 3% storage charges.

(ii) Tor Steel @ Rs. 11,000 per Tonne plus 3% storage charges.

(iii) Mild Steel @ Rs. 10,700 per Tonne plus 3% storage charges.

Note :- 1. The above premia where not specifically mentioned as such shall also be applicable for work in hilly areas higher than 460 metres above mean sea level.

2. The labour rates are only operative if the estimate comprising of material, carriage and labour involved in the work are worked out separately and the estimate is got technically sanctioned from the competent authority before letting out the work on labour rates.

3. The output norms of labour for each item of work as contained in the statement issued by the department/H/SR 1988 will have to be achieved while getting the work done on labour rates departmentally.

4. The above premia of labour rates fixed are subject to the following savings for departmental works as the case may be :-

(i) 21.5% on account of contractor's profit and overhead charges on labour wages.

(ii) Rs. 104.00 per day provided for running charges of road rollers, if not considered while comparing progress of work done by labour.

(iii) Hire charges of mechanical mixer if not actually paid to the mechanical wing.

(iv) Cost of sundries, water, tar boiler, scaffolding etc. not to be taken into account while comparing the cost of mixer rolls.

(v) Rs. 7.00 per cum of concrete provided as hire and running charges of vibrator if not considered while comparing progress of work done by labour.

(vi) Rs. 7.00 per cum of concrete provided as hire and running charges of mixer if not considered while comparing progress of work done by labour.

Serial No.	Lead upto	Premium Fixed.
1.	1 Km.	48 per cent above.
2.	2 Kms	46 per cent above.
3.	3 Kms	44 per cent above.
4.	4 Kms	42 per cent above.
5.	5 Kms	40 per cent above.
6.	6 Kms	39 per cent above.
7.	7 Kms	38 per cent above.
8.	8 Kms	37 per cent above.
9.	9 Kms	36 per cent above.
10.	10 Kms	35 per cent above.
11.	11 Kms	35 per cent above.
12.	12 Kms	34 per cent above.
13.	13 Kms	34 per cent above.

Carriage (Item No. 5.2)

ANNEXURE - I
CHAPTER NO. 5

Amendment in the premium of HSR vide Notification No. SE/PWD/B&R/Ambala
CZC/1741 dated 21.9.1993.

Serial No.	Length upto	Premium Fixed.
14.	14 Kms	33 per cent above.
15.	15 Kms	33 per cent above.
16.	16 Kms	33 per cent above.
17.	17 Kms	32 per cent above.
18.	18 Kms	31 per cent above.
19.	19 Kms	31 per cent above.
20.	20 Kms	30 per cent above.
21.	21 Kms	30 per cent above.
22.	22 Kms	29 per cent above.
23.	23 Kms	29 per cent above.
24.	24 Kms & above.	28 per cent above.

Chapter No.	Description	Rate Fixed
1.	Daily wages	(a) The rate to be paid as per minimum wages fixed by the labour Department, Haryana Government from time to time where minimum wages are not fixed, D.C's rates will be applicable. (b) The daily wages of skilled labour of item No. 1 to 7 are fixed as under :-
(1)	White washing and colour washing man.	Rs.50.00 per day.
(2)	Mason/Plasterer Class-I	Rs. 85.00 per day.
(3)	Mason Class-II and stone dresser	Rs. 75.00 per day
(4)	Carpenter Class-I.	Rs. 90.00 per day
(5)	Carpenter Class-II	Rs. 75.00 per day
(6)	Painter and Paper Hanger Class-I	Rs. 80.00 per day
(7)	Painter and paper Hanger II Class.	Rs. 60.00 per day

2.	Monthly Wages	Nil
3.	Materials	Nil
4.	Loading and Unloading.	95% above.
5.	Carrage :	(i) Item No.4.5, 4.9, 4.10 (b), 4.13 and 4.20 to 4.24 (iii) All other items except 4.1, 4.2, 4.5, 4.9, 4.10 (b), 4.13 and 4.20 to 4.24. (ii) Item No. 5.1 and 5.3 to 5.11 (iii) Item No. 5.2 (i) Item No.6.2(E) (iv) and (v)
6.	Earth Work.	25% above As per separate sheet attached

Chapter No.	Description	Rate Fixed
7.	Rock Cutting	85% above
8.	Demolition	85% above
Chapter No.	Description	Rate Fixed
(ii)	Item No. 6.1 and 6.2, 6.3, 6.5 and 6.6 except item No. 6.2(g)(iv) and (v)	95% above.
(iii)	Item No. 6.4	At par
(iv)	All other items except item No. 6.1, 6.2, 6.3, 6.5 and 6.6	85% above.
9.	Centring and Shuttering	85% above
10.	Concrete	85% above
11.	Brick work	100% above
12.	Stone Masonry	90% above
13.	Hoisting and Roofing:-	65% above
(i)	Item No. 13.11, 13.13 and 13.14	100% above
(ii)	Item No. 13.43 to 13.49	60% above
(iii)	All other items except items 13.11, 13.13, 13.14 and 13.43 to 13.49	90% above
14.	Flooring & Dados :-	75% above
(i)	Item No. 14.19 to 14.24	100% above
(ii)	Item No. 14.48, 14.49, 14.52, 14.55, 14.56, 14.59 to 14.62 and 14.66	45% above
(iii)	All other items except 14.19 to 14.24, 14.48, 14.49, 14.52, 14.55, 14.56, 14.59 to 14.62 and 14.66	85% above
15.	Plastering and Pointing	85% above
16.	Painting, Varnishing, White Washing and Distemping	90% above
17.	Wood Work.	80% above
18.	Steel and Iron work	45% above
(i)	For the items of steel where steel is to be supplied by the Department on Stock issue rate.	70% above
(ii)	For remaining items of structural steel and others.	70% above
19.	Lining	70% above
(i)	Item No. 19.7, 19.8, 19.24, 19.26	100% above
(ii)	All other items except item Nos. 19.7, 19.8, 19.24 and 19.26	85% above
20.	Outlets	90% above
21.	Pile Foundations	90% above
22.	Well Sinking	70% above

Chapter No.	Description	Premium Fixed	Labour rate	Through rate
23.	River and Canal Protection Work.	125% above	70% above	70% above
	(i) Item No. 23.39 only.			
	(iii) All other items except item No. 23.39			
24.	Road work-	90% above		
	(i) Item No. 24.23 only			
	(ii) All other items except item No. 24.23			
25.	Maintenance of Furniture.	90% above		
26.	Miscellaneous	75% above		
27.	Quantities of Materials	40% above		
28.	Water Supply - For Plains-	60% above		
	(i) Item No. 28.1 to 28.6			
	(ii) Item No. 28.50 (a) only			
	(iii) Item No. 28.50 (b) to (e)			
	(iv) All other items except item Nos. 28.1 to 28.6, 28.50 (a) to (e)			
29	Sewerage and Drainage.	5% above.		
	(i) Item No. 29.1, 29.2 and 29.25 to 29.51			
	(ii) Item No. 29.52 to 29.56			
	(iii) All other items, except item No. 29.1, 29.2 and 29.25 to 29.56			
30.	Sanitary Installations.	90% above		
	(i) Item No. 30.84 to 30.86, 30.88 to 30.91, 30.114(b) and (d)			
	(ii) Item No. 30.87, 30.92, to 30.94			
	(iii) All other items except No. 30.84 to 30.94 and 30.114 (b) and (d).			
31.	Electric Installation.	80% above.		
	(i) Item No. 31.12(a) Main switches category (A) type.			
	(ii) Item Nos. 31.12(a) (b) (main switches and BDB's category B and C only) 31.8 to 31.11, 31.21, 31.23 and 31.24			
	(iii) Item No. 31.12 (c) and (d), 31.15 to 31.16			
	(iv) Item No. 31.13, 31.14, 31.30 & 31.33			
	(v) Item No. 31.18(XXXI)			
	(vi) Item No. 31.25 to 31.29			
	(vii) Item No. 31.17			
	(viii) Item No. 31.34			
	(ix) All other items except 31.8 to 31.17, 31.18(XXXI), 31.21, 31.23 to 31.30, 31.33 and 31.34.			

Chapter No.	Description	Premium Fixed	Labour rate	Through rate
32.	Working charges of Machinery.			
33.	Horticulture			
34.	Bearing of bridges			
	(i) Item No. 34.7 (Providing and fixing Neoprene rubberised bearing)	60% above.		
	(ii) Item No. 34.10 and 34.11	60% above.		
	(iii) All other items except item No. 34.7, 34.10 and 34.11	30% above		
			At par.	

STOCK ISSUE RATES

- (a) Cement :- @ Rs. 95 per bag of 50 kg. including cost of empty cement bag plus 3% storage charges.
- (b) Steel :- (i) Tor Steel @ Rs. 12,000 per Tonne plus 3% storage charges.
- (ii) Mild Steel @ Rs. 10,700 per Tonne plus 3% storage charges.

CHAPTER NO. 5

Carriage (Item No. 5.2)

Serial No.	Lead upto	Premium Fixed.
1.	1 Km.	63%
2.	2 Kms	62%
3.	3 Kms	61%
4.	4 Kms	60%
5.	5 Kms	59%
6.	6 Kms	58%
7.	7 Kms	57%
8.	8 Kms	56%
9.	9 Kms	55%
10.	10 Kms	54%
11.	11 Kms	53%
12.	12 Kms	52%
13.	13 Kms	51%
14.	14 Kms	50%
15.	15 Kms	49%
16.	16 Kms	48%
17.	17 Kms	47%
18.	18 Kms	46%
19.	19 Kms	45%
20.	20 Kms	44%
21.	21 Kms	43%
22.	22 Kms	42%
23.	23 Kms	41%
24.	24 Kms	40%

Amendment in the premium of HSR vide Notification No. SE/PWD/B&R/Ambala
CZC/1748 dated 10-7-1995 applicable from 10-7-1995

Serial No.	Lead upto	Premium Fixed.
25	25 kms	39%
26	26 kms	38%
27	27 kms	38%
28	28 kms and above.	38%

Chapter No. Description

1. Daily wages (a) The rate to be paid as per minimum wages fixed by the labour Department Haryana Government from time to time where minimum wages are not fixed, D.C.'s rates will be applicable.

(b) The daily wages of skilled labour of item No. 1 to 7 are fixed as under :-

(1) White washing and colour washing man. Rs.50.00 per day.

(2) Mason/Plasterer Class-I Rs.85.00 per day.

(3) Mason Class-II and stone dresser Rs.75.00 per day.

(4) Carpenter Class-I Rs.90.00 per day.

(5) Carpenter Class-II Rs.75.00 per day.

(6) Painter and Paper Hanger Class-I Rs.80.00 per day.

(7) Painter and paper Hanger Class-II. Rs.60.00

Nil

Nil

2. Monthly Wages

3. Materials

4. Loading and Unloading.

(i) Item No. 4.1 and 4.2, 4.5, 4.9, 4.10(b), 4.13, 4.20 to 4.24 & 4.25(a) All other items except 4.1, 4.2, 4.5, 4.9, 4.10 (b) 4.13 and 4.20 to 4.24 and 4.25 (a) (iii)

(i) Item No. 5.1 and 5.3 to 5.11 (i)

(ii) Item No. 5.2 (ii)

5. Cartage :

(i) Item No. 6.2(g) (iv) and (v) and 6.6 except item No. 6.2(g)(iv) and (v) (ii)

(iii) Item No. 6.4 (iii)

(iv) All other items except item No. 6.1, 6.2, 6.3, 6.4, 6.5 and 6.6 (iv)

(v) Item No. 6.15 (a) and (b) 100% above

6. Earth Work.

(i) Item No. 6.2(g) (iv) and (v) 25% above

(ii) Item No. 6.1 and 6.2, 6.3, 6.5 and 6.6 except item No. 6.2(g)(iv) and (v) 110% above.

(iii) Item No. 6.4 200% above

(iv) All other items except item No. 6.1, 6.2, 6.3, 6.4, 6.5 and 6.6 100% above

(v) Item No. 6.15 (a) and (b) 100% above 95% above

7. Rock Cutting

Chapter No.	Description	Premium Fixed	Labour rate	Through rate
8.	Demolition		95% above	
9.	Centring and Shuttering		90% above	
10.	Concrete		90% above	
11.	Brick work		90% above	
12.	Stone Masonry		100% above	
13.	Floisting and Roofing:-		90% above	65% above
	(i) Item No. 13.11, 13.13 and 13.14		100% above	
	(ii) Item No. 13.43 to 13.49		60% above	
	(iii) All other items except items 13.11, 13.13, 13.14 and 13.43 to 13.49		90% above	
14.	Flooring & Dados :-		90% above	75% above
	(i) Item No. 14.19 to 14.24		100% above	
	(ii) Item No. 14.48, 14.49, 14.52, 14.55		100% above	
	(iii) All other items except 14.19 to 14.24, 14.48, 14.49, 14.52, 14.55, 14.56, 14.59 to 14.62 and 14.66		45% above	
15.	Plastering and Pointing		90% above	90% above
16.	Painting, Varnishing, White Washing and Distemping		95% above	90% above
17.	Wood Work.		95% above	85% above
18.	Steel and Iron work		90% above	60% above
	(i) For the items of steel where steel is to be supplied by the Department on Stock issue rate.		75% above	
	(ii) For remaining items of structural steel and others.		75% above	
19.	Lining		75% above	80% above
	(i) Item No. 19.7, 19.8, 19.24, 19.26 and 19.29		100% above	
	(ii) All other items except item Nos. 19.7, 19.8, 19.24, 19.26 and 19.29		90% above	
20.	Chimneys		90% above	90% above
21.	Pile foundations		90% above	90% above
22.	Well Sinking		Nil	70% above
23.	River and Canal Protection Work.		70% above	
	(i) Item No. 23.39 only.		130% above	
	(ii) All other items except item No. 23.39		75% above	
	(iii) (except item No. 23.39)		75% above	
24.	Road work-		105% above	23.40 to 23.47
	(for item Nos. 24.34 to 24.36 and 24.38 only)		105% above	

Chapter Description
 Premium Fixed
 Labour rate
 Through rate

25. Maintenance of Furniture. Nil
 50% above
 90% above
 75% above

26. Miscellaneous Nil
 27. Quantities of Materials Nil
 28. Water Supply - Nil

29. Sewerage and Drainage. For Plains:-
 (i) Item No. 28.1 to 28.6
 (ii) Item No. 28.50 (a) only
 (iii) All other items except item Nos. 28.1 to 28.6, 28.50 (a)
 60% above
 225% above
 45% above
 5% above.
 90% above
 100% above

30. Sanitary Installations.
 (i) Item No. 30.84 to 30.86, 30.88 to 30.91, 30.114(b) and (d)
 (ii) Item No. 30.87, 30.92, to 30.94
 (iii) All other items except No. 30.84 to 30.94 and 30.114 (b) and (d).
 90% above
 115% above
 70% above

31. Electric Installation.
 (i) Item No. 31.12(a) Main switches category (A) type.
 (ii) Item Nos. 31.12(a) & (b) (main switches and B.D.'s category B and C only) 31.8 to 31.11, 31.21, 31.23 and 31.24
 (iii) Item No. 31.12 (c) and (d), 31.15 to 31.16
 (iv) Item No. 31.13, 31.14, 31.30, 31.33
 (v) Item No. 31.18(XXXI)
 (vi) Item No. 31.25 to 31.29
 (vii) Item No. 31.17
 (viii) Item No. 31.34
 (viiii) All other items except 31.8 to 31.17, 31.18(XXXI), 31.21, 31.23 to 31.30, 31.33 and 31.34.
 80% above.
 80% above
 50% above
 80% above
 45% above
 60% above
 30% above
 60% above
 80% above

32. Working charges of Machinery. Nil
 70% above
 80% above

33. Horticulture. Nil
 70% above

34. Bearing of bridges	(i) Item No. 34.7 (Providing and fixing Neoprene rubberised bearing)	Nil	60% above
	(ii) Item No. 34.10 and 34.11	Nil	30% above
	(iii) All other items except item No. 34.7, 34.10 and 34.11	Nil	At par.

STOCK ISSUE RATES

- (a) Cement :- @ Rs. 100 per bag of 50 Kg. including cost of empty cement bag plus 3% storage charges.
- (b) Steel :-
 - (i) Tor Steel @ Rs. 14,000 per Tonne plus 3% storage charges.
 - (ii) Mild Steel @ Rs. 13,500 per Tonne plus 3% storage charges.

CHAPTER NO. 5

Carriage (Item No. 5.2)

Serial No. Lead upto Premium Fixed.

1.	1 Km.	87%
2.	2 Kms	86%
3.	3 Kms	85%
4.	4 Kms	84%
5.	5 Kms	83%
6.	6 Kms	82%
7.	7 Kms	81%
8.	8 Kms	79%
9.	9 Kms	78%
10.	10 Kms	77%
11.	11 Kms	76%
12.	12 Kms	75%
13.	13 Kms	74%
14.	14 Kms	73%
15.	15 Kms	71%
16.	16 Kms	70%
17.	17 Kms	69%
18.	18 Kms	68%
19.	19 Kms	67%
20.	20 Kms	66%
21.	21 Kms	64%
22.	22 Kms	63%
23.	23 Kms	62%
24.	24 Kms	61%
25.	25 Kms	60%
26.	26 Kms	59%
27.	27 Kms	59%
28.	28 Kms and above.	59%

(6) Corrigendum of Notification No. SE/PWD B&R/AMBALA/CZC/1748 dated 10-7-1995 issued vide Notification No. SE/PWD B&R AMBALA/CZC/1749 dated 3-8-1995.

No SE/PWD B&R/Ambala/C.Z.C/1749 - The following corrections may kindly be carried out in the Notification No. SE/PWD B&R/Ambala/CZC/1748, dated 10th July, 1995 published in Haryana Government Gazette on 25th July, 1995 at pages 1289 to 1294 regarding minutes of the meeting of the Central Zonal Committee on Haryana PWD Schedule of Rates, 1988-2nd Edition held on 23rd January, 1995 at Ambala Cantt. and approved by the Direction Committee of Chief Engineers received, vide Engineer-in-Chief, Haryana, PWD, B&R Br., letter No. 554-576/SR, dated 4th July, 1995.

Page No. of Notification	Sr. No.	Chapter No.	Name of Col.	Ref to the error/omission	Correct.
1291	15	15	Description	3rd word	Painting
1291	22	22	Premium	fixed	Labour Through rate 70%
1292	23	23	Premium	fixed	(except item No. 23.39)
1292	28	28	Premium	fixed	Labour Through rate 60%
1292	(i)				22.5%
1292	(ii)				45%
1292	(iii)				5%
1292	29 (i)	29	Ditto		Labour Through rate
1293	32		Ditto		NIL
1293			Stock issue	(h) Cement	@ Rs. 100.00 per 100.00 paa.

(7) Amendment in premium of HSR issued vide Haryana Government Gazette Notification No. SE/PWD/B&R/Ambala/CZC/1751 dated 30-9-1996 applicable from 30-9-1996.

Chapter No.	Description	Premium Fixed	Labour rate	Through rate
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1. Daily wages
 (a) The rate to be paid as per minimum wages fixed by the labour Department Haryana Government from time to time where minimum wages are not fixed, D.C's rates will be applicable.

Chapter No.	Description	Premium Fixed	Labour rate Through rate
(b)	The daily wages of skilled labour of item No. 1 to 7 are fixed as under:-		
(1)	White washing and colour washing man	Rs. 60.00 per day.	
(2)	Mason/Plasterer Class-I	Rs. 100.00 per day.	
(3)	Mason Class-II and stone dresser	Rs. 90.00 per day.	
(4)	Carpenter Class-I	Rs. 105.00 per day.	
(5)	Carpenter Class-II	Rs. 90.00 per day.	
(6)	Painter and Paper Hanger Class-I.	Rs. 95.00 per day.	
(7)	Painter and paper Hanger Class-II.	Rs. 75.00 per day.	
2.	Monthly Wages		
3.	Materials	Nil	
4.	Loading and Unloading		
(i)	Item No. 4.1, 4.2, 4.5, 4.9, 4.10 (b), 4.13, 4.20 to 4.24 and 4.25 (a)	150% above	
(ii)	All other items except 4.1, 4.2, 4.5, 4.9, 4.10 (b), 4.13 and 4.20 to 4.24 and 4.25 (a)	140% above.	
5.	Carriage:		
(i)	Item No. 5.1 and 5.3 to 5.11	50% above	
(ii)	Item No. 5.2	As per separate sheet attached	
6.	Earth Work:		
(i)	Item No. 6.2(g) (iv) and (v)	35% above	
(ii)	Item No. 6.1 and 6.2, 6.3, 6.5 and 6.6 except item No. 6.2(g)(iv) and (v)	150% above.	
(iii)	Item No. 6.4	400% above	
(iv)	All other items except item No. 6.1, 6.2, 6.3, 6.4, 6.5 and 6.6, 6.15 (a) and (b)	145% above	
(v)	Item No. 6.15 (a) and (b)	170% above	
7.	Rock Cutting	140% above	
8.	Demolition	140% above.	
9.	Centering and Shuttering	125% above	
10.	Concrete	100% above	
11.	Brick work	125% above	
12.	Stone Masonry	135% above	
13.	Hoisting and Roofing:-	125% above	
(i)	Item No. 13.11, 13.13 and 13.14	135% above	
(ii)	Item No. 13.43 to 13.49	60% above	

Chapter No.	Description	Premium Fixed	Labour rate	Through rate
For Plains:-				
29	(i) Item No. 28.1 to 28.6	80% above		
	(ii) Item No. 28.50 (a) only	275% above		
	(iii) All other items except item Nos. 28.1 to 28.6, 28.50 (a)	60% above		
	(iv) Item No. 29.1, 29.2 and 29.25 to 29.51	5% above		
30	(i) Item No. 29.52 to 29.56	120% above		
	(ii) All other items except item No. 29.1, 29.2 and 29.25 to 29.56	135% above		
	(iii) Item No. 30.84 to 30.86, 30.88 to 30.91, 30.114(b) and (d)	105% above		
	(iv) Item No. 30.87, 30.92, to 30.94	130% above		
31	(i) Item No. 31.12(a) Main switches category (A) type.	80% above		
	(ii) Item Nos. 31.12(a)& (b) (main switches and B.D.B's category B and C only) 31.8 to 31.11, 31.21, 31.23 and 31.24			
	(iii) Item No. 31.12 (c) and (d), 31.15 to 31.16			
	(iv) Item No. 31.13, 31.14, 31.30, and 31.33			
	(v) Item No. 31.18(XXXI)			
	(vi) Item No. 31.25 to 31.29			
	(vii) Item No. 31.17			
	(viii) Item No. 31.34			
	(ix) All other items except 31.8 to 31.17, 31.18(XXXI), 31.21, 31.23 to 31.30, 31.33 and 31.34	80% above.		
	(x) Item No. 31.8 (except item No. 31.8 to 31.20, 31.22 to 31.35)	80% above		
32	Working charges of Machinery.			
33	Horticulture			
34	Bearing of bridges			
	(i) Item No. 34.7 (Providing and fixing Neoprene rubberised bearing)	60% above		
	(ii) Item No. 34.10 and 34.11	30% above		
	(iii) All other items except item No. 34.7, 34.10 and 34.11			
	At par			

STOCK ISSUE RATES

- (a) Cement :- @ Rs. 129 per bag of 50 Kg. including cost of empty cement bag plus 3% storage charges.
- (b) Steel :- (i) Tor Steel @ Rs. 15,750 per Tonne plus 3% storage charges.
 (ii) Mild Steel @ Rs. 15,250 per Tonne plus 3% storage charges.

CHAPTER NO. 5

Carriage (Item No. 5.2)

Serial No.	Lead upto	Premium Fixed.
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1.	1 Km.	92%
2.	2 Kms	91%
3.	3 Kms	90%
4.	4 Kms	89%
5.	5 Kms	88%
6.	6 Kms	87%
7.	7 Kms	86%
8.	8 Kms	84%
9.	9 Kms	83%
10.	10 Kms	82%
11.	11 Kms	81%
12.	12 Kms	80%
13.	13 Kms	
14.	14 Kms	
15.	15 Kms	
16.	16 Kms	
17.	17 Kms	74%
18.	18 Kms	73%
19.	19 Kms	72%
20.	20 Kms	71%
21.	21 Kms	
22.	22 Kms	
23.	23 Kms	
24.	24 Kms	66%
25.	25 Kms	65%
26.	26 Kms	64%
27.	27 Kms	
28.	28 Kms and above.	

(8) Amendment in the premium of HSR vide Haryana Government Notification No. SE/PWD/B&R/Ambala/CZC/1752 dated 16-9-1997 applicable from 16-9-1997.

Chapter No. Description Premium Fixed Labour rate Through rate

1. Daily wages

(a) The rate to be paid as per minimum wages fixed by the labour Department Haryana Government from time to time where minimum wages are not fixed, D.C's rates will be applicable.

Chapter No.	Description	Premium Fixed	Labour rate	Through rate
(b)	The daily wages of skilled labour of item No. 1 to 7 are fixed as under:-			
(1)	White washing and colour washing man.	Rs. 60.00 per day.		
(2)	Mason/Plasterer Class-I	Rs. 100.00 per day.		
(3)	Mason Class-II and stone dresser	Rs. 90.00 per day.		
(4)	Carpenter Class-I	Rs. 105.00 per day.		
(5)	Carpenter Class-II	Rs. 90.00 per day.		
(6)	Painter and Paper Hanger Class-I.	Rs. 95.00 per day.		
(7)	Painter and paper Hanger Class-II.	Rs. 75.00 per day.		
2.	Monthly Wages			
3.	Materials	Nil		
4.	Loading and Unloading	Nil		
(i)	Item No. 4.1, 4.2, 4.5, 4.9, 4.10 (b)	165% above		
(ii)	All other items except 4.1, 4.2, 4.5, 4.9, 4.10 (b), 4.13 and 4.20 to 4.24 and 4.25 (a)	155% above.		
5.	Carriage:			
(i)	Item No. 5.1 and 5.3 to 5.11	65% above		
(ii)	Item No. 5.2			
6.	Earth Work.			
(i)	Item No. 6.1 and 6.2, 6.3, 6.5, and 6.6 except item No. 6.2(g)(iv) and (v)	55% above		
(iii)	Item No. 6.4	150% above.		
(iv)	All other items except item No. 6.1, 6.2, 6.3, 6.4, 6.5 and 6.6, 6.15 (a) and (b)	500% above		
(v)	Item No. 6.15 (a) and (b)	145% above		
7.	Rock Cutting	140% above		
8.	Demolition	155% above.		
9.	Centring and Shuttering	145% above		
10.	Concrete	140% above		
11.	Brick work	145% above		
12.	Stone Masonry	145% above		
13.	Hoisting and Roofing:-	125% above		
(i)	Item No. 13.11, 13.13 and 13.14	145% above		
(ii)	Item No. 13.43 to 13.49	90% above		
(iii)	All other items except items 13.11, 13.13, 13.14 and 13.43 to 13.49	90% above		

Chapter No. Description Premium Fixed Through rate Labour rate

14. Flooring & Dado :-	(i) Item No. 14.19 to 14.24	145% above	145% above
	(ii) Item No. 14.48, 14.49, 14.52, 14.55, 14.56, 14.59 to 14.62 and 14.66	45% above	45% above
	(iii) All other items except 14.19 to 14.24, 14.48, 14.49, 14.52, 14.55, 14.56, 14.59 to 14.62 and 14.66	140% above	140% above
15. Plastering and Pointing		140% above	140% above
16. Painting, Varnishing, White Washing and Distemping		95% above	85% above
17. Wood Work.		135% above	125% above
18. Steel and Iron work	(i) For the items of steel where steel is to be supplied by the Department on Stock issue rate.	105% above	100% above
	(ii) For remaining items of structural steel and others.	105% above	110% above
19. Lining	(i) Item No. 19.7, 19.8, 19.24, 19.26 and 19.29	145% above	145% above
	(ii) All other items except item Nos. 19.7, 19.8, 19.24, 19.26 and 19.29	140% above	140% above
20. Outlets		140% above	140% above
21. Pile foundations		Nil	70% above
22. Well Sinking		70% above	70% above
23. River and Canal Protection Work.	(i) Item No. 23.39 only.	150% above	Nil
	(ii) All other items except item No. 23.39 (except item No. 23.9)	105% above	105% above
	(iii) 23.10 to 23.37, 23.40 to 23.47	23.10 to 23.37, 23.40 to 23.47	23.10 to 23.37, 23.40 to 23.47
24. Road work-		145% above	145% above
25. Maintenance of Furniture.		125% above	100% above
26. Miscellaneous		80% above	80% above
27. Quantities of Materials		Nil	Nil
28. Water Supply -		Nil	Nil

Note:- See corrigendum dated 3/8/95 for Chapter No. 23 page No. 356 of this book.

Chapter No.	Description	Premium Fixed	Labour rate	Through rate	
29	(i) Item No. 28.1 to 28.6	90% above			
	(ii) Item No. 28.50 (a) only	350% above			
	(iii) All other items except item Nos. 28.1 to 28.6, 28.50 (a)	70% above			
	Sewerage and Drainage.				
30	(i) Item No. 29.1, 29.2 and 29.25 to 29.51	10% above			
	(ii) Item No. 29.52 to 29.56	140% above			
	(iii) All other items except item No. 29.1, 29.2 and 29.25 to 29.56	150% above			
	Sanitary Installations.				
31	(i) Item No. 30.84 to 30.86, 30.88 to 30.91, 30.114(b) and (d)	105% above			
	(ii) Item No. 30.87, 30.92, to 30.94	135% above			
	(iii) All other items except No. 30.84 to 30.94 and 30.114 (b) and (d).	85% above			
	Electric Installation.				
31	(i) Item No. 31.12(a) Main switches category (A) type.	80% above			
	(ii) Item Nos. 31.12(a)&(b) (main switches and B.D.'s category B and C only) 31.8 to 31.11, 31.21, 31.23 and 31.24	80% above			
	(iii) Item No. 31.12 (c) and (d), 31.15 to 31.16	50% above			
	(iv) Item No. 31.13, 31.14, 31.30, and 31.33	80% above			
	(v) Item No. 31.18(XXXI)	45% above			
	(vi) Item No. 31.25 to 31.29	70% above			
	(vii) Item No. 31.17	30% above			
	(viii) Item No. 31.34	60% above			
	(viii) All other items except 31.8 to 31.17, 31.18(XXXI), 31.21, 31.23 to 31.30, 31.33 and 31.34	80% above			
	(except item No. 31.8 to 31.20, 31.22 to 31.35	80% above			
	Working charges of Machinery.				
	32	Horticulture			
	33	Bearing of bridges			
	34	(i) Item No. 34.7 (Providing and fixing Neoprene rubberised bearing)	60% above		
(ii) Item No. 34.10 and 34.11		30% above			
	(iii) All other items except item No. 34.7, 34.10 and 34.11	Nil			

STOCK ISSUE RATES

Cement :- @ Rs. 129 per bag of 50 kg. including cost of empty cement bag plus 3% storage charges.

- (b) Steel :-
- (i) Tor Steel @ Rs. 15,750 per Metric Tonne plus 3% storage charges.
- (ii) Mild Steel @ Rs. 15,250 per Metric Tonne plus 3% storage charges.

CHAPTER NO. 5
Carriage (Item No. 5.2)

Serial No.	Lead upto	Premium Fixed.
1.	1 Km.	116%
2.	2 Kms	115%
3.	3 Kms	114%
4.	4 Kms	113%
5.	5 Kms	112%
6.	6 Kms	111%
7.	7 Kms	110%
8.	8 Kms	108%
9.	9 Kms	107%
10.	10 Kms	106%
11.	11 Kms	105%
12.	12 Kms	104%
13.	13 Kms	103%
14.	14 Kms	102%
15.	15 Kms	100%
16.	16 Kms	99%
17.	17 Kms	98%
18.	18 Kms	97%
19.	19 Kms	96%
20.	20 Kms	95%
21.	21 Kms	93%
22.	22 Kms	92%
23.	23 Kms	91%
24.	24 Kms	90%
25.	25 Kms	89%
26.	26 Kms	88%
27.	27 Kms	88%
28.	28 Kms and above.	88%

(v) Amendment in the premium of HSR vide Haryana Govt. Gazette Notification No. SE/PWD/B&R/Ambala/CZC/1757 dated 17-12-1999 applicable from 1-1-2000.

Chapter No. Description Labour rate Through rate Premium Fixed

1. Daily wages

- (a) The rate to be paid as per minimum wages fixed by the labour Department Haryana Government from time to time where minimum wages are not fixed. D.C's rates will be applicable.
- (b) The daily wages of skilled labour of item No. 1 to 12 are fixed as under :-

Chapter No. Description Premium Fixed Labour rate Through rate

(1) White washing and colour washing man. Rs.85.00 per day.

(2) Mason/Plasterer Class-I Rs. 140.00 per day.

(3) Mason Class-II and stone dresser Rs. 120.00 per day.

(4) Carpenter Class-I Rs. 140.00 per day.

(5) Carpenter Class-II Rs. 120.00 per day.

(6) Painter and Paper Hanger Class-I. Rs. 130.00 per day.

(7) Painter and paper Hanger Class-II. Rs. 110.00 per day.

(8) Driver with licence of proper category Rs. 110 per day.

(9) Operator Heavy earth moving machine with licence of proper category. Rs. 190.00 per day.

(10) Equipment machanics with licence of proper category. Rs. 190.00 per day.

(11) Plumber (C-I). Rs. 140.00 per day.

(12) Plumber (C-II) Rs. 120.00 per day.

2. Monthly Wages

3. Materials

4. Loading and Unloading

(i) Item No. 4.1, 4.2, 4.5, 4.9, 4.10 (b), 4.13, 4.20 to 4.24 and 4.25 (a)

(ii) All other items except 4.1, 4.2, 4.5, 4.9, 4.10 (b), 4.13 and 4.20 to 4.24 and 4.25 (a)

200% above

5. Cartage :

(i) Item No. 5.1 and 5.3 to 5.11

90% above

(ii) Item No. 5.2

As per separate sheet attached

6. Earth Works

(i) Item No.6.2(g) (iv) and (v)

75% above

(ii) Item No.6.1 and 6.2, 6.3, 6.5 and 6.6 except item No. 6.2(g)(iv) and (v)

200% above

(iii) Item No. 6.4

500% above

(iv) All other items except item No. 6.1, 6.2, 6.3, 6.4, 6.5 and 6.6

6.15 (a) and (b)

170% above

(v) Item No. 6.15 (a) and (b)

145% above

7. Rock Cutting

190% above

8. Demolition

200% above

9. Centring and Shuttering

180% above

150% above

180% above

180% above

Chapter No. Description Premium Fixed Labour rate Through rate

12.	Stone Masonry	125% above	100% above
13.	Hoisting and Roofing:-		
	(i) Item No. 13.11, 13.13 and 13.14	180% above	180% above
	(ii) Item No. 13.43 to 13.49	70% above	100% above
	(iii) All other items except items 13.11, 13.13, 13.14 and 13.43 to 13.49.	100% above	85% above
14.	Flooring & Dados :-		
	(i) Item No. 14.19 to 14.24	180% above	180% above
	(ii) Item No. 14.48, 14.49, 14.52, 14.55, 14.56, 14.59 to 14.62 and 14.66	60% above	60% above
	(iii) Item No. 14.67 to 14.70	140% above	140% above
	(iv) All other items except 14.19 to 14.24, 14.48, 14.49, 14.52, 14.55, 14.56, 14.59 to 14.62 and 14.66 to 14.70	150% above	150% above
15.	Plastering and Pointing	160% above	160% above
16.	Painting, Varnishing, White Washing and Distemping	110% above	100% above
17.	Wood Work.	135% above	125% above
18.	Steel and Iron work		
	(i) For the items of steel where steel is to be supplied by the Department on Stock issue rate.	110% above	100% above
	(ii) For remaining items of structural steel and others.	110% above	110% above
19.	Lining		
	(i) Item No. 19.7, 19.8, 19.24, 19.26 and 19.29	180% above	180% above
	(iii) All other items except item Nos. 19.7, 19.8, 19.24, 19.26 and 19.29	150% above	150% above
20.	Outlets	160% above	160% above
21.	Pile foundations	Nil	70% above
22.	Well Sinking	Nil	70% above
23.	River and Canal Protection Work.	175% above	Nil
	(i) Item No. 23.39 only.	175% above	Nil
	(ii) All other items except item No. 23.39 (except item No. 23.9)	120% above	125% above
			(except item No. 23.1 to 23.8, 23.10 to 23.37, 23.40 to 23.47)

Note :- See corrigendum dated 3/8/95 for Chapter No. 23 page No. 356 of this book.

Chapter No.	Description	Premium Fixed	Labour rate	Through rate
24.	Road work-	165% above	165% above	(for item Nos. 24.34 to 24.36 and 24.38 only)
25.	Maintenance of Furniture.	140% above	115% above	
26.	Miscellaneous	95% above		
27.	Quantities of Materials			NII
28.	Water Supply - For Plains:-			
(i)	Item No. 28.1 to 28.6	120% above		
(ii)	Item No. 28.50 (a) only	430% above		
(iii)	All other items except item Nos. 28.1 to 28.6, 28.50 (a)	90% above		
29.	Sewerage and Drainage.			
(i)	Item No. 29.1, 29.2 and 29.25 to 29.51	20% above.		
(ii)	Item No. 29.52 to 29.56	150% above		
(iii)	All other items except item No. 29.1, 29.2 and 29.25 to 29.56	180% above		
30.	Sanitary Installations.			
(i)	Item No. 30.84 to 30.86, 30.88 to 30.91, 30.114(b) and (d)	125% above		
(ii)	Item No. 30.87, 30.92, to 30.94	150% above.		
(iii)	All other items except No. 30.84 to 30.94 and 30.114 (b) and (d).	100% above.		
31.	Electric Installation.			
(i)	Item No. 31.12(a) Main switches category (A) type.			
(ii)	Item Nos. 31.12(a)& (b) (main switches and B, D, B's category B and C only) 31.8 to 31.11, 31.21, 31.23 and 31.24			
(iii)	Item No. 31.12 (c) and (d), 31.15 to 31.16			
(iv)	Item No. 31.13, 31.14, 31.30, 31.33			
(v)	Item No. 31.18(XXXI)			
(vi)	Item No. 31.25 to 31.29			
(vii)	Item No. 31.17			
(viii)	Item No. 31.34			
(viii)	All other items except 31.8 to 31.17, 31.18(XXXI), 31.21, 31.23 to 31.30, 31.33 and 31.34.	80% above.		
	(except item No. 31.8 to 31.20, 31.22 to 31.35)			
	Working charges of Machinery.			NII

Chapter No.	Description	Premium Fixed	Labour rate	Through rate
33.	Horticulture	105% above		
34.	Bearing of bridges			
	(i) Item No. 34.7 (Providing and fixing Neoprene rubberised bearing)	Nil	60% above	
	(ii) Item No. 34.10 and 34.11	Nil	30% above	
	(iii) All other items except item No. 34.7, 34.10 and 34.11	Nil		At par.

STOCK ISSUE RATES :

- (a) Cement :- @ Rs. 129 per bag of 50 kg. including cost of empty cement bag plus 3% storage charges.
- (b) Steel :- (i) Tor Steel @ Rs. 15,750 per Metric Tonne plus 3% storage charges.
(ii) Mild Steel @ Rs. 15,250 per Metric Tonne plus 3% storage charges.

CHAPTER NO. 5
CARRIAGE (Item No. 5.2)

Serial No.	Lead upto	Premium Fixed
1.	1 Km.	116%
2.	2 Kms	115%
3.	3 Kms	114%
4.	4 Kms	113%
5.	5 Kms	112%
6.	6 Kms	111%
7.	7 Kms	110%
8.	8 Kms	108%
9.	9 Kms	107%
10.	10 Kms	106%
11.	11 Kms	105%
12.	12 Kms	104%
13.	13 Kms	103%
14.	14 Kms	102%
15.	15 Kms	100%
16.	16 Kms	99%
17.	17 Kms	98%
18.	18 Kms	97%
19.	19 Kms	96%
20.	20 Kms	95%
21.	21 Kms	93%
22.	22 Kms	92%
23.	23 Kms	91%
24.	24 Kms	90%
25.	25 Kms	89%

Serial No.	Lead upto	Premium Fixed.
26	26 Kms	88%
27	27 Kms	88%
28	28 Kms and above.	88%

(10) Amendment in the premium of HSR vide Haryana Govt. Gazette Notification No. SE/PV/D/B&R/Ambala/CZC/1764 dated 24-7-2003 applicable from 24-7-2003.

Chapter No.	Description	Premium Fixed
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1. (a) Daily wages
The rate to be paid as per minimum Act only in Case of items not covered minimum wages Act, respective rates to be applicable.

2. Monthly wages
No Rates fixed

3. Materials
Nil.

4. Loading and Unloading
(a) Item No. 4.1, 4.2, 4.5, 4.9, 4.10 (b) 4.13, 4.20 to 4.24 and 4.25 (a) 250% above
(b) All other items except 4.1, 4.2, 4.5, 4.9, 4.10 (b) 4.13 and 4.20 to 4.24 and 4.25(a) 210% above.

5. Carriage:
(a) Item No. 5.2 (By mechanical transport) as per separate sheet
(b) All items other than item 5.2 110% above

6. Earth Work.
(a) Item No. 6.1 to 6.6 except item No. 6.2(g)(iv), 6.2(g)(v) and 6.4 250% above
(b) Item No. 6.2(g)(iv), 6.2(g)(v)(compaction) 90% above
(c) Item No. 6.4 (earth compensation) 700% above
(d) Item No. 6.7 to 6.14 & 6.16 to 6.27 220% above
(e) Item No. 6.15 (a) and (b) 200% above
(Anti termite) 200% above

7. Rock Cutting 250% above
8. Demolition 250% above
9. Centring and Shuttering 175% above
10. Concrete 170% above
11. Brick work 200% above
12. Stone Masonry 120% above
13. Hoisting and Roulfing:- 140% above

(a) All item except No. 13.11, 13.13 and 13.14, 13.43 to 13.49 100% above
(b) Items 13.11, 13.13, 13.14 (Terracing) 200% above
200% above

Chapter No.	Description	Premium Fixed	Through rate	Labour rate	
14.	Flooring & Dado :- (a) All items except 14.19 to 14.24 & 14.48 to 14.70 (b) Item No. 14.19 to 14.24 (brick flooring) (c) Items No. 14.48 to 14.61 (Tile glazed/ stones other than Kolah) (d) Item No. 14.62 to 14.66 (Kolah Stones) (e) Item No. 14.67 to 14.70 (Wooden flooring)	160% above 200% above 80% above 100% above 200% above	160% above 200% above 80% above 100% above 200% above	120% above 200% above 80% above 100% above 200% above	120% above 200% above 80% above 100% above 200% above
15	Plastering and Pointing	180% above	180% above	200% above	200% above
16.	Painting, Varnishing, White Washing and Disemping	110% above	110% above	120% above	120% above
17.	Wood Work.	150% above	150% above	160% above	160% above
18.	Steel and Iron work	130% above	130% above	120% above	120% above
19.	Lining				
(a)	All items except item No. 19.7, 19.8, 19.24, 19.24, 19.26 and 19.29	170% above	170% above	170% above	170% above
(b)	Items Nos. 19.7, 19.8, 19.24, 19.26 and 19.29	200% above	200% above	200% above	200% above
20	Outlets				
21	Pile foundations				
22.	Well Sinking	85% above	85% above		
23.	River and Canal Protection Work.				
(a)	Item No. 23.39 only. (Dumping Stone)	225% above	225% above		
(b)	Labour rate of items except item No. 23.39				
(c)	Through rate of all items except item No. 23.1 to 23.8, 23.10 to 23.37 & 23.39 to 23.47	150%	150%		
24.	Road work-				
(a)	Labour rate of all items. Through rate of item No. 24.34 to 24.36 & 24.38				
(b)	Through rate of item No. 24.34 to 24.36 & 24.38	180% above	180% above		
25.	Maintenance of Furniture.	125% above	125% above	150% above	150% above
26.	Miscellaneous				
27.	Quantities of Materials				No rate involved
28.	Water Supply - For Plains:-				
(a)	All items except item No. 28.1 to 28.6, 28.18 to 28.19 & 28.50	100% above	100% above		

- (a) Cement Rs. 129.00 per bag of 50 Kg. including cost of empty cement bags plus 3% storage charges.
- (b) Fe-415 Steel : Rs. 18,000/- per metric tonne plus 3% storage charges.

APPLICABLE STOCK ISSUE RATES

Chapter No.	Description	Premium Fixed	Through rate	Labour rate
29	Sanitary Installations.			
	(b) Item No. 28.1 to 28.6, 28.18 to 28.19 & 28.50(b) to (e)	150% above		
	(iii) Item No. 28.50 (a) only	550% above		
	(i) Item No. 29.1, 29.2 and 29.25 to 29.51	40% above.		
	(ii) Item No. 29.52 to 29.56	170% above		
	(iii) All other items except item No. 29.1, 29.2 and 29.25 to 29.56	200% above		
30	Electric Installation.			
	(a) Item No. 31.12(c) & (d), 31.15 to 31.16	50% above.		
	(b) Item No. 31.17	30% above		
	(c) Item No. 31.18 (xxxi)	45% above		
	(d) Item No. 31.25 to 31.29	70% above		
	(e) Item No. 31.34	60% above		
	(f) All other items except item No. 31.12(c) & (d), 31.15 to 31.17, 31.18 (xxxi), 31.25 to 31.29 & 31.34	80% above		
	Item no. 31.1 to 31.7 & 31.21(i) to 31.21 (xxvii) only.	80% above on		
31	Working charges of Machinery.	Not fixed		
32	Horticulture	115% above		
33	Bearing of bridges	115% above		
	(i) All items except item No. 34.7, 34.10 and 34.11			
	(ii) Item No. 34.7 (Neoprene Bearings)	60% above		
	(iii) Item No. 34.10 and 34.11 (Expansion joints)	30% above		

CHAPTER NO. 5

Carriage (Item No. 5.2)

Serial No.	Lead upto	Premium Fixed.
1.	1 Km.	153%
2.	2 Kms	152%
3.	3 Kms	151%
4.	4 Kms	150%
5.	5 Kms	149%
6.	6 Kms	148%
7.	7 Kms	147%
8.	8 Kms	145%
9.	9 Kms	144%
10.	10 Kms	143%
11.	11 Kms	142%
12.	12 Kms	141%
13.	13 Kms	140%
14.	14 Kms	139%
15.	15 Kms	137%
16.	16 Kms	136%
17.	17 Kms	135%
18.	18 Kms	134%
19.	19 Kms	133%
20.	20 Kms	132%
21.	21 Kms	130%
22.	22 Kms	129%
23.	23 Kms	128%
24.	24 Kms	127%
25.	25 Kms	126%
26.	26 Kms and above.	125%

(11) Amendment in the premium of HSR vide Haryana Govt. Gazette Notification No. SE/PWD/B&R/Ambala/CZC/2 dated 21-2-2006 applicable from 1-3-2006.

Chapter No.	Description	Premium Fixed	Through rate	Labour rate
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1. (a) Daily wages The rate to be paid as per minimum wages fixed by the Labour Department Haryana Government from time to time where minimum wages are not fixed. Deputy Commissioner's rates will be applicable.

2. Monthly wages No Rates fixed

3. Materials Nil.

4. Loading and Unloading

Chapter No. Description Premium Fixed Through rate Labour rate

(a) Item No. 4.1, 4.2, 4.5, 4.9, 4.10 (b) 4.13, 4.20 to 4.24 and 4.25 (a) 300% above
 (b) All other items except 4.1, 4.2, 4.5, 4.9, 4.10 (b) 4.13 and 4.20 to 4.24 and 4.25(a) 300% above

5. Cartage :
 (a) Item No. 5.2 (By mechanical transport) (i) Upto 25 Kms 285% above
 (ii) Above 25 Kms. 270% above
 (b) All items other than item 5.2 135% above

6. Earth Work:
 (a) Item No. 6.1 to 6.6 except item No. 6.2(g)(iv), 6.2(g)(v) and 6.4 300% above
 (b) Item No. 6.2(g)(iv), 6.2(g)(v) compaction 100% above
 (c) Item No. 6.4 (earth compensation) 700% above
 (d) Item No. 6.7 to 6.14, & 6.16 to 6.27 250% above
 (e) Item No. 6.15 (a) and (b) (Anti termite) 200% above

7. Rock Cutting 300% above
 8. Demolition 325% above
 9. Centring and Shuttering 175% above
 10. Concrete 225% above

(a) All items except item No. 10.67 to 10.69, 10.74 to 10.76 230% above
 (b) Item No. 10.67 to 10.69, 10.74 to 10.76 275% above
 11. Brick work 190% above
 12. Stone Masonry 250% above
 13. Hoisting and Roofing:- 120% above

(a) All item except No. 13.11, 13.13 and 13.14, 13.18 & 13.43 to 13.49 150% above
 (b) Items 13.11, 13.13, 13.14 (Terracing) 250% above
 (c) Item No. 13.43 to 13.49 (C.I. items) 200% above
 (d) Item No. 13.18 (G.I. sheet roofing) 180% above

14. Flooring & Dados :-
 (a) All item except item No. 14.19 to 14.24 & 14.48 to 14.70 275% above
 (b) Item No. 14.19 to 14.24 (brick flooring) 250% above
 (c) (1) Items No. 14.48 (a-i) & (b-1) (glazed/Tiles) 95% above
 (II) Items No. 14.48 (a-ii) & (b-ii) (glazed/Tiles) 230% above
 95% above 120% above

Chapter No.	Description	Premium Fixed	Through rate	Labour rate
15	Plastering and Pointing			
	(d) Item No. 14.49 to 14.53 (marble stones)	--	50% above	
	(e) Item No. 14.54 to 14.61 (stone other than Kotah)	80% above	80% above	
	(f) Item No. 14.62 to 14.66 (Kotah stone items)	100% above	100% above	
	(g) Item No. 14.67 to 14.70 (wooden flooring)	200% above	200% above	
		250% above	250% above	
16	Painting, Varnishing, White Washing and Distemping			
		110% above	120% above	
17	Wood Work			
	(a) Item No. 17.1 to 17.89	150% above	160% above	
	(b) Item No. 17.90 to 17.94 (Factory manufactured doors.)	150% above	160% above	
18	Steel and Iron work			
	(a) Item No. 18.22	225% above	170% above	
	(b) Other items of steel work (except item No. 18.22)	250% above	200% above	
19	Lining			
	(a) All items except item No. 19.7, 19.8, 19.24, 19.26 and 19.29 to 19.32	220% above	220% above	
	(b) Items Nos. 19.7, 19.8, 19.24, 19.26 and 19.29 to 19.32	260% above	260% above	
20	Outlets			
21	Pile foundations			
22	Well Sinking			
23	River and Canal Protection Work			
	(a) Item No. 23.39 only (Dumping Stone)	--	300% above	
	(b) Labour rate of items except Item No. 23.39	--	200% above	
	(c) Through rate of all items except Item No. 23.1 to 23.8, 23.10 to 23.37 & 23.39 to 23.47	--	200% above	
24	Road work-			
	(a) Labour rate of all items.	--	225% above	
	(b) Through rate of item No. 24.34 to 24.35 & 24.38 except 24.36	--	225% above	
	(c) Item No. 24.36 (Barbed wire fencing)	--	225% above	
25	Maintenance of Furniture.			
26	Miscellaneous			
27	Quantities of Materials			
28	Water Supply For Plains:-			
	(a) All items except item No. 28.1 to 28.6, 28.18 to 28.19 & 28.50 (b) to (e)		150% above	

Chapter No. Description Premium Fixed Through rate Labour rate

(b) Item No. 28.1 to 28.6, 28.18 to 28.19 & 28.50(b) to (e) 200% above
(c) Item No. 28.50 (a) only 650% above

29 Sewerage and Drainage.
(a) Item No. 29.1, 29.2 and 29.25 to 29.51 50% above.
(b) Item No. 29.52 to 29.56 225% above
(c) All other items except item No. 29.1, 29.2 and 29.25 to 29.56 250% above

30 Sanitary Installations.
(a) All items except item No. 30.53, 30.59, 30.84 to 30.94 & 30.114(b) and (d) 150% above
(b) Item No. 30.84 to 30.86, 30.88 to 30.91, 30.114(b) and (d) 200% above
(c) Item No. 30.87, 30.92 to 30.94 180% above
(d) Item No. 30.53 & 30.59 Material to be supplied by the department 200% above

31 Electric Installation.
(a) Item No. 31.12(a) Main switches & BDB's (Cal-B & C only) 31.8 to 31.11, 31.21, 31.23 & 31.24 100% above
(c) Item No. 31.12 (c) & (d) 31.15 to 31.16 50% above
(d) Item No. 31.13, 31.14 & 31.33 110% above
(e) Item No. 31.30 (Street light pole) 200% above
(f) Item No. 31.18 (xxx1) --
(g) Item No. 31.25 to 31.29 80% above
(h) Item No. 31.17 30% above
(i) Item No. 31.34 60% above
(j) Balance HSR items i.e. except item No. 31.8 to 31.17, 31.18(xxx1), 31.21 31.23 to 31.30, 31.33 and 31.34 90% above
(k) Labour rate items 31.1 to 31.7, 31.21(i) to (xxvii) 100% above

32 Working charges of Machinery. Not fixed
33 Horticulture 140% above
34 Bearing of bridges 140% above
(i) All items except item No. 34.7, 34.10 and 34.11 --

APPLICABLE STOCK ISSUE RATES

- (A) Cement : Rs. 145.00 per bag of 50 Kg. plus 3% storage charges including the cost of empty cement bag.
- (B) Steel bars Rs. 27000/- per metric tonne plus 3% storage charges (Fe-415 TMT Steel)

-----END-----

Chapter No.	Description	Premium Fixed	Through rate	Labour rate
(ii)	Item No. 34.7 (Neoprene Bearings)	75% above		--
(iii)	Item No 34.10 and 34.11 (Expansion Joints)	50% above		--

**Amendment in the premium of HSR Wide Notification No. SE/PWD/B&R
Ambala/CZC/1032 dated 5-11-2007. Effective From 1-1-2008.**

(377)

Chapter No.	Description	Premium fixed		
		Through rate	Labour rate	Labour rate.
1	Daily Wages	1	2	3
2.	Monthly Wages	No rates fixed.		
3.	Materials	NIL.		
4.	Loading and Unloading	(a) Item No. 4.1, 4.2, 4.5, 4.9, 4.10(b), 4.13, 4.20 to 4.24 and 4.25(a). (b) All other items except 4.1, 4.2, 4.5, 4.9, 4.10(b), 4.13, 4.20 to 4.24 and 4.25(a).	350% above.	350% above.
5.	Carriage.	(a) Item 5.2 (By Mechanical Transport). (i) Upto 25 Kms. 300% above. (ii) Above 25 Kms. 285% above. (b) All items other than item No. 5.2	150% above.	150% above.
6.	Earth Work.	(a) Item No. 6.1 to 6.6 except item No. 6.2(g) (iv) 6.2(g) (v) and 6.4. (b) Item No.6.2(g)(iv) and 6.2(g)(v) (compaction) (c) Item No. 6.4 (earth compensation) (d) Item No.6.7, 6.10 to 6.14 and 6.16 to 6.27 (e) Item No. 6.8 & 6.9 (f) Item No.6.15(a) & (b) (Anti Termite)	350% above. 110% above. 700% above. 300% above. 300% above. 300% above.	350% above. 350% above. 350% above. 350% above. 350% above. 350% above.
7.	Rock Cutting		350% above	350% above
8.	Demolition		390% above	390% above
9.	Centering and Shuttering		225% above.	275% above.
10.	Concrete.	(a) All items except item No.10.67 to 10.69 10.74 to 10.76. (b) Item No. 10.67 to 10.69, 10.74 to 10.76	370% above	370% above.
11.	Brick Work.		350% above.	350% above.
12.	Stone Masonry		150% above.	200% above.

The rate to be paid as per minimum wages fixed by the Labour Deptt. Haryana Government from time to time, where minimum wages are not fixed, Deputy Commissioner's rate will be applicable.

	1	2	3
13. Hoisting and Roofing.	(a) All items except Item No. 13.11, 13.13, 13.14, 13.18 and 13.49	200% above	200% above
	(b) Item No. 13.11, 13.13 and 13.14	350% above	350% above
	(c) Item No. 13.43 to 13.49 (C.I. items)	350% above	350% above
	(d) Item No. 13.18 (G.I. sheet roofing)	300% above	300% above
14. Flooring and Dados.	(a) All items except Item No. 14.19 to 14.24 and 14.48 to 14.70	370% above	370% above
	(b) Item No. 14.19 to 14.24 (brick flooring)	350% above	350% above
	(c) (i) Item No. 14.48(a-i) & (b-i) Glazed Tiles. (ii) Item No. 14.48(a-ii) & (b-ii) Glazed Tiles.	95% above	230% above
	(d) Item No. 14.49 to 14.52 (Marble Stone)	60% above	60% above
	(e) Item No. 14.53	60% above	60% above
	(f) Item No. 14.54 to 14.61 (stone other than Kohah Stone)	125% above	125% above
	(g) Item No. 14.62 to 14.66 Kohah stone items.	135% above	135% above
	(h) Item No. 14.67 to 14.70 (wooden flooring)	200% above	200% above
15. Plastering and Pointing		325% above	325% above
16. Painting, Varnishing, White Washing/ Distemping.		125% above	140% above
17. Wood Work		175% above	200% above
	(a) Item No. 17.1 to 17.89	175% above	200% above
	(b) Item No. 17.90 to 17.92 & 17.94 (Factory manufactured doors)	175% above	200% above
	(c) Item No. 17.93 (Flush door shutters)	150% above	160% above
18. Steel and Iron Work.	(a) Item No. 18.22	325% above	350% above
	(b) Other items of steel work (except Item No. 18.22)	325% above	350% above
19. Lining	(a) All items except item No. 19.29 to 19.32	300% above	300% above
	(b) Item No. 19.29 to 19.32	350% above	350% above
20. Outlets.		330% above	330% above

1	2	3
21.	Pile Foundations	350% above
22.	Well Sinking	200% above
23.	River and Canal Protection Works.	
	(a) Item No. 23.39 only (dumping stone)	--
	(b) Labour rate of items (except item No. 23.38 & 23.39)	250% above
	(c) Through rate of all items except item No. 23.1 to 23.8, 23.10 to 23.37 and 23.39 to 23.47)	275% above
	(d) Item No. 23.38 (Wire crates)	300% above
24.	Road Work.	
	(a) Labour rate of all items.	310% above
	(b) Through rate of item No. 24.34, 24.35 and 24.38 (Expansion joints and road cuts)	325% above
	(c) Item No. 24.36 (Barbed wire fencing)	300% above
25.	Maintenance of Furniture.	175% above
26.	Miscellaneous	130% above
27.	Quantities of Material	No rates involved.
28.	Water Supply.	
	For Plains	
	(a) All items except item No. 28.1 to 28.6 (a to e & f to I), 28.18 to 28.19 & 28.50	215% above
	(b) Item No. 28.1 to 28.6 (a to e) & 28.18 to 28.19.	250% above
	(c) Item No. 28.1 to 28.6 (f to I)	250% above
	(d) Item No. 28.50 (a) only	800% above
	(e) Item No. 28.50 (b to e)	300% above
29.	Sewerage and Drainage.	
	(a) Item No. 29.1, 29.2 and 29.25 to 29.51	80% above
	(b) Item No. 29.52 to 29.56	250% above
	(c) All other items except item No. 29.1, 29.2 and 29.25 to 29.56.	330% above
30.	Sanitary Installations	
	(a) All other items except item No. 30.53, 30.59, 30.84 to 30.94 and 30.114(b) & (d)	250% above
	(b) Item No. 30.84 to 30.86, 30.88 to 30.91, 30.114 (b) & (d)	300% above
	(c) Item No. 30.87, 30.92 to 30.94	275% above

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(d) Item No. 30.53 and 30.59 (a) (for estimation purpose) Rs.1500/-each 250% above.

31. Electrical Installation.
- (a) Item No. 31.1 to 31.7, 31.19, 31.20 31.35. 130% above.
 - (b) Item No. 31.8 to 31.11 130% above.
 - (c) Item No. 31.12 (a) Main Switches, Category-A type. 130% above.
 - (d) Item No. 31.12 (a) & (b) Main Switches & BDBs (Category B & C only) 130% above.
 - (e) Item No. 31.25 to 31.29 130% above.
 - (f) Item No. 31.32 150% above.
 - (g) Item No. 31.13, 31.14 & 31.33 150% above.
 - (h) Item No. 31.21 150% above.
 - (i) Item No. 31.24 150% above.
 - (j) Item No. 31.22 All items, except 31.22 (iv, vi, x, xiii, xiv, xvii & xx) 150% above.
 - (k) Item No. 31.22 (iv, vi, x, xiii, xiv, xvii & xx) Copper work. 250% above.
 - (l) Item No. 31.23 All items except 31.23 (iv, vi to ix) 150% above.
 - (m) Item No. 31.23 (iv, vi to ix) Copper Work. 250% above.
 - (n) Item No. 31.30 (Street light) 200% above.
 - (o) Item No. 31.31 (copper bus bar chamber) 200% above.
 - (p) Item No. 31.18 All items except 31.18 (xxxi). 200% above.
 - (q) Item No. 31.18 (xxxi) Flush door shutter) 150% above. 160% above.
 - (r) Item No. 31.34 All items except 31.34 (i to vi) 130% above.
 - (s) Item No. 31.34 (i to vi) Rewinding items 200% above.
 - (t) Item No. 31.12 (c) & (d) 31.15 to 31.16 50% above.
 - (u) Item No. 31.17 30% above.
 - (v) Item No. 31.36 to 31.49 (i.e. newly added items) At par.
 - (w) Labour rate item No. 31.1 to 31.7, 31.21 (i) to (xxvi) and 31.36 to 31.39 (i.e. newly added items of copper wiring) 150% above.
32. Working Charges of Machinery. Not fixed. 150% above.
33. Horticulture 150% above
34. Bearing of Bridges. 150% above

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2	
3	

STOCK ISSUE RATES

A. CEMENT

OPC-43 Grade cement :-

Rs.245.00 per bag of 50 Kgs. Cement including the cost of empty cement bag plus 3% storage charges.

Note: The revised premia are based on the above mentioned issue rates of cement.

(i) In case department supply the cement, recovery will be made on above rates

irrespective of the type of cement i.e. OPC or PPC.

(iii) In case contractor is allowed to use PPC cement, arranged by himself deduction

@ Rs. 25.00 per bag of 50 Kgs. Cement will be made.

B. STEEL

Fe-415 TMT Steel bars.

Rs. 33,000/- per MT plus 3% storage charges on Fe-415, TMT steel bars of the company's TISCO, SAIL, RINL or IISCO.

(i) In case of departmental supply of the steel, recovery will be made on above rate for Fe-415, TMT steel bars.

(ii) In case steel is to be arranged by the agency and agency is allowed to use Fe-415, TMT steel bars of companies other than above, but ISI marked, the deduction @ Rs. 3000/- per M.T. will be made.

(iii) If contractor/agency is allowed to use Fe-500 TMT steel bars of above companies in place of Fe-415, TMT steel bars, an extra payment of Rs.700/- per MT will be made to the contractors/agencies.

APPENDIX AND CORRIGENDA TO THE HARYANA PWD SCHEDULE OF RATES, 1988
 (SECOND EDITION)
 A & C Slip No. CZC-2
 Dated 5-11-2007.

The following additional items shall be added in chapter No. 31 of Electrical
 Installation as HSR item No. 31.36 to 31.49

HSR Description of item Unit Labour Through Rate

31.36 Item No. Writing in 1.5 sqmm PVC insulated copper conductor cable in 1.6 mm thick conduit pipe.

(I) Fan Point
 (a) Short point 34.90
 (b) Medium point 524.00
 (c) Long point 733.00

(ii) Light point
 (a) Short point 26.00
 (b) Medium point 433.00
 (c) Long point 639.00

(III) Twin control light point with switch.
 2-ways, 5 amp. Single pole
 (a) Short point 276.00
 (b) Medium point 486.00
 (c) Long point 726.00

(IV) Light point without control.
 (a) Short point 8.70
 (b) Medium point 10.90
 (c) Long point 14.50

(V) Bed light control point.
 (a) Short point 26.00
 (b) Medium point 33.00
 (c) Long point 38.50

(VI) Call bell point including MS box of size 180mm x 100mm x 60mm deep for call bell.
 (a) Short point 27.30
 (b) Medium point 34.20
 (c) Long point 40.20

(VII) 3-pin 5amp. Plug point including earthing the 3rd pin etc.
 (a) Short point 26.60
 (b) Medium point 33.60
 (c) Long point 38.50

(VIII) 3-pin 15amp. Plug point with 4 sqmm PVC insulated copper conductor cable including earthing the 3rd pin etc.
 (a) Short point 283.00
 (b) Medium point 466.00
 (c) Long point 672.00

Each	26.60	33.60	403.00
-do-	33.60	38.50	667.00
-do-	38.50		970.00
PVC insulated wiring in Surface Conduit.			
31.37 Wiring in 1.5 sqmm PVC insulated copper conductor cable in 1.6 mm thick conduit pipe.			
(I) Fan Point			
(a) Short point	23.10	28.00	329.00
(b) Medium point	28.00		507.00
(c) Long point	34.90		721.00
(II) Light Point			
(a) Short point	21.20	24.00	240.00
(b) Medium point	26.00	419.00	633.00
(c) Long point	33.00		
(III) Twin control light point with 2-ways, 5 amp, single pole switch.			
(a) Short point	21.90	266.00	266.00
(b) Medium point	27.20	473.00	473.00
(c) Long point	34.60	720.00	720.00
(IV) Light point without control			
(a) Short point	5.80	152.00	152.00
(b) Medium point	6.70	308.00	308.00
(c) Long point	7.90	494.00	494.00
(V) Bed light control light point			
(a) Short point	21.20	219.00	219.00
(b) Medium point	26.00	384.00	384.00
(c) Long point	33.00	583.00	583.00
(VI) Call bell point including MS box of size 180mm x 100mm x 60mm deep for call bell.			
(a) Short point	22.50	278.00	278.00
(b) Medium point	27.30	456.00	456.00
(c) Long point	34.20	670.00	670.00
(VII) 3-pin 5 amp. Plug point including earthing the 3rd pin etc.			
(a) Short point	22.00	372.00	372.00
(b) Medium point	26.60	452.00	452.00
(c) Long point	33.60	669.00	669.00
(VIII) 3-pin 15 amp. Plug point with 4 sqmm PVC insulated copper conductor cable including earthing the 3rd pin etc.			
(a) Short point	22.00	392.00	392.00
(b) Medium point	26.60	654.00	654.00
(c) Long point	33.60	965.00	965.00

bakelite sheet including cost of switches,

wall socket, ceiling rose etc.

Item	Unit	Rate	Quantity	Total
(I) Fan Point	Each	5.80	115.00	115.00
(a) Short point	Each	5.80	115.00	115.00
(b) Medium point	-do-	7.30	173.00	173.00
(c) Long point	-do-	8.30	238.00	238.00
(II) Light Point	Each	5.80	95.00	95.00
(a) Short point	Each	5.80	95.00	95.00
(b) Medium point	-do-	7.30	153.00	153.00
(c) Long point	-do-	8.30	219.00	219.00
(III) Twin control light point with 2-way 5 amp. Single pole switch.	Each	6.60	120.00	120.00
(a) Short point	Each	6.60	120.00	120.00
(b) Medium point	-do-	8.50	206.00	206.00
(c) Long point	-do-	9.90	304.00	304.00
(IV) Light point without control.	Each	1.90	53.00	53.00
(a) Short point	Each	1.90	53.00	53.00
(b) Medium point	-do-	2.30	95.00	95.00
(c) Long point	-do-	2.70	144.00	144.00
(V) Bed light control light point.	Each	5.80	74.00	74.00
(a) Short point	Each	5.80	74.00	74.00
(b) Medium point	-do-	7.30	119.00	119.00
(c) Long point	-do-	8.30	169.00	169.00
(VI) Call bell Point	Each	5.80	101.00	101.00
(a) Short point	Each	5.80	101.00	101.00
(b) Medium point	-do-	7.30	159.00	159.00
(c) Long point	-do-	8.30	224.00	224.00
(VII) 3-pin. Stump Plug Point including earthing the 3rd pin etc.	Each	5.80	109.00	109.00
(a) Short point	Each	5.80	109.00	109.00
(b) Medium point	-do-	7.60	168.00	168.00
(c) Long point	-do-	8.30	232.00	232.00
(VIII) 3-pin 15amp. Plug point with 4 sqmm PVC insulated copper conductor cable including earthing the 3rd pin etc.	Each	5.80	232.00	232.00
(a) Short point	Each	5.80	232.00	232.00
(b) Medium point	-do-	7.60	373.00	373.00
(c) Long point	-do-	8.30	534.00	534.00
Supply and erection of PVC unshathed copper conductor cable single core 1100 volts grade in pipe of suitable size excluding cost and erection of pipe.	Mtr	10.20	10.20	10.20
(I) Cable size 1.5 sqmm (3/0.81mm)	-do-	10.20	10.20	10.20
(II) Cable size 2.5 sqmm (3/1.05mm)	-do-	16.30	16.30	16.30
(III) Cable size 4 sqmm (7/0.85 mm)	-do-	24.50	24.50	24.50
(IV) Cable size 6 sqmm (7/1.05 mm)	-do-	35.60	35.60	35.60
(V) Cable size 10 sqmm (7/1.35 mm)	-do-	50.00	50.00	50.00
(VI) Cable size 16 sqmm (7/1.70 mm)	-do-	83.70	83.70	83.70

31.40

134.70	-do-	(vii) Cable size 25 sqmm (7/2.14 mm)	
184.40	-do-	(viii) Cable size 35 sqmm (7/2.52 mm)	
(386)			
650.00	-do-	(i) 4-way, SP&N (Horizontal)	Each
870.00	-do-	(ii) 8-way, SP&N (Horizontal)	
1110.00	-do-	(iii) 12-way, SP&N (Horizontal)	
1350.00	-do-	(iv) 16-way, SP&N (Horizontal)	
1670.00	-do-	(v) 4-way, TP&N (Horizontal) (8+12)	
2100.00	-do-	(vi) 8-way, TP&N (Horizontal) (8+24)	
2600.00	-do-	(vii) 12-way, TP&N (Horizontal) (8+36)	
3490.00	-do-	(viii) 16-way, TP&N (Horizontal) (8+48)	
3850.00	-do-	(ix) 4-way, TP&N (Vertical) (8+12)	
4890.00	-do-	(x) 8-way, TP&N (Vertical) (8+24)	
6300.00	-do-	(xi) 12-way, TP&N (Vertical) (8+36)	
1270.00	-do-	(i) 16A/240V DP ELCB with 30 mA sensitivity.	Each
1240.00	-do-	(ii) 16A/240V DP ELCB with 100 mA sensitivity.	
1270.00	-do-	(iii) 25A/240V DP ELCB with 30 mA sensitivity.	
1240.00	-do-	(iv) 25A/240V DP ELCB with 100 mA sensitivity.	
1350.00	-do-	(v) 32A/240V DP ELCB with 30 mA sensitivity.	
1330.00	-do-	(vi) 32A/240V DP ELCB with 100 mA sensitivity.	
1350.00	-do-	(vii) 40A/240V DP ELCB with 30 mA sensitivity.	
1330.00	-do-	(viii) 40A/240V DP ELCB with 100 mA sensitivity.	
1810.00	-do-	(ix) 63A/240V DP ELCB with 30 mA sensitivity.	
1700.00	-do-	(x) 63A/240V DP ELCB with 100 mA sensitivity.	

Supply and erection of double door sheet steel enclosure distribution board suitable for MCBs and ELCBs etc. recessed in wall including bonding to earth with all labour and material required to complete the job in all respect upto to the entire satisfaction of the Engineer-in-Charge of the work.

Supply and erection double pole/Four pole Residual current circuit breaker (RCCB/ELCB) suitable for operation on 240/415V, 5Hz, AC supply installed in existing sheet steel enclosures including making necessary connections and bonding to earth with all labour and material required to complete the job in all respect upto the entire satisfaction of the Engineer-in-Charge of the work.

31.42

31.41

31.47	Supply and erection of MS box of size 200mm x 150mm x 100mm deep covered with bakelite sheet including cost and flushed erection of 32A DP-switch 15A socket and switch with necessary connections complete in all respect up	Each	157.00
31.46	Supply and erection of sheet steel enclosures 3/4 pole for ELCB/MCB fixed on wall or existing board etc. including bonding to earth complete in all respect up to the entire satisfaction of the Engineer-in-Charge of the work.	Each	21.70
	(f) 35 sqmm	-do-	14.50
	(e) 25 sqmm	-do-	10.30
	(d) 16 sqmm	-do-	8.20
	(c) 10 sqmm	-do-	6.00
	(b) 4 sqmm to 6 sqmm	-do-	4.80
	(a) 1.5 sqmm to 2.5 sqmm	Each	
31.45	Supply and erection of copper lugs including crimping etc. upto the entire satisfaction of Engineer-in-Charge of the work.	Metre	31.00
	(u) 20 mm dia.	-do-	37.00
	(b) 25 mm dia.	-do-	
31.44	Supply and erection of PVC conduit pipe ISI marked (Medium) recessed in wall/ceiling etc. including cost of PVC bands, inspection box and all other material required to complete the job in all respect up to the entire satisfaction of Engineer-in-Charge of work.	Each	20.00
31.43	Supply and erection of 5 amp. 2 way switch on existing sheet including connections complete in all respect up to the entire satisfaction of the Engineer-in-Charge of the work.	Each	1900.00
	(xi) 25A/415V FP ELCB with 30mA sensitivity.	-do-	1610.00
	(xii) 25A/415V FP ELCB with 100 mA sensitivity.	-do-	1550.00
	(xiii) 40A/415V FP ELCB with 30 mA sensitivity.	-do-	1670.00
	(xiv) 40A/415V FP ELCB with 100 mA sensitivity.	-do-	1600.00
	(xv) 63A/415V FP ELCB with 30 mA sensitivity.	-do-	2050.00
	(xvi) 63A/415V FP ELCB with 100 mA sensitivity.	-do-	1900.00

350.00	Each	Charge of the work. to the entire satisfaction of Engineer-in-	31.48
5.00	Each	Supply and erection of MS saddles and clamps on wall/RCC parapit for fixing underground cable at a distance of 0.60 metre centre to centre fixed by means of rawl plug including the cost of all labour and material required to complete the job in all respect.	31.49
0.12	Sq.cm	Supply and erection of MS box made of 16 Gauge MS sheet recessed in wall, with arrangement of fixing brass screws, 2 Nos. check nuts and one No. PVC bush of required size including all labour and material required to complete the job in all respect upto the entire satisfaction of Engineer-in-Charge of the work. (i) With 2 coats of primer. (ii) With GI coating (anodized) -do- suitable for modular accessories.	0.17

Note:- Only internal surface area of the box is to be measured for payment.

COPY OF CORRIGENDA OF NOTIFICATION NO. SE/PWD/B&R/AMBALA/CZC/1032 dated 5-11-2007.
ADDENDA CORRIGENDA TO THE HARYANA PWD SCHEDULE OF RATES 1988 (SECOND EDITION)

The following amendments be made in analysis of rate of Haryana PWD Schedule of rates 1988.

A & C Slip No.- CZC-1
 Dated :- 5-11-2007

Sr. No.	Page No.	Item No.	Description.	As existing		Description.	To be amended as			
				Unit	Labour Rate		Through Rate	Unit	Labour Rate	Through Rate
CHAPTER NO.10										
1.	46	10.67	Design mix cement concrete of grade M-30 with minimum cement contents 560 Kg/cum in foundation and plinth.	Cum	83.00	917.70	Design mix cement concrete of grade M-30 with minimum cement contents 420 Kg/ cum in foundation and plinth.	Cum	83.00	759.20
2.	46	10.68	Design mix cement concrete of grade M-35 with minimum cement contents 560 Kg/ cum in foundation and plinth.	Cum	85.00	943.20	Design mix cement concrete of grade M-35 with minimum cement contents 420 Kg/ cum in foundation and plinth.	Cum	85.00	784.70
3.	46	10.69	Design mix cement concrete of grade M-40 with minimum cement contents 560 Kg/ cum in foundation and plinth.	Cum	87.00	965.15	Design mix cement concrete of grade M-40 with minimum cement contents 420 Kg/ cum in foundation and plinth.	Cum	87.00	806.70
4.	47	10.74	Design mix cement concrete of grade M-30 with minimum cement contents 560 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	89.25	923.95	Design mix cement concrete of grade M-30 with minimum cement contents 420 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	89.25	765.50
5.	47	10.75	Design mix cement concrete of grade M-35 with minimum cement contents 560 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	91.25	949.45	Design mix cement concrete of grade M-35 with minimum cement contents 420 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	91.25	791.00
6.	47	10.76	Design mix cement concrete of grade M-40 with minimum cement contents 560 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	93.25	971.40	Design mix cement concrete of grade M-40 with minimum cement contents 420 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	93.25	812.90

FLOORING & DADOS

Marble stone flooring 20 mm to 25mm thick slab including matching grains of marble laid in any pattern as specified over based of 12mm thick cement course sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of marble including rubbing and polishing (using marble stone slab of size more than 0.38 Sqm each.)

Fixing marble stone flooring 17mm and above thick slab including matching grains of marble laid in any pattern as specified over base of 12mm thick cement course sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of marble including rubbing and polishing (Excluding the cost of marble.)

	Sqm	123.70	782.20	Sqm.	123.70	149.70
a) White marble:-	Sqm	123.70	782.20			
i) White Makrana Marble (1st Qual-ity)	Sqm	123.70	706.30			
ii) Abu Plain, Abu panther and Abu veined.	Sqm	123.70	478.60			
iii) Makrana Doongri Adanga Veined and Makrana chak doongri veined.	Sqm	123.70	530.30			
b) - Black :-	Sqm	123.70	403.85			
i) Abu Zebra, Bhainsilana Zebra and Plain.	Sqm	123.70	656.85			
ii) Kishan Gair Zebra, Makrana Dhobi Doongri Zebra.	Sqm	123.70	732.75			
iii) Narnaul Zebra.	Sqm	123.70	555.65			
c) Green marble :-	Sqm	123.70	403.85			
i) Baroda green marble	Sqm	123.70	492.40			
ii) Abu green marble	Sqm	123.70	378.55			
iii) Bundi green marble	Sqm	123.70	396.25			
d) Pink marble :-	Sqm	123.70	441.80			
i) Pink plain marble	Sqm	123.70	549.30			
ii) Makrana pink Adanga marble	Sqm	123.70	149.70			
iii) Bunda Adanga pink marble.	Sqm	123.70				
e) Grey marble :-	Sqm	123.70				
i) Kumart grey marble	Sqm	123.70				
ii) Bundi grey marble	Sqm	123.70				
iii) Brown marble :-	Sqm	123.70				
i) Bar-brown marble	Sqm	123.70				

8. 85 14.52 Marble stone 20 mm to 25 mm thick in
& 86 risers of step, skirting, dado, pillars and wall
fining including matching grains of marble
slab in any pattern as specified laid on 12
mm thick cement coarse sand mortar 1:3
and jointed with white cement slurry mixed
with pigment to match the shade of marble
including rubbing and polishing, including la-
bour for fixing cramps, pins and dowels
etc. (using size of marble slab above 0.38
Sqm each)

Fixing marble stone 17mm and above
thick in risers of step, skirting, dado,
pillars and wall lining including match-
ing the grains of marble slab in any
pattern as specified laid on 12 mm
thick cement coarse sand mortar 1:3
and jointed with white cement slurry
mixed with pigment to match the
shade of marble including rubbing and
polishing including labour for fixing
cramps, pins and dowels etc.
(Excluding the cost of marble.)

a) White marble:-	Sqm	160.00	830.00
i) White Makrana Marble (1st Quality)	Sqm	160.00	752.00
ii) Abu Plain, Abu panher and Abu veined.			
iii) Makrana Doongri Adanga Veined and Makrana chak doongri veined.	Sqm	160.00	516.00
b) Black :-			
i) Abu Zebra, Bhainsiana Zebra and Plain.	Sqm	160.00	570.00
ii) Kishan Garh Zebra, Makrana Dirohi Doongri Zebra.	Sqm	160.00	439.00
iii) Naamaul Zebra.			
c) Green marble :-	Sqm	160.00	701.00
i) Baroda green marble	Sqm	160.00	779.00
ii) Abu green marble			
iii) Bundi green marble	Sqm	160.00	596.00
d) Pink marble :-	Sqm	160.00	439.00
i) Pink plain marble	Sqm	160.00	530.00
ii) Makrana pink Adanga marble	Sqm	160.00	413.00
iii) Bunda Adanga pink marble.	Sqm	160.00	431.00
e) Grey marble :-	Sqm	160.00	431.00
i) Kumari grey marble			
ii) Bundi grey marble	Sqm	160.00	478.00
iii) Brown marble :-	Sqm	160.00	589.00
i) Bar-brown marble	Sqm.	86.55	201.95

9.	87	14.62	Kotah stone flooring 34 to 40 mm thick in any pattern as specified over 12 mm thick base of cement coarse sand mortar 1:3 laid and jointed with pigment to match the shade of stone including rubbing and polishing.	Sqm	86.55	201.95	Kotah stone flooring, minimum 25 mm thick, in any pattern as specified over 20 mm thick base of cement coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing.	Sqm	32.85	157.60
10.	87	14.63	Kotah stone rough dressed, 40 mm to 50 mm thick slabs, set to pattern in pavements over 20 mm thick base of cement coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone.	Sqm	32.85	157.60	Kotah stone rough dressed, 25 mm thick slabs, set to pattern in pavements over 20 mm thick base of cement coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone.	Sqm	32.85	157.60
CHAPTER NO. 30 SANITARY INSTALLATIONS.										
11.	211	30.53	Providing and fixing in position best quality stainless steel sinks with complete fittings as fully described in Item No. 30.51 above.	Each	48.00	5386.00	Providing and fixing in position of best quality stainless steel sink of 600 mm X 450 mm X 200 mm size. (for estimating purpose only)	Each	48.00	1500.00
12.	223	30.59	Providing and fixing in position best quality stainless steel build in draining board of size 600 mm X 450 mm complete as described in Item No. 30.53 and 30.58 above.	Each	60.00	7630.00	Providing and fixing in position of best quality stainless steel sink of 600 mm X 450 mm X 200 mm size. (for estimating purpose only)	Each	60.00	1500.00
			a) 600 mm X 450 mm X 200 mm	Each	60.00	7630.00				
			b) 530 mm X 450 mm X 175 mm	Each	60.00	6627.00				

AMENDMENT IN THE PREMIUM OF HSR VIDE SE AMBALA CIRCLE
HARYANA, PWD B&R AMBALA NOTIFICATION NO. SE PWD B&R AMBALA/
CZ/CI DATED 23-1-2009 APPLICABLE FROM 1-2-2009.

The Direction Committee of Chief Engineers discussed the recommendations of the Central Zonal Committee and approved the fixation of the following premium on various chapters of Haryana PWD Schedule of Rates 1988, 2nd Edition. These premiums will be applicable from 1st February, 2009.

Chapter No.	Description	Premium fixed.
	Through rate	Labour rate

1. Daily Wages
The rate to be paid as per minimum wages fixed by the Labour department, Haryana Govt. from time to time. Where minimum wages are not fixed, Deputy Commissioner's rate will be applicable.
No rates fixed.
NIL

2. Monthly Wages
3. Materials
4. Loading and Unloading
(a) Item No. 4.1, 4.2, 4.5, 4.9, 4.10(b), 4.13, 4.20 to 4.24 and 4.25(a)
(b) All other items except 4.1, 4.2, 4.5, 4.9, 4.10 (b), 4.13, 4.20 to 4.24 and 4.25 (a)
350% above.

5. Carriage.
(a) Item 5.2 (By Mechanical Transport)
(i) Up to 25 Kms. 300% above.
(ii) Above 25 Kms. 285% above.
6. Earth Work.
(a) Item No. 6.1 to 6.6 except item No. 6.2(g)
(a) 6.2 (g) (v) and 6.4
(b) Item No. 6.2(g) (iv) and 6.2(g)(v) (compaction).
110% above.
350% above.

7. Rock Cutting
(f) Item No. 6.15 (a) & (b) (And Termitie) 200% above
200% above
350% above
450% above
8. Demolition
9. Centering and Shuttering
225% above
275% above
10. Concrete
(a) All items except item No. 10.67 to 10.69, 10.74 to 10.76
340% above
370% above
(b) Item No. 10.67 to 10.69, 10.74 to 10.76
340% above
370% above
11. Brick Work.
400% above
400% above
12. Stone Masonry
Hoisting and Roofing.
200% above
250% above
13. All items except item No. 13.11, 13.13, 13.14
(a) 13.18 and 13.43 to 13.49
200% above
(b) Item No. 13.11, 13.13 and 13.14 (Tracing)
400% above
(c) Item No. 13.43 to 13.49 (C.I. items)
350% above

26.	Miscellaneous	130% above.
27.	Quantities of Material	No rates involved.
28.	Water Supply.	
	For Plains :	
	(a) All items except item No. 28.1 to 28.5 (a to e and f to i), 28.18 to 28.19 and 28.50	250% above.
	(b) Item No. 28.1 to 28.6 (a to e) & 28.18 to 28.19	300% above.
	(c) Item No. 28.1 to 28.6 (f to i)	300% above.
	(d) Item No. 28.50 (a) only	800% above.
	(e) Item No. 28.50 (b to e)	300% above.
29.	Sewerage and Drainage.	
	(a) Item No. 29.1, 29.2 and 29.25 to 29.51	280% above
	(b) Item No. 29.52 to 29.56	280% above
	(c) All other items except item No. 29.1, 29.2 and 29.25 to 29.56	375% above
30.	Sanitary Installation.	
	(a) All other items except item No. 30.53, 30.59, 30.84 to 30.94, & 30.114 (b) & (d)	250% above.
	(b) Item No. 30.84 to 30.86, 30.88 to 30.91	300% above
	(c) Item No. 30.87, 30.92 to 30.94	225% above
	(d) Item No. 30.53 and 30.59 (for estimation purpose)	250% above.
31.	Electrical Installation.	
	(a) Item No. 31.1 to 31.7, 31.19, 31.20, 31.35, 31.35, 130% above	130% above
	(b) Item No. 31.8 to 31.11	130% above.
	(c) Item No. 31.12 (a) Main switches, Category A type.	150% above.
	(d) Item No. 31.12 (a) & (b) Main Switches & BDBs (Category B & C only)	150% above.
	(e) Item No. 31.25 to 31.29	140% above.
	(f) Item No. 31.32	175% above
	(g) Item No. 31.13, 31.14 & 31.33	175% above
	(h) Item No. 31.21	175% above.
	(i) Item No. 31.24	180% above.
	(j) Item No. 31.22 All items, except 31.22 (iv, vi, x, xiii, xiv, xvii & xx) Copper work.	180% above
	(k) Item No. 31.22 (iv, vi, x, xiii, xiv, xvii & xx) Copper work.	300% above.
	(l) Item No. 31.23 All items except 31.23 (iv, vi to ix)	200% above.
	(m) Item No. 31.23 (iv, vi to ix) Copper Work	270% above.
	(n) Item No. 31.30 (Street light)	270% above.
	(o) Item No. 31.31 (copper bus bar chamber)	220% above

25.	(d) Item No. 13.18 (G.I. sheet roofing)	240% above	300% above.
14.	Flooring and Dadoes.		
	(a) All items except item No. 14.19 to 14.24 and 14.48 to 14.70	340% above	500% above
	(b) Items No. 14.19 to 14.24 (Brick flooring)	400% above	370% above
	(c) (i) Item No. 14.48 (a-i) & (b-i) Glazed Tiles	95% above	230% above.
	(ii) Item No. 14.48 (a-ii) & (b-ii) Glazed Tiles	95% above	120% above.
	(d) Item No. 14.49 to 14.52 (Marble Stone)	90% above	90% above.
	(e) Item No. 14.53	--	60% above.
	(f) Item No. 14.54 to 14.61 (Stones other than Kohah Stone)	125% above	125% above.
	(g) Item No. 14.62 to 14.66 (Kohah Stone items)	200% above	150% above.
	(h) Item No. 14.67 to 14.70 (Wooden flooring)	200% above	200% above.
15.	Plastering and Pointing.	340% above	340% above.
16.	Painting, Varnishing, White Washing/Dispersing.	125% above	140% above.
17.	Wood Work.	250% above	250% above.
	(a) Item No. 17.1 to 17.89	250% above	250% above.
	(b) Item No. 17.90 to 17.92 & 17.94 (Factory manufactured doors)	250% above	250% above.
	(c) Item No. 17.93 (Push door shutters)	150% above	160% above.
18.	Steel and Iron Work.	350% above	450% above.
	(a) Item No. 18.22	350% above	450% above.
	(b) Other items of steel work	--	350% above.
19.	Lining	325% above	350% above.
	(except item No. 18.22)	325% above	350% above.
	(a) All items except item No. 19.29 to 19.32	340% above	340% above.
	(b) Item No. 19.29 to 19.32	410% above	410% above.
20.	Outlets	410% above	410% above.
21.	Pile Foundations.	410% above	410% above.
22.	Well Sinking	325% above	325% above.
23.	River and Canal Protection Works.	325% above	325% above.
	(a) Item No. 23.39 only (dumping stone)	--	400% above.
	(b) Labour rate of items (except item No. 23.38 & 23.39)	--	300% above.
	(c) Through rate of all items except item 23.1 to 23.8, 23.10 to 23.37 and 23.39 to 23.47	325% above	325% above.
	(d) Item No. 23.38 (Wire cranes)	325% above	325% above.
24.	Road Work.	325% above	325% above.
	(a) Labour rate of all items.	--	310% above.
	(b) Through rate of item No. 24.34, 24.35 & 24.38 (Expansion joints and road cuts)	325% above.	325% above.
	(c) Item No. 24.36 (Barbed wire fencing)	300% above.	--
25.	Maintenance of Furniture.	175% above	215% above.

32.	Working Charges of Machinery	Not fixed	150% above
33.	Horticulture	Not fixed	150% above
34	Bearing of Bridges.	Not fixed	150% above
	(a) All items except Item No. 34.7, 34.10 & 34.11	Not fixed	150% above
	(b) Item No. 34.7 (Neoprene Bearing)	Not fixed	170% above
	(c) Item No. 34.10 & 34.11 (Expansion Joints)	Not fixed	170% above
	(p) Item No. 31.18, All items except 31.18 (xxx)	200% above	160% above
	(q) Item No. 31.18 (xxx) (Flush door shutter)	150% above	150% above
	(r) Item No. 31.34 All items except 31.34 (i to vi)	130% above	130% above
	(s) Item No. 31.34 (i to vi) - Rewinding items	200% above	200% above
	(t) Item No. 31.12 (c) & (d) 31.15 to 31.16	60% above	60% above
	(u) Item No. 31.17	30% above	30% above
	(v) Item No. 31.36 to 31.49 (i.c. newly added items)	10% above	10% above
	(w) Labour rate item 31.1 to 31.7, 31.21 (i) to (xxvi) and 31.36 to 31.39 (i.c. newly added items of copper wiring)	10% above	10% above

A.	Cement	Rs. 175.00 per bag of 50 Kgs. Cement including the cost of empty cement bag plus 3% storage charges.
	OPC-43 Grade Cement	
B.	Steel	Rs. 35,300/- Per MT plus 3% storage charges.
	Fe-500 TMT Steel bars.	

1. The revised premia are based on Fe-500 TMT Steel bars of the company's TISCO, SAIL, RINL or USCO.

2. In case department supplies the steel, recovery will be made on above rate.

3. In case steel is to be arranged by the agency and he is allowed to use Fe-500 TMT steel bars companies other than above but ISI marked, the deduction @ Rs. 5,000/- Per MT will be made.

END

AMENDMENT IN THE PREMIUM OF HARYANA SCHEDULE OF RATES CIRCULATED BY S.E. PWD B&R CIRCLE AMBALA, VIDE HR. GOVT. GAZETTE NOTIFICATION NO. SE/PWD/B&R/AMBALTA/C2/C2 DATED 3-7-2009 AND PUBLISHED IN NOTIFICATION ON 21-7-09 AS APPLICABLE FROM 3-7-2009.

The Direction Committee of Chief Engineers has approved the following new items inducted in various Chapters of Haryana PWD Schedule of Rates-1988 (2nd edition) and A&C slips No. 3, 4, 5 & 6 dated 3-7-2009. These new items will be applicable from the date of publication.

NEW ITEMS INDUCTED IN HSR-1988 (2nd EDITION)

(1) Civil Works

CHAPTER NO. 10

CONCRETE.

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
1				
2				
3				
4				
5				

HSR 10.157	Providing and laying 50mm thick interlocking paver blocks of all shapes and colours in design mix cement M-30 over a bed of 25mm thick fine sand complete in all respect.	Sqm	60.00	300.00
HSR 10.158	Providing and laying 60mm thick interlocking paver blocks of all shapes and colours in design mix cement M-35 over a bed of 25mm thick fine sand complete in all respect.	Sqm	60.00	350.00
HSR 10.159	Providing and laying 80mm thick interlocking paver blocks of all shapes and colours in design mix cement M-35 over a bed of 30mm thick fine sand complete in all respect.	Sqm	65.00	450.00

NOTE:- (i) Above rates are based on present day rates
(ii) No extra premium is allowed on these new items.

NEW ITEMS INDUCTED IN HSR-1988 (2nd EDITION)

(1) Civil Works

CHAPTER NO. 13

HOISTING AND ROOFING

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
1				
2				
3				
4				
5				

HSR 13.89	Providing & fixing PVC Rain Water pipe 6 kg. pressure of ISI mark in cement mortar during masonry work.	Mtr.	17.00	182.00
HSR 13.90	(a) 100 MM dia PVC pipe 6 kg. pressure (b) 150 MM dia PVC pipe 6kg. pressure	Mtr.	17.00	336.65
HSR 13.90	(a) 100 MM dia PVC Bend (b) 150 MM dia PVC Bend	each	23.40	97.40
HSR 13.91	Providing and fixing False Ceiling with 12 mm thick Gypsum Board fixed on M.S Steel runners with lapping, filling with Gypsum compound and frame 1/2 cost of screws angles, ravel plugs, applying putring coat, etc. complete in all respects.	Sqm.	65.00	165.40
HSR 13.92	Providing and fixing False Ceiling without grooves with 12mm to 15mm thick, 600mm x 600 mm level quality mineral fibre tiles of ungrooved	Sqm.	70.00	700.00

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
1				5
2				4
3				3
4				4
5				5
HSR 13.93	Providing and fixing False Ceiling with grooves with 12mm to 15mm thick, 600mm x 600mm best quality mineral fibre tiles of approved make fixed on M.S. Steel runners frame i/c cost of screws angles, cleats, rawel plugs, with taping and painting etc, complete in all respects as approved by the Engineer- In-Charge.	Sqm.	75.00	800.00
HSR 13.94	Providing & laying average 6mm thick POP Coating on walls, Ceiling, beams and lintels etc, complete in all respects as approved by the Engineer- In-Charge.	Sqm.	50.00	90.00
HSR 14.89	Providing and fixing vitrified tiles of size 600 x 600mm of approved make in flooring laid in any pattern as specified over base of 20 mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with the shade to tiles.	Sqm	188.80	924.30
HSR 14.90	Providing and fixing vitrified tiles of size 600 x 600 mm of approved make in sitting / dado laid in any pattern as specified over base of 12mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade to tiles.	Sqm	188.80	929.80
HSR 14.91	Pvdg & fixing ceramic tiles/sand sized tiles of size 400 mm x 400 mm or above size of approved make in flooring, laid in any pattern as specified over base of 20 mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of tiles.	Sqm	188.80	624.00
HSR 14.92	Providing and fixing 1st quality ceramic glazed wall tiles conforming to I.S. 15622 (thickness to be specified by the manu-facturer) of approved SOMANI, ORIENT & JOHNSONS.			

CHAPTER NO. 14
FLOORING AND DADOS

NEW ITEMS INDUCTED IN HSR-1988 (2nd EDITION)

(i) Civil Works

Note:- (i) Above rates are based on present day rates.
(ii) No extra premium is allowed on these new items.

1	2	3	4	5
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HSR 14.93	Sqm	141.60	501.75	
	Sqm	141.60	648.15	
	Sqm	188.80	295.10	
HSR 14.94	Sqm	188.80	270.65	
HSR 14.95	Sqm	300.00	390.00	
HSR 14.96	Sqm	280.00	370.00	

make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-In-Charge in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 course and jointed with grey cement slurry, including pointing in white cement mixed with pigment of matching shades complete.

a) Size of ceramic Glazed tiles 200x300mm
 b) Size of ceramic Glazed tiles 300x450mm
 Laying and fixing vitrified/ceramic and sild tiles of any size of approved make in floors laid in any pattern as specified over base of 20mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of tiles. (Tiles shall be supplied by the Department.)

Laying and fixing vitrified/ceramic/Glazed tiles of any size of approved make in skirting/ dados, pillars, wall facing, laid in any pattern as specified over base of 12mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of tiles. (Tiles shall be supplied by the Department.)

Laying and fixing Granite stone in all shades 15mm to 18mm thick in skirting/dado, risers of steps, pillars and wall facing, laid in any pattern as specified over base of 12mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of granite including labour for fixing cramps pins and dowels etc. (ex- cluding the cost of granite stone).
 Laying and fixing Granite stone in all shades 15 mm to 18mm thick in flooring, laid in any pattern as specified over base of 20mm thick cement course sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of granite stone. (Excluding the cost of granite stone).

Note:- (i) Above rates are based on present day rates.
 (ii) No extra premium is allowed on these new items.

NEW ITEMS INDUCTED IN HSR-1988 (2nd EDITION)

(i) Civil Works

CHAPTER NO. 16

PAINTING, VARNISHING, WHITE WASHING & DISTEMPERING

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
1				
2				
3				
4				
5				

HSR 16.79 Providing two coats of exterior acrylic emulsion paint.

(a) 2nd Quality	Sqm	6.30	26.85
(b) 1st Quality	Sqm	6.30	48.75

Note:- (i) Above rates are based on present day rates.
 (ii) No extra premium is allowed on these new items.

NEW ITEMS INDUCTED IN HSR-1988 (2nd EDITION)

(i) Civil Works

CHAPTER NO. 17
WOOD WORK

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
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1	Providing and fixing aluminium work for doors	Kg.	24.20	242.30
2	Providing and fixing aluminium work for doors	Kg.	24.20	242.30

Fixed portion (Anodised aluminium transparent or dyed to required shade according to IS:1868, minimum anodic coating of grade AC-15)

Providing and fixing aluminium work for doors windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS, 733 and IS:1285 fixed with rapplings and screws or with fixing clips or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required neoprene felt etc. aluminium sections shall be smooth, rust free straight mitered and jointed mechanically wherever required including clean angle. Aluminium snap heading for glazing/panelling C.P. brass/stainless steel screws, etc. complete.

Providing and fixing 12 mm thick pre-laminated particle board (at pressed three layer or graded wood particle board conforming to IS:12823 grade I type II in panelling fixed in aluminium doors, windows shutters and partition frames with c.p. brass/stainless steel screws etc. complete.

(a) Pre-laminated particle board with decorative lamination on one side & balancing lamination on both side.

(b) Pre-laminated particle board with decorative lamination on both side.

Note: (i) Add Rs.15/- per Kg. extra if powder coating of 50 micron is done instead of anodizing in above item No. 9 & 10.

(ii) Add Rs.20/- per Kg. extra if polyester powder coating of 50 micron is done instead of anodizing in above item No. 9 & 10.

HSR 17.97	Providing and fixing 12 mm thick pre-laminated particle board (at pressed three layer or graded wood particle board conforming to IS:12823 grade I type II in panelling fixed in aluminium doors, windows shutters and partition frames with c.p. brass/stainless steel screws etc. complete.	Sqm	52.60	745.65
	(a) Pre-laminated particle board with decorative lamination on one side & balancing lamination on both side.	Sqm	52.60	780.30
	(b) Pre-laminated particle board with decorative lamination on both side.	Sqm	52.60	780.30

1	2	3	4	5
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HSR Item No.	Description	Unit	Labour Rate	Through Rate
HSR 17.98	Providing and fixing glazing in aluminium door windows, ventilator shutters etc. with pvc/propene gasket etc. complete (cost of aluminium snap beading shall be paid in basic items).			
HSR 17.99	(a) With float glass panes of 4.0mm thickness. (b) With float glass panes of 5.0mm thickness. Providing and fixing double action hydraulic floor spring of approved brand and manufacture 15 : 63 L5 marked for doors including cost of cutting doors as required embedding in floors and cover plates with brass pivot and single piece M.S. sheet outer box.	Sqm	96.60	7011.00
HSR 17.100	(a) With Stainless Steel cover plate. (b) With brass cover plate. Providing aluminium jali of thickness 7mm thick with opening-75mm x 75mm of including mounting and fixing in frame with cost of screws etc. complete.	Each	69.00	1671.50
HSR 17.101	Providing fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.	Each	69.00	1339.50
HSR 17.102	(i) Anodized (AC-15) Aluminium Powder coated minimum thickness 50 micron aluminium. (ii) Polyester powder coated minimum thick-ness 50 micron aluminium. (iii) Polyester powder coated minimum thick-ness 50 micron aluminium.	Each	43.00	52.30
HSR 17.102	Providing fixing aluminium round shape handle of outer dia 100 mm with screws etc. complete.	Each	43.00	49.95
HSR 17.102	(i) Anodized (AC-15) Aluminium Powder coated minimum thickness 50 micron aluminium. (ii) Polyester powder coated minimum thick-ness 50 micron aluminium. (iii) Polyester powder coated minimum thick-ness 50 micron aluminium.	Each	37.20	45.30

Note:- (i) Above rates are based on present day rates.
(ii) No extra premium is allowed on these new items.

NEW ITEMS INTRODUCED IN HSR-1988 (2nd EDITION)
Civil works
CHAPTER NO. 21
PILE FOUNDATIONS

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
HSR 21.04	Bored cast-in-situ M35 grade RCC pile excluding Reinforcement complete as per Drawing and Technical Specification and removal of excavated earth with all lift and haul.			

1	2	3	4	5
		Mtr	--	5638.00
		Mtr	--	6433.00

Note:- (i) Above rates are based on present day rates.
 (ii) No extra premium is allowed on these new items.

NEW ITEMS INDUCTED IN HSR-1988 (2nd EDITION)
 (iii) Public Health Services

CHAPTER NO. 28
WATER SUPPLY

Note:- (i) Notes and foot notes already existing in chapter No.28 would be applicable to these items also.
 (ii) The pipe lines laid should be measured excluding length of specials.
 (iii) Alterations in the makes for items (wherever provided) will be made by Direction Committee of Chief Engineer from time to time.

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
1				5
2				3
3				4
4				5

HSR 28.13(A) Providing and fixing CAST IRON KINETIC AIR VALVES CONFORMING TO AND MARKED WITH IS:14845; including carriage, loading, unloading stacking, handling, re-handling etc. drilling, tapping, screwing in valves connections complete in all respects to the satisfaction of Engineer-in-Charge.

80mm /d.	Each	157.00	2824.00
100mm /d.	Each	157.00	3098.00
150mm /d.	Each	174.00	7514.00
200mm /d.	Each	174.00	13267.00

HSR 28.10(A)

Providing and fixing CAST IRON DOUBLE FLANGED SWING CHECK TYPE REFLEX (NON-RETURN) VALVES PN-1.6 MARKED WITH IS: 5312 including nuts and bolts marked with IS: 1363, Rubber sheet marked with IS:638 etc. carriage loading, unloading, stacking handling, Re-handling etc. Complete in all respect to the satisfaction of Engineer-in-Charge (Makes AARICO, VENUS, LEADER, BIR, PANJA, UPADHAY)

80mm /d.	Each	60.00	2485.00
100mm /d.	Each	68.00	3362.00
150mm /d.	Each	94.00	5638.00
200mm /d.	Each	100.00	9142.00
250mm /d.	Each	134.00	14032.00
300mm /d.	Each	134.00	17008.00
350mm /d.	Each	134.00	34630.00
400mm /d.	Each	141.00	40933.00
450mm /d.	Each	141.00	49547.00
500mm /d.	Each	141.00	78296.00
600mm /d.	Each	141.00	102991.00

1	2	3	4	5
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HSR 28.51

Providing and fixing RUBBER SHEET 3 mm THICK MARKED WITH IS:638 for joining of flanged pipes, specials etc. including making of holes etc. complete in all respect to the satisfaction of Engineer-in-Charge.

Each	11.00			
Each	13.00			
Each	21.00			
Each	27.00			
Each	36.00			
Each	45.00			
Each	57.00			
Each	68.00			
Each	83.00			
Each	99.00			
Each	132.00			

HSR 28.52

Supplying GI PIPES CLASS B MARKED WITH IS:1239 IN 3.05 M LENGTH, their threading and welding with flanges (Heavy Duty) on both sides, joining with nuts and bolts marked with IS:1363, rubber gaskets, marked with IS:638 JOINTING WITH PUMPING MACHINERY AND LOWERING INTO TUBEWELLS and testing including carriage, loading, unloading etc. complete in all respect to the satisfaction of Engineer-in-Charge.

50mm I/d	Each	287.00	1086.00
63mm I/d	Each	287.00	1270.00
80mm I/d	Each	330.00	1618.00
100mm I/d	Each	342.00	2146.00

HSR 28.53

Providing and fixing BRASS/GUN METAL FERRULES BY DRILLING AND TAPPING A.C./PVC PIPE LINES of all diameters and connections including cost of M.S. Clamps (Heavy) with welded socket/Stubble piece including carriage, loading, unloading etc. complete in all respects to the satisfaction of Engineer-in-Charge. (Excavation will be paid separately.)

6mm I/d ferrule on 50mm I/d pipes	Each	44.00	211.00
6mm I/d ferrule on 80mm I/d pipes	Each	44.00	245.00
6mm I/d ferrule on 100mm I/d pipes	Each	44.00	273.00
10mm I/d ferrule on 80mm I/d pipes	Each	44.00	234.00
10mm I/d ferrule on 100mm I/d pipes	Each	44.00	244.00
10mm I/d ferrule on 150mm I/d pipes	Each	44.00	308.00

HSR 28.54

Providing and fixing IN BRASS/GUN METAL FERRULES BY DRILLING AND TAPPING CAST IRON/D.I./G.I PIPE LINES of all diameters and making connections including carriage, loading, unloading etc. complete in all respects to the satisfaction of Engineer-in-Charge. (Excavation will be paid separately.)

1	3	Each	44.00	154.00	484.00
2	4	Each	44.00	154.00	484.00
3	5	Each	44.00	154.00	484.00

HSR 28.55 Providing and packing ASBESTOS CLAND 10mm i/d ferrule
 PACKING of best quality in pumps and valves etc. complete in all respects to the satisfaction of Engineer-in-Charge. (Make : TURNER, CHARMINAR, CHAMPION)

HSR 28.56 Providing and fixing Cast Iron Detachable Joints class-15 marked with IS:8794 for use with A.C/P.V C/CI pipes complete with 2 nos. rubber rings marked with IS:5382 & IS:10292 and appropriate number of nut and bolts marked with IS:1363 including carriage, loading, unloading etc. complete in all respects to the satisfaction of Engineer-in-Charge. (Excavation will be paid separately)

Each	177.00
Each	220.00
Each	360.00
Each	360.00
Each	364.00
Each	731.00
Each	888.00

HSR 28.57 Providing and fixing Cast Iron Detachable Joints class-25 marked with IS:8794 for use with asbestos cement pressure pipes complete with 2 nos. rubber rings marked with IS:5382 & IS:10292 and appropriate number of nut and bolts marked with IS:1363 including carriage, loading, unloading etc. complete in all respects to the satisfaction of the Engineer-in-Charge (Excavation will be paid separately)

Each	215.00
Each	270.00
Each	440.00
Each	622.00
Each	816.00
Each	1014.00

HSR 28.58 Providing and fixing fabricated PVC (UNPLASTICISED POLY VINYL CHLORIDE COUPLERS) (4kg/cm²) on PVC pipes used for portable water supply IS-4985 : 1988 including cost of adhesive, carriage, loading, unloading etc. complete in all respects to the satisfaction of the Engineer-in-Charge (Excavation will be paid separately)

Each	25.00
Each	35.00
Each	75.00
Each	184.00
Each	53.00

HSR 28.59 Providing and fixing DUCTILE IRON DOUBLE SEAL MANHOLE COVERS AND FRAMES

Each	25.00
Each	35.00
Each	75.00
Each	184.00
Each	53.00

Size : 90mm O/D
 Size : 110mm O/D
 Size : 160mm O/D
 Size : 200mm O/D

1	2	3	4	5
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OF 610MMx610MM with locking arrangement on clear water tanks including cost of setting in Cement concrete 1:2:4 to correct alignment and levels including curage, loading, unloading etc. Engineer-in-Charge

Note:- (i) Above rates are based on present day rates.

(ii) No extra premium is allowed on these new items.

NEW ITEMS INDUCTED IN HSR-1988 (2nd EDITION)

CHAPTER NO. 29

SEWORAGE AND DRAINAGE

Note:- (i) Rates and foot notes already existing in chapter No.29 would be applicable to these items also.

(ii) The length of sewer lines should be measured excluding length of manholes/inspection chambers.

Additional HSR Item No.	Description	Unit	Labour	Through Rate
1				
2				
3				
4				
5				

(*To replace existing HSR Item 29.28)

Providing, lowering, laying, cutting (cut surface to be uniformly finished) joining with rubber rings marked with IS:5382 and testing of SPICOT AND SOCKETED RCC NP2 MARKED WITH IS:458-1988 and specials into trenches for all depths including curage, loading, unloading, stacking, handling, re-handling etc. complete in all respects to the satisfaction to the Engineer-in-Charge.

HSR 29.29

200 mm /d	Per mtr.	16.00	270.00
250 mm /d	Per mtr.	18.00	304.00
300 mm /d	Per mtr.	23.00	414.00
350 mm /d	Per mtr.	27.00	511.00
400 mm /d	Per mtr.	35.00	607.00
450 mm /d	Per mtr.	40.00	700.00
500 mm /d	Per mtr.	43.00	797.00
600 mm /d	Per mtr.	54.00	1061.00
700 mm /d	Per mtr.	72.00	1458.00
800 mm /d	Per mtr.	93.00	1700.00
900 mm /d	Per mtr.	114.00	1944.00
1000 mm /d	Per mtr.	141.00	2342.00
1200 mm /d	Per mtr.	186.00	2937.00
1400 mm /d	Per mtr.	210.00	3400.00
1600 mm /d	Per mtr.	230.00	3900.00

HSR 29.34

Providing and fixing SFRCC MANHOLE COVERS AND FRAMES MARKED WITH IS: 12592 including setting the same to correct lines and levels in 1:2 cement sand mortar over manhole including

1	2	3	4	5
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carriage loading, unloading stacking handling re-handling etc, complete in all respects to the satisfaction of Engineer-in-Charge.

1200.00	149.00	Each	Type : Extra Heavy Duty Set (EHD-35) 560 MM Clear Opening.
1100.00	136.00	Each	Type : Extra Heavy Duty Set (HD-20) 560 MM Clear Opening.
800.00	75.00	Each	Type : Extra Heavy Duty Set (MD-10) 560 MM Clear Opening.

Providing SALT GLAZED STONE WARE
PIPES GRADE 'A' IN STANDARD LENGTH
OF 600MM EACH PIPE MARKED WITH
IS:651 and their lowering, cutting, joining and
testing as described in HSR item No. 29.38, 29.39,
29.40 including the cost of joining materials as
well as cartilage, loading, unloading, stacking,
handling, re-handling etc, complete in all respects
to the satisfaction to the Engineer-in-Charge.

128.00	Per mtr.	100 mm I/d
199.00	Per mtr.	150 mm I/d
253.00	Per mtr.	200 mm I/d
386.00	Per mtr.	250 mm I/d
560.00	Per mtr.	300 mm I/d
976.00	Per mtr.	350 mm I/d
1428.00	Per mtr.	400 mm I/d
1894.00	Per mtr.	450 mm I/d
3028.00	Per mtr.	500 mm I/d
4217.00	Per mtr.	600 mm I/d

Note:- (i) Above rates are based on present day rates.
(ii) No extra premium is allowed on these new items.

NEW ITEMS INTRODUCED IN HSR-1988 (2nd EDITION)
CHAPTER NO. 30
SANITARY INSTALLATIONS

Note:- (i) Notes and foot notes already existing in chapter No.30 would be applicable to these items also.
(ii) Alterations in the makes for items (Wherever provided) will be made by the Direction Committee of Chief Engineer from time to time.

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
1				
2				
3				
4				
5				

HSR 30.119 Providing and fixing HDPE WATER STORAGE TANKS of Sinlex, Diplas, O.K. Supreme make with covers/lids marked with IS:12701 on rooftop of buildings including cost of hoisting and placing in position, making connections with inlet and outlet pipes, providing overflow and scour provisions with suitable plug on scour pipe including cost of nipples, washers, flanges for connections in tanks complete in all respects to the satisfaction to the Engineer-in-Charge.(Except civil work).

NEW ITEMS INDUCTED IN HSR-1988 (2nd EDITION)

CHAPTER NO. 31

ELECTRICAL INSTALLATIONS

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
1	200 ltr. capacity	Each	122.00	1134.00
2	300 ltr. capacity	Each	122.00	1640.00
3	500 ltr. capacity	Each	152.00	2682.00
4	700 ltr. capacity	Each	174.00	3716.00
5	1000 ltr. capacity	Each	203.00	5263.00
6	1500 ltr. capacity	Each	243.00	7835.00
7	2000 ltr. capacity	Each	304.00	10424.00
8	3000 ltr. capacity	Each	304.00	15484.00
9	5000 ltr. capacity	Each	608.00	25908.00

Note:- (i) Above rates are based on present day rates.
 (ii) No extra premium is allowed on these new items.

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
1	Supply and erection of weather proof MS box size 20cm x 30cm x 10cm of 16G and covered with MS sheet hinged cover having locking arrangement housed in 1:2:4 CC muff of size 40cm dia 55cm high including cost of PVC pipe of suitable size for incoming and outgoing cable, 4 copper bars of size 20mm x 3mm, 125mm duty dyed, insulated and supported with porcelain insulator, 2 No. 16A 416V kit-cut fixed in the MS box including painting etc, complete the job in all respect up to the entire satisfaction of Engineer-in-Charge of work.	Each	890.00	995.00
2	Supply and erection of MS stand made of 50mm x 50mm x 6mm angle iron frame and 150 cm long, 30cm wide with MS sheet covering size 30cm x 30 cm, 3.15mm thick fixed on the top of board & legs duly embedded in 1:2:4 cement concrete block 30cm below ground level including the cost of cement sand, welding, painting & lubrication charges etc. upto the entire satisfaction of Engineer-in-charge of the work.	Each	6000.00	6000.00

HSR 31.50

HSR 31.51

HSR 31.52

Supply and erection 3 stepped steel tubular pole (sawged type) 7 meters long single bracket level duly embedded 1.25 m below ground level conforming to 410-SP-3 of IS : 2713 (part II) 1980, welded with mild steel base plate of size 30cm x 30cm x 6mm thick including erection of pole in concrete and a platform 10cm thick to the size of base plate at the bottom and 1mt. long 40mm dia GI bracket, 300mm MS sleeve & MS bracing nut and bolt etc. bracket fixed with suitable size of mild steel nipple (minimum 10cm in the bracket)

1
2
3
4
5

to hold the fitting including painting etc. complete the job in all respect up to the entire satisfaction of Engineer-in-Charge of work.

HSR 31.53

Each

600.00

Supply and erection of 50mm diameter 1.5 mtr long GI bracket (B-Class) making an angle 10 to 15 degree with horizontal plane for mounting size light fitting on GI bracket on wall with 2 Nos. 50 mm x 3mm thick MS flat including cost of cutting welding of GI pipe complete with cement sand mixture bolts and nuts etc. including making necessary connection with all labour and material required to complete the job in all respect up to the entire satisfaction of Engineer-in-Charge of the work.

HSR 31.54

Each

1740.00

Supply and erection of surge light luminaires 2x28

watts energy saving fitting suitable for two Nos. 28 watts T-5 tube including the cost of standard accessories as supplied by the manufacturer with the fitting and cost of two nos. 28 watts tube rod including the erection of fitting and making necessary connection with required material to complete the job in all respect.

HSR 31.55

Each

195.00

Supply and erection of socket size rotary

step type Electronic regulator for A.C. ceiling fan Anchor make Deluxe model No.50440 151/55K make PC 561 operated on 120/280V.A.C. Supply complete including cutting of existing bakelite sheet and making necessary connection etc. upto the entire satisfaction of the Engineer-in-Charge of the work.

HSR 31.56

Providing and fixing modular type accessories of approved make in existing box including fixing and making necessary connections, complete in all respect.

10 amp 1 way switch

Each

87.00

10 amp 2 way switch

Each

100.00

20 amp switch

Each

116.00

10 amp Socket

Each

106.00

16 amp Socket

Each

165.00

Bell Push

Each

102.00

Fun Regulator

Each

397.00

Cell bell Ding-Dong (Monica)

Each

99.00

Blinking plate

Each

25.00

Providing and fixing GI concealed sheet metal boxes with inner and outer face plate including concealing the box in wall and fixing in position with inner plate and face plate-with all labour and material required for the job complete in all respect.

HSR 31.57

Each

111.00

1 & 2 Modules

1	2	3	4	5
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HSR 31.58	3 Modules	Each	128.00	
	4 Modules	Each	148.00	
	6 Modules	Each	214.00	
	8 Modules	Each	269.00	
	12 Modules	Each	336.00	

Supply and erection of PVC pipe ISI marked (Medium) recessed in wall/ceiling etc, including the cost of PVC bends, inspection boxes, iron hooks and cement concrete etc, complete in all respect upto the entire satisfaction of Engineer-in-Charge of work.

HSR 31.59	PVC pipe of 32 mm dia	Mtr	45.00	
	PVC pipe of 40 mm dia	Mtr	56.00	

Supply and joining three core flat cables of Finolex, Polycab, Ecoo & Bunton with bare bunched copper conductor insulated and sheathed with PVC for submersible pump motors with voltage grade 110 volts marked with IS:694, 1990 including cost of joining, materials as well as curing, loading, unloading etc, complete in all respect upto the entire satisfaction of Engineer-in-Charge.

	CAPACITY OF MOTOR : 7.50 KW TO 11.00 KW Size of Cable 2.5 Sq.m (copper)	Mtr	2.00	70.00
	CAPACITY OF MOTOR : 11.00 KW TO 13.00 KW Size of Cable 4.00 Sq.m (copper)	Mtr	2.00	100.00
	CAPACITY OF MOTOR : 13.00 KW TO 22.00 KW Size of Cable 6.00 Sq.m (copper)	Mtr	2.00	150.00
	CAPACITY OF MOTOR : 22.00 KW TO 36.00 KW Size of Cable 10.00 Sq.m (copper)	Mtr	2.00	240.00
	CAPACITY OF MOTOR : 50.00 KW TO 60.00 KW Size of Cable 25.00 Sq.m (copper)	Mtr	3.00	1000.00

Note:- (i) Above rates are based on present day rates.
 (ii) No extra premium is allowed on these new items.

NEW ITEMS INDUCTED IN HSR-1988 (2nd EDITION)

(i) CIVIL Works

CHAPTER NO. 34

BEARING FOR BRIDGES

Additional HSR Item No.	Description	Unit	Labour Rate	Through Rate
1				
2				
3				
4				
5				

Supplying, fitting and fixing in position true to line and level POT-PIPE bearing consisting of a metal piston supported by a disc or unreinforced elastomer confined within a metal cylinder, sealing rings, dust seals, PIPE surface sliding against stainless steel making surface, complete assembly to be of cast steel/fabricated structural steel, metal and elastomer elements to be as per IRC : 83 Part-

MT (Load) -- 125.00

(#10)

1	2	3	4	5
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1 & 11 respectively and other parts conforming to BS-5400, Section 9.1 & 9.2 and clause 2006 of NORTH Specification complete as per drawing and approved Technical Specifications.

Mtr

8000.00

HSR 34.13

Providing and laying single strip expansion joint catering to maximum horizontal movement upto 70 mm, complete as per MORT & H specification No. 2607 to be installed by the manufacturer/supplier or their authorized representative ensuring compliance to the manufacturer's instructions for installation.

Note:- (i) Above rates are based on present day rates.
(ii) No extra premium is allowed on these new items.

**THE FOLLOWING AMENDMENTS ARE MADE IN THE ANALYSIS OF RATE
OF HARYANA SCHEDULE OF RATES 1988 (2nd EDITION)**

A & C slip No. CZC-3
dated 3-7-2009

Existing A & C Slip No. CZC-1 dated 5-1-2007			Amended as Under							
Sr. No.	Page No.	HSR Item No.	Description.	Unit	Labour Rate.	Through Rate	Description.	Unit	Labour Rate	Through Rate
1	2	3	4				5			
CHAPTER NO.10										
1.	46	10.67	Design mix cement concrete of grade M-30 with minimum cement contents 420 Kg/cum in foundation and plinth.	Cum	83.00	759.20	Design mix cement concrete of grade M-30 with minimum cement contents 420 Kg/ cum in foundation and plinth.	Cum	83.00	790.00
2.	46	10.68	Design mix cement concrete of grade M-35 with minimum cement contents 420 Kg/ cum in foundation and plinth.	Cum	85.00	784.70	Design mix cement concrete of grade M-35 with minimum cement contents 430 Kg/ cum in foundation and plinth.	Cum	85.00	810.00
3.	46	10.69	Design mix cement concrete of grade M-40 with minimum cement contents 420 Kg/ cum in foundation and plinth.	Cum	87.00	806.70	Design mix cement concrete of grade M-40 with minimum cement contents 440 Kg/ cum in foundation and plinth.	Cum	87.00	830.00
4.	47	10.74	Design mix cement concrete of grade M-30 with minimum cement contents 420 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	89.25	765.50	Design mix cement concrete of grade M-30 with minimum cement contents 420 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	89.25	796.25
5.	47	10.75	Design mix cement concrete of grade M-35 with minimum cement contents 420 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	91.25	791.00	Design mix cement concrete of grade M-35 with minimum cement contents 430 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	91.25	816.25
6.	47	10.76	Design mix cement concrete of grade M-40 with minimum cement contents 420 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	93.25	812.90	Design mix cement concrete of grade M-40 with minimum cement contents 440 Kg/ cum in first storey upto 4 metres above plinth level.	Cum	93.25	836.25

Note:- (i) Existing ceiling premium will be applicable on HSR Item No. 10.66 to 10.69 and 10.73 to 10.76
(ii) No extra payment should be made to the agency for use of Batch mixer, Transit mixer, Belt conveyor and overhead crane.

ADDENDA CORRIGENDA TO THE ANALYSIS OF RATES OF HARYANA PWD SCHEDULE OF RATES 1988 (2nd EDITION)

A & C slip No. CZC-4
dated 3-7-2009

The following amendments be made in analysis of rate of Haryana PWD Schedule of Rates 1988.

Amended as Under

Sr. No.	Page No.	HSR Item No.	Description.	Unit	Labour Rate	Through Rate	Description.	Unit	Labour Rate	Through Rate
CHAPTER NO.10										
1.	46	10.66	Design mix concrete of grade M-25 with minimum cement contents 405 Kg/cum in foundation and plinth.	Cum	82.00	772.75	Design mix concrete of grade M-25 with minimum cement contents 410 Kg/ cum in foundation and plinth.	Cum	82.00	780.00
2.	46	10.73	Design mix cement concrete of grade M-25 with minimum cement contents 405Kg/ cum in first storey upto 4 meters above plinth level.	Cum	88.25	779.00	Design mix cement concrete of grade M-25 with minimum cement contents 410 Kg/ cum in first storey upto 4 meters above plinth level.	Cum	88.25	786.25

Note:- (i) Existing ceiling premium will be applicable on HSR Item No. 10.66 to 10.69 and 10.73 to 10.76.
(ii) No extra payment should be made to the agency for use of Batch mixer, Transit mixer, Belt conveyer and overhead crane.

ADDENDA CORRIGENDA TO THE ANALYSIS OF RATES OF HARYANA PWD SCHEDULE OF RATES 1988 (2nd EDITION)

A & C slip No. CZC-5
dated 3-7-2009

The following amendments be made in analysis of rate of Haryana PWD Schedule of Rates 1988.

Amended as Under

Sr. No.	Page No.	HSR Item No.	Description.	Unit	Labour Rate	Through Rate	Description.	Unit	Labour Rate	Through Rate
CHAPTER NO.18										
1.	125	18.22	Cold twisted deformed (ribbed/lor steel) bars for RCC works, where not including in the complete rate of RCC including bending, binding and placing in position complete.	Qt.	49.55	917.05	Fe-500 EQR TMT steel bars for bars RCC, works, where not including in the complete rate of RCC including bending, binding and placing in position complete.	Qt.	49.55	917.05

ADDENDA CORRIGENDA TO THE ANALYSIS OF RATES OF HARYANA PWD SCHEDULE OF RATES 1988 (2nd EDITION)
The following amendments be made in analysis of rate of Haryana PWD Schedule of Rates 1988.

A & C slip No. CZC-6
dated 3-7-2009

Sr. No.	Page No.	HSR Item No.	Already existing in HSR-1988 (2nd Edition)			Replaced/ Amended as Under					
			Description.	Unit	Labour Rate	Through Rate	Description.	Unit	Labour Rate	Through Rate	
CHAPTER NO.28											
1.	174	38.8	4								
			Joining A.C./P.V.C Pipes and specials with cast iron/P.V.C Detachable joints fitted with bolts and nuts excluding cost of detachable joints, rubber rings, bolts and nuts but including cost of labour and tools ETC. and tested complete.	Each	2.85			Joining A.C./P.V.C Pipes and specials with cast iron detachable joints/split coupler P.V.C. joint fitted with bolts and nuts excluding cost of detachable joints/split coupler P.V.C. joints rubber rings bolts and nuts but including cost of labour and tools etc. and tested complete.	Each	2.85	
			a) 50 mm	Each	3.60			a) 50 mm	Each	3.60	
			b) 80 mm	Each	4.45			b) 80 mm	Each	4.45	
			c) 100 mm	Each	6.00			c) 100 mm	Each	6.00	
			d) 125 mm	Each	7.35			d) 125 mm	Each	7.35	
			e) 150 mm	Each	9.15			e) 150 mm	Each	9.15	
			f) 200 mm	Each	11.00			f) 200 mm	Each	11.00	
			g) 250 mm	Each	12.95			g) 250 mm	Each	12.95	
			h) 300 mm	Each				h) 300 mm	Each		
HSR 28.10			Extra for fixing sluice valves/flap valves socketed for flanged, including cartage from stores or nearest railway station to site of work.					Providing and fixing cast iron double flanged sluice valves PN-1.6 marked with IS : 14846 including nuts and bolts marked with IS : 1363. Rubber sheet marked with IS : 638 etc. cartage loading, unloading, stacking, handling, Re-handling etc. complete.			

Sl. No.	Page No.	HSR Item No.	Already existing in HSR-1988 (2nd Edition)			Replaced/ Amended as Under					
			Description.	Unit	Labour Rate	Through Rate	Description.	Unit	Labour Rate	Through Rate	
1	2	3	4								
CHAPTER NO.28											
			a) 80 mm i/d b) 100 mm i/d c) 150 mm i/d d) 200 mm i/d e) 250 mm i/d f) 300 mm i/d g) 350 mm i/d h) 400 mm i/d i) 450 mm i/d j) 500 mm i/d k) 600 mm i/d	Each Each Each Each Each Each Each Each Each Each Each	10.20 11.85 16.60 19.25 26.10 28.40 31.30 34.30 39.85 45.55 56.00			a) 80 mm i/d b) 100 mm i/d c) 150 mm i/d d) 200 mm i/d e) 250 mm i/d f) 300 mm i/d g) 350 mm i/d h) 400 mm i/d i) 450 mm i/d j) 500 mm i/d k) 600 mm i/d	Each Each Each Each Each Each Each Each Each Each Each	60.00 68.00 94.00 100.00 134.00 134.00 134.00 134.00 134.00 141.00 141.00	2573.00 3698.00 5709.00 9945.00 15589.00 18944.00 30395.00 41120.00 48981.00 66911.00 95126.00
	HSR 28.10 (A)		NOT EXISTING					Providing & fixing Cast iron double flanged swing check type reflux (non return) valves PN-1.6 marked with IS : 5312 including nuts and bolts marked with IS : 1363, Rubber sheet marked with IS : 638 etc. carriage loading, unloading, stacking handling, re-handling etc. complete in all respect to the satisfaction of Engineer in-Charge (Makes AARKO, VENUS, LEADER, BIR, PANIA, UPADHAY.			

Sr. No.	Page No.	HSR Item No	Already existing in HSR-1988 (2nd Edition)			Replaced/ Amended as Under					
			Description.	Unit	Labour Rate	Through Rate	Description.	Unit	Labour Rate	Through Rate	
1	2	3	4								
CHAPTER NO.28											
3	175	HSR 28.13	Extra for fixing double air valves all sizes including cartage from divisional stores or nearest railway station to Site of Work.	Each	10.00			Providing and fixing cast iron double air valves of sizes given below marked with IS: 14845 including cartage, loading, unloading, stacking, handling, re-handling etc. drilling, tapping, screwing in valves connections complete in all respect to the satisfaction of Engineer-in-Charge.	Each	157.00	1883.00
								65 mm i/s	Each	157.00	2103.00
								80 mm i/d	Each	157.00	2491.00
								100 mm i/d	Each	157.00	
								HSR 28.13 (A)			
								Providing and fixing cast iron kinetic air valves of size given below marked with IS: 14845 including cartage, loading, unloading, stacking, handling, re-handling etc. drilling, tapping, screwing in valves connections complete in all respect to the satisfaction of Engineer-in-Charge.	Each	157.00	2824.00
								80 mm i/d	Each	157.00	3098.00
								100 mm i/d	Each	174.00	7514.00
								150 mm i/d	Each	174.00	
								200 mm i/d	Each	174.00	13267.00
			NOT EXISTING								
4		HSR 28.13 (A)									

Sr. Page HSR			Already existing in HSR-1988 (2nd Edition)			Replaced/ Amended as Under				
No.	No.	Item No	Description.	Unit	Labour Rate	Through Rate	Description.	Unit	Labour Rate	Through Rate
1	2	3	4				5			
CHAPTER NO.29										
3	187	HSR 29.28	Fixing C.I. or Malleable iron step including carriage from stores of the Engineer-in-Charge to the site of works and setting the same to correct lines and levels in the work embedded in 1 : 2 cement and sand mortar.	Each	1.05		Providing and fixing steel bar embedded plastic steps of size 203 mm x 165 mm of orange colour, conforming to specifications, in pump chambers, manholes etc., having minimum 3 mm thick Polypropylene polymer conforming to IS : 10910 encapsulated on 12 mm dia ribbed steel bars per IS : 1786. The rate include cost of setting the same to correct lines and levels duly embedded in 1 : 2 : 4 cement concrete including carriage, loading, unloading, stacking, handling, re-handling etc. complete in all respect to the satisfaction of Engineer-in-Charge.	Each	8.50	90.00

(417)

NEW ITEMS INTRODUCED IN HARYANA PWD
 SCHEDULE OF RATES-1988 (and EDITORIAL CIVIL WORKS
 vide SE/PWD/B&R Br. Ambala Circle Notification No.
 SE/PWD B&R Ambala CZC/7 dated 10-5-2010.
 CHAPTER NO. 6
 EARTH WORK

Additional ISR Item No.	Description	Unit	Rate (Rs.)
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MSR (1.2(1)) Where work would be got executed manually & departmentally by employing local household labourer demanding employment under various assured employment guarantee schemes. Earth work excavation in ordinary soil exclusive of compensation of earth :-

1. (i) Cassi work undressed by, owing an average horizontal throw upto 2 metres, and an average vertical lift upto 0.5 metres including breaking of clods.

2. (ii) Earth work undressed with a combined lead upto 15 metres including breaking of clods.

3. (iii) Lead :-
 Extra for every 7.5 metres additional lead beyond 15 metres, but upto 60 metres by manual mean.

MSR-6.5(i) Where work would be got executed manually and departmentally by employing local household labourer demanding employment under various assured employment guarantee schemes. Gravel (in loose form in non-cohesive binding material) work in excavation with occasional use of picks, exclusive of compensation of earth, undressed with a combined lead upto 15 metres, with percentage of gravel or knikar.

4. (i) Exceeding 40 percent, but upto 60 percent. --do-- 1050.85

5. (ii) Exceeding 60 percent, but upto 80 percent. --do-- 1274.50

6. (iii) Exceeding 80 percent, but upto 100 percent. --do-- 1425.00

7. (iv) Lead :-
 Extra for every 7.5 metres additional lead. --do-- 82.10

Note:- 63.5% premium will be allowed on these new items.

The Engineer-in-Chief,
 Hurayana, PW (B&R) Department,
 Minnan Sadan, Plot No. 1, Sector-33-A, Chandigarh.

From

To

All the Superintending Engineers,

Haryana, PW (B&R) Department,

Ambala/Chandigarh/Bhawan/Curgaoon

Hisar/Rohat/Kewari/Jhajjar/Kaithal/Karnal/NH Jind,

SE, Elect. Karnal/SE Mech. Karnal/Director Research Lab. Hisar.

Memo No. : 5876-90

Dated Chandigarh the 07.10.2010

14.10.2010

Subject :- Plinth area rates to be provided for various types of Buildings.

Reference :- This office Memo No. 3711-36 dated 10/6/2008.

The rates of materials and Labour have further been increased since revision of Plinth area rates vide letter under reference. Therefore it has been decided to increase the plinth area rates. The following plinth area rates should be provided to preparation of rough cost estimates in future.

Plinth area rates:-

Sr. Description of Building	Plinth area rates	Services.
No.	(in Sqm)	Provision for E.I
		Civil work P.H. Internal P.H. Estate
		per sqm. Services Internal & Estate
		services (per sqm.)

1. MEDICAL BUILDINGS		8% for rural	8% for rural area	8% for rural area
a) Hospitals				
b) Community Health Centres	9960/-	10%	5% for urban	Provision for E.I
c) Primary Health Centres			area.	Internal and estate
Sub Health centres, Rural			services may be	made as per plinth
Family Welfare Centres & ESI			area	rates supplied by
Dispensaries			SE (Elect.) Karnal	vide memo No.
2. EDUCATIONAL BUILDINGS				1590 dated
a) Colleges		8% for	27.11.2009	(enclosed as
b) Schools (Urban)			rural area	Annexure 'A')
c) Schools (Rural)	8930/-	5%	5% for urban	area.
d) Library Buildings	9800/-	15%		
e) Hostels				
f) Cycle Stands	7200/-			
g) Connecting passages.	7080/-			
3. TECHNICAL EDUCATIONAL BUILDINGS				
a) Engineering Colleges	10500/-	7.5%	8% for	
Politechnics			rural area	
b) I.T.I's	8400/-	7.5%	5% for urban	
c) Science Blocks	9720/-	10%	area	
d) Concretes		10%		
e) Mess/Dining Blocks	8780/-			
4. RESIDENTIAL BUILDINGS				
a) Upto 1200 sq. Area	10500/-	12.5%	8% for rural area	
5. OFFICES.				
a) R.C.C. frame structures.				Provision for E.I

ii) In case the building consists of more than 2 storeys, the extra rates for foundation should be

i) The rates are applicable for normal site conditions upto double storey foundations.

These rates are subject to the following conditions :-

11.	a) All categories (local type of days)	11250/-	10%	8% for rural area.
	b) Workshop with std. designs	7600/-	10%	5% for urban area.
7.	AUDITORIUM/SEMINAR HALL	12070/-	7%	8% for rural area
	MUSEUM/Multipurpose Hall			5% for urban area
8.	ALL OTHER BUILDINGS	7870/-	10%	8% for rural area 5% for urban area.
9.	REST HOUSES/CIRCUIT HOUSES (Excluding furnishing)	10500/-	20%	8% for rural area 5% for urban area
10.	BASEMENT FLOOR with normal water proofing treatment with bituminous felt.	13000/-		
11.	Pressurized Mechanical ventilation system in the basement (with provision of exhaust blowers)	50/- Sqm.(except residential)		
12.	Boundary wall 5'-1 1/2" high and 9" thick consisting of cement sand mortar 1 : 4 complete.	1900/- per mtr		
13.	High security boundary wall for judicial complexes or other similar buildings 7.6" high consisting of 25mm dia MS Bar 3/4" CC placed diagonally sharply pointed from both the edges as per drawing/design approved by the Govt.	8000/- per mtr.		
14.	Approach road, internal roads & parking.	600/- sqm.		
	1) Flexible (black top)	900/- sqm.		
	ii) Rigid (cement concrete)			
15.	Land scaping.			
16.	Consultancy services @ 1.50% of building cost.			
17.	Contingencies charges:			
	i) upto Rs. 1.00 Crore.	@ 1% of estimated cost.		
	ii) Rs. 1.00 Crore to Rs. 5.00	@ 0.75% of estimated cost.		
	iii) Rs. 5.00 Crores to Rs. 20.00	@ 0.50% of estimated cost		
	Crores	(Subject to a minimum of Rs. 1.00 lacs)		
	Crores	(Subject to a minimum of Rs. 3.75 lacs.)		

rates approved by SE (Elect.) Karnal vide memo No.1590 dated 27.11.2009 (enclosed as Annexure 'A')

- (iv) For fire fighting system Rs. 500/- per sqm for Wet riser system and Rs. 450/- per sqm (except residential buildings) for sprinkler system should be provided, where it is mandatory as per local building by laws.
- (v) The Economy Committee specifications as approved by the Govt. vide memo No.1/33/2000-I B&R (W) dated 22.08.2008 shall be applicable.
- (vi) The buildings shall be constructed as earthquake resistant structures as per latest IS Codes. In case of sulphates and chlorides prone areas extra rate @ Rs. 200/- per sqm. of ground floor area is to be provided in the rough cost estimate.
- (vii) The above rates are based on the assumption that safe bearing capacity of soil shall be 10 tons per sqm. In case, the safe bearing capacity of the soil is less than 10 tons per sqm. extra cost should be provided.
- (ix) Above rates do not include furniture of any type.
- (x) Extra for external P.H. Estate Services shall be provided as per site requirement, if existing sewerage disposal system is not available in the area.

The plinth area rates only for the preparation of rough cost Estimates/preliminary project reports and are not to be used for assessment costs or fixing rents of buildings or for any other purpose. You are advised to prepare the rough cost estimate/PR on these rates.

sd/-

Superintending Engineer (Bldgs.)
For Engineer-in-Chief, Haryana, PW
(B&R) Deptt. Chandigarh.

Sr. No. Description of buildings. Proposed Plinth area Rates.

MEDICAL BUILDINGS

I) 30 Bedded Hospital
 II) Community Health Centre

Internal E.I. @ Rs. 450/- Per sqm.
 Estate E.I. i.e. security/street light @ Rs. 50/- per sqm
 of campus/plot area.
 Fire Alarm system @ Rs.300/- p. Sqm.
 Intercom system/EPABX @ Rs. 125/- P. Sqm.
 Sub Station @ Rs. 300/- per sqm.
 ACD/Service connection charges Rs.2.00 lacs.
 Solar lighting Rs. 1.00 lacs.
 Air Cnditioning for operation theater and emergency zone Rs. 2.00 lacs.

Internal E.I. @ Rs. 450/- per sqm.
 Estate E.I. i.e. security/street light @ Rs.50/- per sqm.
 of campus/Plot area.
 ACD/Service connection charges Rs. 1.00 lacs for PHC only.
 Solar lighting Rs. 1.00 lac for PHC.
 Air Cnditioning for operation theater and emergency zone Rs. 1.00 lacs for PHC.
 Internal E.I. @ Rs. 500/- per sqm.
 Estate E.I. i.e. security/street light @ Rs. 50/- per sqm

of campus/Plot area.
 Fire Alarm system @ Rs.300/- per Sqm.
 Intercom system/EPABX @ Rs. 125/- P. Sqm.
 Sub Station @ Rs. 300/- per sqm.
 Generator sel @ Rs. 200/- per sqm.
 LAN charges/connection @ Rs. 125/- per sqm.
 ACD/Services connection charges Rs. 3.00 lacs.
 Lift @ Rs. 26.00 lacs for each bed lift.
 Lift for 8/10 persons @ Rs. 16.00 lacs each.

Solar lighting Rs. 2.00 lacs.
 Air Conditioning for operation theater and emergency zone Rs. 5.00 lacs.
 CCTV Rs. 3.00 lacs for Distt. H.Q.

EDUCATION BUILDINGS

1) College Buildings.

Internal E.I. @ Rs.400/- per sqm.
 Estate E.I. i.e. security/street light @ Rs. 50/- per sqm
 of campus/Plot area.
 Fire Alarm system @ Rs. 300/- per sqm.
 Sub Station @ Rs. 300/- per sqm.
 ACD/Service connection charges Rs. 2.00 lacs.
 Generator Set @ Rs. 200/- per sqm.
 LAN charges/connection/intercom @ Rs. 125/- per sqm.

of campus/Plot area.
Estate E.I. i.e. security/street light @ Rs. 50/- per sqm.
Fire Alarm System @ Rs. 300/- per sqm. (only for
inhabited i.e. 3 stores and above).
Intecom system/EPABX @ Rs. 125/- per sqm
Sub Station @ Rs. 400/- per sqm. Generator Set @

of campus/Plot area.
Estate E.I. i.e. security/street light @ Rs. 50/- per sqm.
Internal E.I. @ Rs. 400/- per sqm.
Solar lighting Rs. 1.00 lacs.
ACD/Service connection charges Rs. 1.00 lacs.
LAN charges/connection @ Rs. 125/- per sqm.
Intecom system/EPABX @ Rs. 125/- per sqm

of campus/Plot area.
Estate E.I. i.e. security/street light @ Rs. 50/- per sqm.
Internal E.I. @ Rs. 500/- per sqm.
of campus/Plot area.
Estate E.I. i.e. security/street light @ Rs. 50/- per sqm.
Internal E.I. @ Rs. 400/- per sqm.

of campus/Plot area.
Estate E.I. i.e. security/street light @ Rs. 50/- per sqm.
Internal E.I. @ Rs. 400/- per sqm.

Buildings.
Judicial block (Inhabited)
ii) Offices in Mini Sects &

i) General office buildings.
Internal E.I. @ Rs. 400/- per sqm.
Estate E.I. i.e. security/street light @ Rs. 50/- per sqm.

ii) Above 1200 sqft. Area
i) All categories of residences
(upto 1200 sqft. Area)

4. RESIDENTIAL BUILDINGS.

Note:- Rs. 25.00 lacs extra for independent feeder, if required.

hall.
Air Conditioning Rs. 2.00 lacs for lab and conference
Solar lighting Rs. 2.00 lacs.
ACD/Service connection charges Rs. 3.00 lacs.
LAN charges/connection @ Rs. 125/- per sqm.
Generator Set @ Rs. 200/- per sqm.
Sub Station @ Rs. 500/- per sqm.
Intecom system/EPABX @ Rs. 125/- per sqm.

Fire Alarm System @ Rs. 300/- per sqm. (only for
inhabited)
Motor/Power wiring in workshop @ Rs. 600/- per
sqm.
of campus/Plot area.
Estate E.I. i.e. security/street light @ Rs. 50/- per sqm.
Internal E.I. @ Rs. 500/- per sqm.

iv) Science block canteen
and Mess/Dining-block)

iii) ITI
ii) Polytechnics
i) Engineering college.

3. TECHNICAL EDUCATION & I.T.I BUILDINGS.

of campus/Plot area.
LAN charges/connection @ Rs. 125/- per sqm.
ACD/Service connection charges Rs. 1.00 lacs.
Solar lighting-Rs. 1.00 lac for Distt. H.Q.

of campus/Plot area.
LAN charges/connection @ Rs. 125/- per sqm.
ACD/Service connection charges Rs. 1.00 lacs.
Solar lighting-Rs. 1.00 lac for Distt. H.Q.

Head Office of various
deptt. in Chandigarh/
Panchkula.

Public address system Rs. 2.00 lacs.
Car call Haller Rs. 50,000/-
ACD/Service connection charges Rs.5.00 lacs.
Solar lighting Rs. 2.00 lacs.
Air Conditioning Rs. 2.00 lacs for Mini Sectt.
Air Conditioning Rs.5.00 lacs for Judicial complex.
CCTV Rs. 5.00 lacs.
Internal E.I. @ Rs.300/- per sqm.

Estate E.I. i.e. security/steel light @ Rs.50/- per sqm
of campus/plot area.
Fire Alarm System @ Rs. 300/- per sqm. (Only for
multistoried).
Intercom system/EPA BX @ Rs. 125/- per sqm

Sub Station @ Rs.400/- per sqm.
Generator Set @ Rs. 200/- per sqm.
LAN charges/connection @ Rs. 125/- per sqm.
Lift @ Rs. 16.00 lacs for each lift for 8/10 passengers
Public address system Rs. 2.00 lacs.
Car call Haller Rs. 50,000/-

ACD/Service connection charges Rs.4.00 lacs.
Air Conditioning @ Rs. 3000/- per sqm. For speci-
fied area only.
Solar lighting Rs. 2.00 lacs.
CCTV Rs. 3.00 lacs.
Access control cum attendance system Rs.2.00 lacs.

Internal E.I. @ Rs. 500/- per sqm.
Estate E.I. i.e. security/steel light @ Rs. 50/- per sqm
of campus/plot area.
Rs. 8.00 lacs for 2 Nos. High Mast light in Bus Stand
workshop.
Motor/Power wiring in workshop @ Rs. 600/- per
sqm.

ACD/Service connection charges Rs. 3.00 lacs.
Solar lighting Rs. 2.00 lacs for Distt. H.Q.
CCTV Rs. 2.00 lacs for Distt. H.Q.
Public Address system for Ins. 2.00 lacs.
Internal E.I. @ Rs. 800/- per sqm.
Estate E.I. i.e. security/steel light @ Rs.50/- per sqm
of campus/Plot area.
Fire Alarm System @ Rs. 300/- per sqm. (Only for
multistoried).
Intercom system/EPA BX @ Rs. 125/- per sqm

6. TRANSPORT BUILDINGS.
1) All Bus Stands & Workshop
buildings.

7. AUDITORIUM / SEMINAR
HALLS MUSEUM
(EXCLUDING FALSE CEILING
AND WALL PANNBLING)

R. BERT HOUSES

i) Rest Houses (up to Sub

Divisional level)

Air Conditioning @ Rs. 3000/- per sqm. For spec-
ified area only.
Lift @ Rs. 16.00 lacs for each lift for R/10
passengers.
Solar lighting Rs. 1.00 lac.
CCTV Rs.2.00 lacs.
Sound and light system @ Rs. 3000/- P. sqm. for
specified area only.

Internal E.I. @ Rs. 800/- per sqm.
Estate E.I. i.e. security/street light @ Rs.50/- per sqm.
of campus/Pilot area.
For electrical appliances Rs.1500/- per sqm. Split AC,
TV, Refrigerator and water cooler etc.
Inverter Rs. 30,000/-
ACD/Service connection charges Rs.1.00 lac.
Solar lighting Rs. 1.00 lac.
Internal E.I. @ Rs. 800/- per sqm.

ii) Rest Houses

(up to Dist. level)

Internal E.I. @ Rs. 800/- per sqm.
Estate E.I. i.e. security/street light @ Rs.50/- per sqm.
of campus/Pilot area.
For electrical appliances Rs.2500/- per sqm. Split AC,
TV, Refrigerator and water cooler etc.
Inverter Rs. 50,000/-
ACB/Service connection charges Rs. 2.00 lacs.
Intercom system/BPABX @ Rs. 125/- per sqm.
Public address system Rs. 2.00 lacs.
Solar lighting Rs. 2.00 lacs.
Internal E.I. @ Rs: 800/- per sqm.

iii) State Guest House.

Internal E.I. @ Rs: 800/- per sqm.
Estate E.I. i.e. security/street light @ Rs. 50/- per sqm
of campus/Pilot area.
For electrical appliances Rs.3000/- per sqm. Split AC,
TV, Refrigerator and water cooler etc.
Intercom system/BPABX @ Rs. 200/- per sqm.
Public address system Rs. 2.00 lacs.
Sub Station @ Rs. 400/- per sqm.
Generator Set @ Rs. 200/- per sqm.
Fire Alarm system @ Rs. 300/- per sqm. (only for
multistoried)
Lift @ Rs. 16.00 lacs for each lift for 8/10 passengers
Car call Hoiler Rs. 50,000/-
ACD/Service connection charges Rs. 10.00 lacs.
Solar lighting Rs. 3.00 lacs.
CCTV Rs. 3.00 lacs.
Access control cum attendance system Rs.2.00 lacs.

sd/-
Superintending Engr, neer,
Elect. PWD (B&C) Br.,
Karnal.

CR 1300/MBB
Estate E.I. i.e. security/street light @ Rs. 50/- per sqm
of campus/Plot area.
ACD/Service connection charges Rs. 1.00 lacs.
Solar lighting Rs. 1.00 lacs.
Note:- Provision for lifts are to be made only in such buildings where lifts well provided in
Architect Drawing.