

Nature of surface painted	Multiplying factor for painting one side only	Multiplying factor for painting both sides
(1)	(2)	(3)
A. Timber doors, Windows etc.		
Fully glazed (or with glass substitute)	$\frac{2}{3}$	$1\frac{1}{3}$
Fully panelled or flush or battened	1	2
Fully venetian or fixed louvered	$1\frac{1}{2}$	3
2/3 panelled, 1/3rd glazed	$\frac{7}{8}$	$1\frac{3}{4}$
1/3 panelled, 2/3rd glazed	$\frac{3}{4}$	$1\frac{1}{2}$
1/3 panelled, 2/3 venetian	$1\frac{1}{3}$	$2\frac{2}{3}$
1/3 glazed, 2/3rd venetian or fixed louvered	$1\frac{1}{4}$	$2\frac{1}{2}$
Netted (without painting to the net)	$\frac{1}{4}$	$\frac{1}{2}$
Netted (with painting to the net as well)	$\frac{5}{8}$	$1\frac{1}{4}$
Corrugated (i.e. with leaves of G.I. sheet)	$1\frac{1}{4}$	$2\frac{1}{2}$
B. Corrugated Iron sheet roof or wall	$1\frac{1}{6}$	$2\frac{1}{3}$
C. Corrugated Asbestos sheet roof or wall	$1\frac{1}{5}$	$2\frac{2}{5}$
D. Trafford Asbestos sheet roof or wall	$1\frac{1}{10}$	$2\frac{1}{5}$
E. Cast Iron or Wooden railing (complete)	-	$1\frac{1}{2}$
F. Grills, Grating (Welded mesh)	-	1
G. Heavy type grating or grated doors as in Jallies etc.		$1\frac{1}{2}$
H. Collapsible Gate	-	$1\frac{1}{2}$
I. Steel roll top shutters (including top casting)	$1\frac{1}{4}$	$2\frac{1}{2}$
J. Steel Windows	$\frac{1}{3}$	$\frac{2}{3}$

**Schedule showing minimum height of stacks and the allowance to be deducted for shrinkage and/or shrinkage when measured in fresh stacks**

Materials	Minimum height of stacks	Allowance to be deducted for shrinkage and/or shrinkage
(1)	(2)	(3)
i) Stone metal ballast, Chips, Single or gravel	325mm	1/13
ii) Stone boulders 15 cm or above size	350mm	1/7
iii) Stone boulders below 15 cm size	450mm	1/9
iv) Jhama bats or brick bats	530mm	1/7
v) Jhama metal, Khoa or Chips	340mm	1/9
vi) Sand	610mm	1/8
vii) Surki	610mm	1/4
viii) Lime	610mm	1/4
ix) Moorum	335mm	1/13
x) Carried earth	340mm	1/9
xi) Rubbish (building or Kiln)	340mm	1/9
xii) Steam coal or slack coal	610mm	1/8
xiii) Cinder	430mm	1/9

**Some Useful Notes and Data**  
**Area and Weight of Steel Bars**  
 (Subject to variation as per I.S. code)

Dia in mm	Area cm <sup>2</sup>	Weight in kg/m.
6	0.283	0.222
8	0.503	0.395
10	0.785	0.617
12	1.131	0.888
14	1.539	1.208
16	2.011	1.578
18	2.545	2.000
20	3.142	2.466
22	3.801	2.980
25	4.909	3.854
28	6.157	4.830
32	8.042	6.313
36	10.180	7.990
40	12.570	9.860
45	15.900	12.490
50	19.640	15.410

**CONVERSION TABLE**

**LENGTH**

1-inch(in) = 2.54 centimetre (cm)  
 = 25.4 milimetre (mm)

1-foot (ft.) = 30.48 cm.  
 = 0.3048 metre (m)

1 mile = 1.608 kilometre (km)

**WEIGHT**

1-lb = 0.4536Kg

1 ton = 1.01605 tonne.

**AREA**

1-sq.in. = 6.4561 sq.cm.

1-sq. ft. (sft) = 0.0929 Sq. M.

1-Acre = 4048 sq.m=0.4048 Hect.

**VOLUME**

1cu. ft. (cft) = 0.028317 cum.

1 gal. = 4.54596 Litres.

1 acre. ft = 1233.38 cu. m=0.1233 hect.m

**Miscellaneous**

- 1) 1 cum. of brick bats = 310 Nos. brick
- 2) 1 cum. of khoa as road metal = 1.1 cum. of brick bats.
- 3) 1 tonne of steam coal = 0.98 cum. after deduction of shrinkage and/or shrinkage.
- 4) 1 tonne of slack coal. = 0.84 cum. after deduction of sinkage and/or shrinkage.
- 5) 1 cum. of slaked lime = 800 k.g
- 6) 1 bag of cement = 0.035 cum
- 7) 1 cum. of steel = 7850 k.g.

## Specification Governing Issue of Rollers

**The Number of working days to be allowed for finishing each individual item of work shall be calculated on the basis of limits of work output specified in statements**

I&II below

### STATEMENT-1

Sl. No.	Item of Works	Work output per working day of 8hrs.	
		Floor limit Max.	Ceiling limit Minimum
1	2	3	4
1.	Rolling subgrade	1486 Sq.m	2230 Sq.m
2.	a) Stone (except laterite) or slag boulders.	557 Sq.m	929 Sq.m
	b) Laterite boulders	743 Sq.m	1115 Sq.m
3.	Consolidation of Balast (size within the range of 75mm. to 127mm.)		
	a) Broken stone (Pakur or Rajmahal or Chandil or similar hard stone).	23 Cu.m.	34 Cu.m.
	b) Broken stone of varieties softer than (a)	25 Cu.m.	40 Cu.m.
	c) Broken Slag	25 Cu.m	40 Cu.m.
	d) Laterite or Jhama	34 Cu.m.	51 Cu.m.
	e) Unbroken stone (i.e, Shingles)	34 Cu.m.	51 Cu.m.
4.	Consolidation of metal (size within the range of 38 mm. to 75 mm.)		
	a) Broken stone metal (Pakur or Rajmahal or Chandil or similarly hard stone).	14 Cu.m	23 Cu.m
	b) Broken stone metal of varieties softer than (a)	17 Cu.m	28 Cu.m
	c) Broken Slag metal	17Cu.m	28 Cu.m
	d) Laterite or Jhama metal	28 Cu.m	45 Cu.m.
	e) Unbroken stone (shingles or gravels)	34 Cu.m	51 Cu.m
5.	Consolidation of Moorum	34 Cu.m	51 Cu.m.
6.	Compacted Earth work	250 Cu.m.	400 Cu.m
7.	Rolling dry Chips/Bajree/Gravel in surface dressing works		
	a) On water bound surface	557 Sq.m	1115 Sq.m.
	b) On black top surface	650 Sq.m.	1301 Sq.m.
8.	Rolling premixed Chips/Bajree/Gravel:		
	a) In 12 mm. (Nominal) thick Carpet	372 Sq.m.	743 Sq.m.
	b) In 25 mm. (Nominal) thick Carpet	325 Sq.m	650 Sq.m.
	c) In 32 mm. (Nominal) thick Carpet	278 Sq.m	557 Sq.m
	d) In 38 mm. (Nominal) thick Carpet	230 Sq.m.	465 Sq.m.
9.	Seal Coat	700 Sq.m.	1000 Sq.m.

### STATEMENT-II

- B. For Petrol, Diesel or Steam Rollers – 6 Tons or less:  
This limits of work output to be allowed for Petrol, Diesel or Steam Rollers of 6 Tons or less shall be 25% less the limits for the corresponding items in statement above.

**Chart for Consumption of Materials**  
**Consumption of different construction materials in an item of work**  
**shall be computed on the basis of quantities shown in the table.**

Sl. No.	Description of item.	Unit.	Name of materials required.	Quantity of material required.
1	2	3	4	5
1.	Single brick flat soling	% Sq.M	Brick	3,228 Nos.
2.	Double brick flat soling	% Sq. M.	Brick	6,456 Nos.
3.	Brick on end edging (25 cm. thick)			
	a) 7.5 cm. wide	%M	Brick	820 Nos.
	b) 12 cm. wide	%M	Brick	1400 Nos.
4.	Cement concrete with jhama Khoa or chips, 4:2:1	CU.M	1) Jhama chips (6mm. to 20mm.) 2) Sand 3) Cement	0.9 cum. 0.45 cum. 0.225 cum.
5.	-Do- -Do-, 5: 2 $\frac{1}{2}$ :1	CU.M	1) Jhama chips (6mm. to 20 mm) 2) Sand 3) Cement	0.93 cum. 0.465 cum. 0.186 cum.
6.	Cement concrete with jhama Khoa, 6:3:1	CU.M	1) Jhama Khoa (30mm down) 2) Sand 3) Cement	0.96 cum. 0.48 cum. 0.16 cum.
7.	-Do- -Do-, 8:4:1	CU.M	1) Jhama Khoa (30 mm down) 2) Sand 3) Cement	0.98 cum. 0.49 cum. 0.122 cum.
8.	Cement Concrete with Jhama Khoa, 7:2:1	CU.M	1) Jhama Khoa (30mm down) 2) Sand 3) Cement	0.96 cum. 0.28 cum. 0.14 cum.
9.	-Do- -Do-, 16:8:1	CU.M	1) Jhama Khoa (30 mm) 2) Sand 3) Cement	0.98 cum. 0.49 cum. 0.061 cum.
10.	Cement Concrete with Stone chips, 4:2:1	CU.M	1) Stone chips (6mm. to 20mm.) 2) Sand 3) Cement	0.88 cum. 0.44 cum. 0.22 cum.
11.	Cement Concrete with Stone chips, 3:1 $\frac{1}{2}$ :1	CU.M	1) Stone chips (6mm. to 20mm) 2) Sand 3) Cement	0.86 cum. 0.43 cum. 0.286 cum.
11.A.	Cement Concrate with (5:1 $\frac{1}{2}$ :1)	CU.M	Jhama 1) Chips (6m to 20m.) 2) Sand 3) Cement	0.92 cum. 0.46 cum. 0.18 cum.
12.	Cement Concrete with Stone ballast 6:3:1	CU.M	1) Stone ballst (30mm. down) 2) Sand 3) Cement	0.94 cum. 0.47 cum. 0.156 cum.

Sl. No.	Description of item	Unit	Name of materials required	Quantity of material required
1	2	3	4	5
13.	Cement Concrete with Stone ballast (8:4:1)	CU.M	1) Stone ballast (30mm down) 2) Sand 3) Cement	0.96 cum. 0.48 cum. 0.12 cum.
14.	Lime Concrete with Jhama Khoa, 5:2:1	CU.M	1) Jhama Khoa (30 mm) 2) Surki/Sand 3) Slaked Lime	1.00 cum. 0.40 cum. 0.20 cum.
15.	Brick Work in Sand Cement Mortar	CU.M		
	a) with 4:1 Sand Cement		1) Brick 2) Cement 3) Sand	389 Nos. 0.083 cum. 0.33 cum.
	b) with 6:1 Sand Cement	CU.M	1) Brick 2) Cement 3) Sand	389 Nos. 0.55 cum. 0.33 cum.
	c) with 8:1 Sand Cement	CU.M	1) Brick 2) Cement 3) Sand	389 Nos. 0.041 Nos. 0.33 Nos.
16.	Brick Work in Sand/Surki/Cinder Lime Mortar:			
	a) with 4:1 Sand/Surki/Cinder	CU.M	1) Brick 2) Slaked Lime 3) Sand/Surki/Cinder	389 Nos. 0.0825 cum. 0.33 cum.
	b) with 6:1 Sand/Surki/Cinder	CU.M	1) Brick 2) Slaked Lime 3) Sand/Surki/Cinder	389 Nos. 0.055 cum. 0.33 cum.
17.	Brick work in Sand, Lime and Cement mortar:			
	a) 6:1:1 Composite Mortar	CU.M	1) Brick 2) Sand 3) Lime 4) Cement	389 Nos. 0.283 cum. 0.047 cum. 0.047 cum.
	b) with 9:2:1 composite Mortar	CU.M	1) Brick 2) Sand 3) Lime 4) Cement	389 Nos. 0.27 cum. 0.06 cum. 0.03 cum.
18.	(1:1:1) Lime:Fly Ash:Sand Mortar brick work	CU.M	1) Brick 2) Lime 3) Fly Ash 4) Sand	389 Nos. 0.11 cum. 0.11 cum. 0.11 cum.
19.	125mm thick brick wall			
	a) Sand Cement Mortar (3:1)	% Sq.M	1) Brick 2) Cement 3) Sand	4951 Nos. 1.22 cum. 3.66 cum.
	b) Sand Cement Mortar, 4:1	% sq.M	1) Brick 2) Cement 3) Sand	4951 Nos. 0.914 cum. 3.66 cum.
	c) Sand Cement Mortar, 6:1	% sq.M	1) Brick 2) Cement 3) Sand	4951 Nos. 0.66 cum. 3.96 cum.
	d) 125mm. thick brick wall in Lime Mortar 4:1	% Sq.M	1) Brick 2) Slaked Lime 3) Sand	4951 Nos. 0.99 cum. 3.96 cum.

Sl. No	Description of item	Unit	Name of materials required	Quantity of material required
1	2	3	4	5
	e) in Lime Mortar, 5:1	% Sq.M.	1) Brick 2) Slaked Lime 3) Sand	4951 Nox. 0.795 cum. 3.98 cum.
	f) 25 mm. thick D.P.C.with stone chips, 4:2:1	% Sq.M	1) Stone chips (6mm. to 12 mm.) 2) Cement 3) Sand	2.23 cum. 0.558 cum. 1.12 cum.
21.	75 mm thick brick wall in cement mortar:			
	a) Cement Mortar, 3:1	% Sq.M	1) Brick 2) Cement 3) Sand	3014 Nos. 0.762 m <sup>3</sup> 2.286 m <sup>3</sup>
	b) Cement Mortar, 4:1	% Sq.M	1) Brick 2) Cement 3) Sand	3014 Nos. 0.571m <sup>3</sup> 2.285m <sup>3</sup>
22.	a) 25mm. Artificial Stone floor with Stone chips (4:2:1) (which includes 3mm. thick topping)	% Sq.M	1) Stone chips (6mm to 12mm) 2) Cement 3) Sand	2.23 cum. 0.855 cu.m. 1.12 cu.m.
	b) 19 mm. -do- -do- (4:2:1) (which includes 3mm. topping)	% Sq.M	1) Stone chips (6mm. to 12mm) 2) Cement 3) Sand	1.676 cu.m. 0.70 cum. 0.838 cum.
23.	a) 75 thick R.C. Slab with 0.8% reinforcement	% Sq.M	1) Stone chips (6mm. to 20mm.) 2) Sand 3) Cement 4) Steel 5) Shuttering	6.70 cum., 3.35 cum. 1.675 cum. 482.62 Kg. 100m <sup>2</sup>
	b) 100mm. R.C Slab with stone chips (4:2:1) and with 0.8% reinforcement	% Sq.M	1) Stone chips (6mm. to 20mm.) 2) Sand 3) Cement 4) Steel 5) Shuttering	8.925 cum. 4.47 cum. 2.232 cum. 684 Kg. 100 sq.m.
	c) 125mm. R.C. Slab with Stone chips (4:2:1) and with 0.8% reinforcement	% Sq.M	1) Stone chips (6mm. to 20mm.) 2) Sand 3) Cement 4) Steel 5) Shuttering	11.18 cum. 5.59 cum. 2.80 cum. 787.44 Kg. 100 sq.m
	d) 150mm. R.C. Slab with Stone chips (4:2:1) and with 0.8% reinforcement.	% Sq.M	1) Stone chips (6mm. to 20mm) 2) Sand 3) Cement 4) Steel 5) Shuttering	13.402cum. 6.701 cum. 3.35 cum. 957 K.G. 100 sq.m.
24.	Sand Cement Plaster:			
	a) 6.0mm. thick Cement plaster, 4:1	% Sq.M.	1) Cement 2) Sand	0.198 cum 0.792cum
	b) 12.00mm. -do-, 4:1	"	1) Cement 2) Sand	0.366 cum 1.46 cum.
	c) -do-, 5:1	"	1) Cement 2) Sand	0.292 cum. 1.46 cum.

Sl. No	Description of item	Unit	Name of materials required	Quantity of material required
1	2	3	4	5
	d) -do-, 6:1	"	1) Cement	0.244 cum.
	e) -do-, 8:1	"	2) Sand	1.46 cum.
25.	a) 19 mm. thick Cement plaster, 4:1	% Sq.M.	1) Cement	0.183 cum.
	b) 19 mm, -do-, 6:1	"	2) Sand	1.46 cum.
	c) -do- -do-, 8:1	%m <sup>2</sup>	1) Cement	0.518 cum.
26.	25mm thick cement plaster	"	2) Sand	2.07 cum.
	a) 4:1	% Sq.M	1) Cement	0.366 cum.
	b) 6:1	% Sq.M	2) Sand	2.196 cum.
	c) 8:1	% Sq.M	1) Cement	0.28 cum.
27.	a) Cement Flush pointing, (3:1)	% Sq.M.	2) Sand	2.24 cum.
	b) -do-, 4:1	"	1) Cement	0.71 cum.
28.	Rulled pointing, 3:1	"	2) Sand	2.84 cum.
29.	6mm. thick plaster with composite Mortar, 6:1:1	% Sq.M.	1) Cement	0.472 cum.
30.	a) 12.5 mm. thick -do-, 6:1:1	"	2) Sand	2.84 cum.
	b) 12.5mm thick -do- (9:2:1)	"	1) Cement	0.39 cum.
31.	a) 19mm. thick -do- 6:1:1	"	2) Sand	3.12 cum.
	b) 19mm thick -do- 9:2:1	"	(1) Cement	0.122 cum.
32.	12.5 mm. thick plaster with	"	(2) Sand	0.3660 cum.
	a) Sand Lime Mortar 2:1	% Sq. M.	(1) Cement	0.092 cum.
	b) -do- 3:1	% Sq. M.	(2) Sand	0.3660 cum.
	c) -do- 4:1	% Sq. M.	(1) Sand	0.1220 cum.
	d) -do- 6:1	% Sq. M.	(2) Sand	0.365 cum.
33.	19mm. thick plaster with	"	(3) Cement	0.78 cum.
	a) Sand Lime mortar 4:1	% Sq. M.	(2) Lime	0.13 cum.
	b) -do- 6:1	% Sq. M.	(3) Cement	0.13 cum.
		"	(1) Sand	1.38 cum.
		"	(2) Lime	0.23 cum.
		"	(3) Cement	0.23 cum.
		"	(1) Sand	1.33 cum.
		"	(2) Lime	0.30 cum.
		"	(3) Cement	0.15 cum.
		"	(1) Sand	2.07 cum.
		"	(2) Lime	0.345 cum.
		"	(3) Cement	0.345 cum.
		"	(1) Sand	2.07 cum.
		"	(2) Lime	0.46 cum.
		"	(3) Cement	0.23 cum.
		"	(1) Sand	1.28 cum.
		"	(2) Lime	0.64 cum.
		"	(1) Sand	1.37 cum.
		"	(2) Lime	0.457 cum.
		"	(1) Sand	1.46 cum.
		"	(2) Lime	0.365 cum.
		"	(1) Sand	1.46 cum.
		"	(2) Lime	0.243 cum.
		"	(1) Sand	2.07 cum.
		"	(2) Lime	0.518 cum.
		"	(1) Sand	2.196 cum.
		"	(2) Lime	0.366 cum.

Sl. No	Description of item	Unit	Name of materials required	Quantity of material required
1	2	3	4	5
34.	Neat Cement punning	% Sq. M.	(1) Cement	0.152 cum.
35.	Rubble masonry with Sand Cement Mortar, 6:1	CUM	(1) Stone (2) Cement (3) Sand (4) Key stone	1.00 cum. 0.043 cum. 0.25 cum. 0.16 cum.
36.	Rubble masonry with Sand Lime Mortar, 4:1	CUM	(1) Stone (2) Lime (3) Sand (4) Key stone	1.00 cum. 0.07 cum. 0.264 cum. 0.16 cum.
37.	Rubble masonry with composite Mortar : Sand : Lime : Cement 8:1:1	CUM	(1) Stone (2) Cement (3) Lime (4) Sand (5) Key stone	1.00 cum. 0.033 cum. 0.033 cum. 0.264 cum. 0.16 cum.
38.	-do-, -do-, 9:2:1		(1) Stone (2) Cement (3) Lime (4) Sand (5) Key stone	1.00 cum. 0.027 cum. 0.054 cum. 0.247 cum. 0.16 cum.
39.	75mm. thick Lime terracing in roof with lime concrete, with 7:2:2	% Sq.M	(1) Brick khoa (2) Surki (3) Lime	7.50 cum. 2.10 cum. 2.10 cum.
40.	100mm. thick Lime terracing in roof with lime concrete, 7:2:2	CUM	(1) Brick khoa (2) Surki (3) Lime	10.00 cum. 2.90 cum. 2.90 cum.
41A.	125 mm. -do- -do-		(1) Brick khoa (2) Surki (3) Lime	12.5 cum. 3.6 cum. 3.6 cum.
41B.	150 mm. -do- -do-	CUM	(1) Brick khoa (2) Surki (3) Lime	15.0 cum. 4.3 cum. 4.3 cum.
42.	Roofing a) Tile (Standard Size) b) C.C.I. Sheet c) Asbestos sheet	% Sq.M. " " "	Tile G.C.I. Sheet 3 m. long Asbestos sheet 3 m. Long	1180 nos. 70 sheets  50 sheets
43.	Priming one coat for new and old wall	% Sq.M	Stone lime Gum	21.75 kg. 150 gms.
44.	White washing one coat	"	Sheel lime Stone lime Gum	7.80 kg. 15.60 kg. 150 gms.
45.	White washing two coat	"	Sheel lime Stone lime Gum	13.66 kg. 27.32 kg. 270 gms.
46.	Colour washing one coat	"	Stone lime Colouring materials Gum	22.0 kg. 7 pkts. 150 gms.



Sl. No	Description of item	Unit	Name of materials required	Quantity of material required
1	2	3	4	5
47	Colour washing two coat		Stone lime Colouring materials Gum	41.5 kg. 12 pkts. 300 gms.
48	Cement wash one coat		Cement	15 kgs.
49	Cement wash two coat		Cement	25 kgs.
50	Priming One coat one Wood & plastered surface		Ready mixed paint	12.0 litres.
51	Priming One coat on Iron or metal surface		Ready mixed paint	9.7 litres
52	Painting one coat over priming surface (a) on timber or Plaster surface	% Sq.m	-do-	10.85 litres.
	(b) On iron/metal/cement punned surface		-do-	8:80 litres.
53	Painting Two Coats over priming surface (a) On timber or plastred surface		-do- -do-	20.38 litres
	(b) On iron/metal road works			17.61 littres.
	(c) Painting with Aluminium paint one coat	% Sq.m.		6.00 littes.
	(d) Copal vernishing two coats on timber surface			25 littes.
	(e) Painting with red lead paint one coat on metal surface			13 littes.
	(f) Painting with Black Japan one coat on matal surface			8.80 littes.
	<b>Surface dressing work</b>			
54.	(a) Single or first coat on W.B.M. Surface :	700 Sq.M.	1. Roller Diesel 2. Matrix 3. Coal 4. Stone chips(12mm)	- 15.5 litres - 1260 kg. - 150 kg. - 10.50 cum.
	(b) Second coat or renewal coat on black top surface	750 Sq.M.	1. Roller-Disel 2. Matrix 3. Coal 4 Stonechips(10 mm)	- 16 litres, - 825 kg. - 150 kg. - 9 cum.
	<b>Premix Carpet</b>			
55	(a) on W.B.M. Surface	450 Sq.M	1) Roller-Diesel 2) Martix 3) Coal 4) Stone chips 12 mm 10 mm	14.5 Litres, 1110 kg. 356 kg. - 8.1 cum. - 4.1 cum.
	(b) On black top or concrete surface	450 Sq.M.	1). Roller Disel 2. Matrix 3) Coal 4) Stone chips 10 mm 12 mm	- 14.5 litres. - 877 kg. - 328 kg. - 8.1 cum. - 4.1 cum.
	<b>Seal Coat</b>			
56.	a) With sand blinding	% Sq.M.	1. Sand 2. Coal 3. Matrix	0.60 cum. 23 kg. 68 kg.
	b) With stone blinding	"	1. Matrix 2. Coal 3. Stone chips 6 mm	95 kg. 30 kg. 0.9 cum.

Effort per Unskilled personday

1(i) **Loose and soft soil to be excavated by spade**

	Lead upto 24.38m	Beyond 24.38 upto 48.76m	Beyond 48.76 upto 73.15m	Beyond 73.15 upto 97.53m	Beyond 97.53 upto 122m	Beyond 122 upto 146.3m	Beyond 146.3 upto 170.68m	Beyond 170.68 upto 195m
Male	2.8	2.69	2.55	2.38	2.24	2.01	1.9	1.81
Female	2.41	2.29	2.18	2.01	1.9	1.7	1.61	1.53

**Ordinary Mixed soil to be excavated by Spade**

	Lead upto 24.38m	Beyond 24.38 upto 48.76m	Beyond 48.76 upto 73.15m	Beyond 73.15 upto 97.53m	Beyond 97.53 upto 122m	Beyond 122 upto 146.3m	Beyond 146.3 upto 170.68m	Beyond 170.68 upto 195m
Male	2.49	2.41	2.29	2.12	2.01	1.81	1.7	1.61
Female	2.12	2.04	1.95	1.81	1.7	1.53	1.5	1.33

**Mixed medium hard soil with Moorum, Kankar, Pebbles etc. to be excavated by pick-axe**

	Lead upto 24.38m	Beyond 24.38 upto 48.76m	Beyond 48.76 upto 73.15m	Beyond 73.15 upto 97.53m	Beyond 97.53 upto 122m	Beyond 122 upto 146.3m	Beyond 146.3 upto 170.68m	Beyond 170.68 upto 195m
Male	2.04	1.93	1.84	1.7	1.61	1.5	1.42	1.3
Female	1.73	1.64	1.61	1.5	1.42	1.3	1.19	1.1

**Hard Soil/ Moorum-Laterite or Rocky Soil to be excavated by pick-axe (no blasting required)**

	Lead upto 24.38m	Beyond 24.38 upto 48.76m	Beyond 48.76 upto 73.15m	Beyond 73.15 upto 97.53m	Beyond 97.53 upto 122m	Beyond 122 upto 146.3m	Beyond 146.3 upto 170.68m	Beyond 170.68 upto 195m
Male	1.64	1.53	1.44	1.33	1.25	1.13	1.05	0.99
Female	1.39	1.3	1.22	1.13	1.05	0.93	0.91	0.85

(ii) **Muddy and Slushy Soil (to be measured by tin/bucket)**

	Lead upto 24.38m	Beyond 24.38 upto 48.76m	Beyond 48.76 upto 73.15m	Beyond 73.15 upto 97.53m
Male	1.81	1.61	1.39	0.99
Female	1.5	1.39	1.19	0.85

(iii) Earthwork in filling in foundation & plinth in layers not exceeding 15cm including watering & ramming etc. complete. - Per Manday

(a) The earth obtained from the trenches within a lead of 25m.	3.1	3						
(b) -do-do-excavated land within a lead of 25 meter	1.8	1.74	1.69	1.58	1.49	1.4	1.33	1.26

(iv) **For lift beyond 1.5 m for all kinds of soil**

Multiplying factor for amount of work per unskilled worker

Lift beyond 1.5 upto 2.43 m	0.94
Lift beyond 2.43 upto 3.04 m	0.92
Lift beyond 3.04 upto 3.65 m	0.88
Lift beyond 3.65 upto 4.26 m	0.85
Lift beyond 4.26 upto 4.87 m	0.82
Lift beyond 4.87 upto 5.48 m	0.78
Lift beyond 5.48 upto 6.09 m	0.74
Lift beyond 6.09 upto 6.7 m	0.70

For lead beyond 195 upto 243.8 m

0.55

Of output in respect of Lead upto 1.5 m

For lead beyond 243.8 upto 292.6 m

0.50

v) Sand (Local/river) work in filling in foundation trenches or plinth etc. in layer not exceeding 150mm including watering & ramming etc. complete Earth/Sand obtained within a lead of 50m. 4.6 m<sup>3</sup>

2 a) Fine dressing & chitchalling work including breaking clods in the forming and side slope of embankment and in canal bed to required slope, camber and grade. 50 m<sup>2</sup>

b) Compacting the sub-grade after earthwork in embankment at every layers not exceeding 250mm after breaking clods and sprinkling with water dugging as necessary and ramming (with hand roller) ... a group of 4 unskilled... 200m<sup>2</sup>

c) Surface dressing of the ground, including removing vegetation &/or un equalities not exceeding 15 cm. Deep & disposal of rubbish lead up to 30 m. & Lift up to 1.5 m. 35 sq.m.

(i) Loose or soft soil 25 sq.m.

(ii) Dense or hard soil

- |       |  |                            |
|-------|--|----------------------------|
| 3.    | Box cutting in road embankment and removing the spoils & spread over on the shoulder and consolidating and dressing sub-grade to correct camber and grade  |                            |
|       | i) Depth of cutting upto 15cm  | 20m <sup>2</sup>           |
|       | ii) Depth of cutting upto 25cm.  | 15m <sup>2</sup>           |
|       | iii) Depth of cutting beyond 25 cm. and upto 30 cm   | 12m <sup>2</sup>           |
| 4.    | i) Shrub clearance including cutting of light bushes & removal of other vegetation and clearing the site   | 50m <sup>2</sup>           |
|       | ii) Cutting the small trees and clearing the site (girth of trees not exceeding 1m).   | 3 Nos.                     |
|       | iii) Cutting roots of trees from below ground upto 1.0 m. clearing the site and filling the portion with earth (Tree up to 3.0 m above ground and girth up to 2.0 m)   |                            |
|       | (a group of 2 Nos. unskilled labour).  | 1 Tree                     |
| 5.    | Filling empty gunny bags with dry earth or sand, stitching the bag and carrying and arranging properly within a lead of 60 m.  | 40 bags.                   |
| 6.    | Carrying the sand bags to the site of work and dumping as per direction within a lead of 30 m.   | 60 bags.                   |
| 7.    | Removal of water hyacinth:   |                            |
|       | (i) Work under standing water not exceeding 1 m.   | 50 m <sup>2</sup>          |
|       | (ii) Work under standing water exceeding 1 m.  | 40 m <sup>2</sup>          |
| 8.(a) | Bailing out water from pond, drain etc. manually.  | 3 m <sup>3</sup>           |
|       | (b) Pumping out water caused by springs, seepage, drains Water mains or well point pumping etc.  | 4500 liters<br>(4.5 cu.m.) |
| 9.    | Turfing with sods in the embankment slope and shoulder including collection of sods:   |                            |
|       | (i) Sodds obtained within a lead of 30 m.  | 25 m <sup>2</sup>          |
|       | (ii) Sodds obtained with a lead beyond 30 m.   | 20 m <sup>2</sup>          |
| 10.   | Making post (1 m to 3 m long) of bamboo or Salbullah with one end conical as per direction   |                            |
|       | (a) Bamboo –   | 30 pcs.                    |
|       | (b) Salbullah –  | 25 pcs.                    |
| 11.   | Open timbering in trenches including use of & waste of all necessary timber work including walls, struts, open poling boards/horizontal sheeting/runners etc. as may be necessary & fixing & removal complete. |                            |
|       | (a) For depth not exceeding 1.5m.<br>(a group of 1sk. & 2un. sk.)  | 300sq.m.                   |
|       | (b) Depth exceeding 1.5m. up to 3m.<br>(a group of 1sk. & 2un. sk.)  | 150 sq.m.                  |

#### B. Collection of Materials

- |     |   |                     |
|-----|---|---------------------|
| 12. | Breaking of stone materials including stacking (Measurement of broken metal or khoa with due allowance for sinkage and/or shrinkage). |                     |
| (a) | Brick/jhama khoa –  |                     |
|     | (i) 80 mm–100 mm size   | 1.8 m <sup>3</sup>  |
|     | (ii) 50 mm–80 mm size   | 1.2 m <sup>3</sup>  |
|     | (iii) 25 mm–50 mm size  | 0.75 m <sup>3</sup> |
| (b) | Laterite boulder and local stone (not requiring blasting)–  |                     |
|     | (i) 80 mm–100 mm size   | 0.90 m <sup>3</sup> |
|     | (ii) 50 mm–80 mm size   | 0.60 m <sup>3</sup> |
|     | (iii) 25 mm–50 mm size  | 0.40 m <sup>3</sup> |
|     | (iv) 25 mm–down size  | 0.25 m <sup>3</sup> |
| 13. | A. Collecting & breaking from surface and/or digging into ground at quarry including stacking (within a lead of 15 m)–                |                     |
|     | (a) Laterite boulder & local stone (not requiring blasting)–  |                     |
|     | (i) 100mm–150 mm size   | 0.9 m <sup>3</sup>  |
|     | (ii) 80mm–100mm size  | 0.6 m <sup>3</sup>  |
|     | (b) Moorum  | 1.2 m <sup>3</sup>  |
|     | (c) Sand  | 3.2 m <sup>3</sup>  |
|     | (d) River bed material  | 2.2 m <sup>3</sup>  |
|     | e) River bed gravels, pebbles etc. (by screening sand)  | 0.75 m <sup>3</sup> |

- B. For Hilly area: (Darjeeling, Kalimpong, Kurseong)-
- (a) For lead beyond 15 m & up to 30 m - Multiplying factor. 0.8
- (b) For lead beyond 30 m & up to 45 m - -do- 0.6
- (c) For lead beyond 45 m & up to 60 m - -do- 0.5
14. Taking out & carrying old hume pipe and stacking within a lead of 60 m and lift to 1.2 m as per direction.
- (i) Up to 60 cm. dia & upto 2.5 m long 10Nos. H.P. of 2.5 m. length i.e. 25 m.  
-(a group of 4 Nos. unskilled mazdoors)
- (ii) above 60 cm. dia & upto 1.2 m dia & 2.5 m long - 6 nos. H.P. of 2.5 m length or 15 m.  
(a group of 4 nos. unskilled mazdoors).
- C. Loading And Unloading**
15. Loading, unloading & stacking of construction materials within a distance 30 m.
- (i) Brick/Brick batas/laterite boulders. 500 Nos. or 1.3 m<sup>3</sup>
- (ii) Stone materials 1m<sup>3</sup>
- (iii) Moorum/Sand/Cinder/River bed materials. 1.3 m<sup>3</sup>
- (iv) Steel materials. 1000 Kgs.
- (v) Bamboo/Salbullah 200 Nos.
- (vi) Cement 30 bages.
16. [For unloading & stacking only]
- (a) Carriage of construction materials from a nearby quarry/road point/river point on head load a) to a distance of 100m beyond original lead of 30 m: Volume of work to be decreased by 33½%
- (i) Bricks/Brick batas/laterite boulders/Steel materials/ Moorum/Sand/Cinder/River bed materials 335nos. or .87 m<sup>3</sup>
- (ii) Steel materials. 670 kgs.
- (iii) Cement. 20 bages.
- (iv) Bamboo/Salbullah. 134 nos.
- (b) For distance beyond 100m & up to 500m. Volume of works to be reduced @ 20% for each 100m beyond 100m.
17. (a) Rock cutting in hilly tracks under Darjeeling district size not less than 30 to 50cm & weight 30 to 40 kg. & stacking the same (Loose Rock) to a distance not exceeding 15m properly as per direction by hammer and chisel where blasting is not necessary Unskilled - 2 2.8m<sup>3</sup>
- (b) Distance not exceeding to 15m to 30m. -do- - 2 2.0m<sup>3</sup>
- (c) -do- 30m to 45m. -do- - 2 1.5m<sup>3</sup>
- (d) -do- 45m to 60m. -do- - 2 1.0m<sup>3</sup>

#### D. ROAD WORKS

Sl. No.	Description of works	Amount of work per day
1	2	3
18.	Laying soiling to proper camber, hand packing, spreading powdered earth in the interestices with departmental bricks and stones supplied at site:	
	(a) Bricks :-	
	(i) Single brick flat (7.5 cm thick)	Semi-Skilled - 1) 34 m <sup>2</sup> Unskilled - 4)
	(ii) Double brick flat (15 cm thick)	Semi-Skilled - 1) 19 m <sup>2</sup> Unskilled - 4)
	(iii) Single brick-on-edge (12 cm thick)	Semi-Skilled - 1) 29 m <sup>2</sup> Unskilled - 4)
	(iv) Brick-on-edge over a brick flat (19 cm. thick)	Semi-Skilled - 1) 18 m <sup>2</sup> Unskilled - 4)
	(v) Repairing single brick flat	Semi-skilled - 1) 35 m <sup>2</sup> Unskilled - 4)
	Soiling with 50% old+50%new	Unskilled - 4)
	(vi) -do- 75% old+25% new	Semi-skilled - 1) 40 m <sup>2</sup> Unskilled - 4)
	(b) Laterite boulder/stone boulder (15-20 cm. thick).	Skilled - 1) 30 m <sup>2</sup> Unskilled - 4)

19.	Laying edging including preparation of bed, hand packing, fixing in position back filling with departmental bricks & stones supplied at site. (a group of one semi-skilled & 4 unskilled to work at a time).		
	a) Bricks: 7.5 cm. wide (25cm. deep).		100 m.
	12.0cm. wide (25cm. deep).		75 m.
	b) Stone boulder 10-12 cm. wide (20cm. deep).		100 m.
20.	Labour for taking out old brick-on-edge edging including removing debris to flank or berm. sorting out serviceable materials and stacking	.....Unskilled-1	125 m.
21.	Labour for taking out old soling including removing debris to flank or berm, sorting out serviceable materials and stacking.		
	(a) Single Flat soling.	Unskilled-1	20 m <sup>2</sup>
	(b) Double flat soling	Unskilled-1	12 m <sup>2</sup>
22.	Spreading and consolidation with hand roller (up to 2 ton) with materials supplied at site including watering and sprinkling powdered earth (excluding the hire charge of roller). A group of 1 skilled/1 semi-skilled and 15 mazdoors to work at a time.		
	(a) Thickness (loose) 7.5 cm. to 10 cm.		
	(i) with moorum, cinder, kiln ash, sand,		125 m <sup>2</sup>
	(ii) with brick metal, laterite and soft rock metal (25mm.-40mm size)		100 m <sup>2</sup>
	(b) Thickness (loose) beyonds 10 cm. up to 15 cm.:		
	i) with moorum, cinder, kiln ash, sand and brick metal, laterite etc.		75 m <sup>2</sup>
	(c) Thickness (loose) 20 cm. with brick bats		60 m <sup>2</sup>
23.	Spreading and consolidation with power roller (8-10 ton) with materials supplied at the site including watering and sprinkling powdered earth (excluding the hire charge of roller). A group of 1 skilled and 1 semi-skilled and 10 mazdoors:		
	(a) Thickness (Compacted) 7.5cm.-10cm. .		
	(i) with moorum, cinder, kiln ash, sand.		220 m <sup>2</sup>
	(ii) with brick metal, laterite and soft rock.		200 m <sup>2</sup>
	(b) Thickness (Compacted) above 10cm up to 15 cm.		
	i) with moorum, cinder, kil nash,sand		180 m <sup>2</sup>
	ii) with brick metal, laterite and soft rock		150 m <sup>2</sup>
	(c) Thickness (Compacted) 20 cm. with brick bats		125 m <sup>2</sup>
	(d) Stone metal Censolidation (Compacted)		
	Thickness 7.5cm to 10 cm.		
	A group of skilled-1, Semi-skilled-1 Un-skilled-16		180 m <sup>2</sup>
24.	Picking up existing water bound macadam road surface collecting the picked up materials, screening and stacking screened materials and rubbish seperately as directed.		
	A) Jhama metal surface:		
	(i) Av. depth 37mm. to 50mm. thick.		90 m <sup>2</sup>
	unskilled-4 nos.		
	(ii) Av. depth beyond 50mm. to 75mm. thick		90 m <sup>2</sup>
	unskilled-6 nos.		
	B) Stone metallad surface:		
	(i) Av. depth beyond 37mm. up to 50mm.		90 m <sup>2</sup>
	unskilled-6nos.		
	(ii) Av. depth beyond 50mm. up to 75mm.		90 m <sup>2</sup>
	unskilled-8nos.		
25.	Picking up and removing old bituminus layer of thickness up to 3mm Av. and stacking the picked up materials as directed.		
	unskilled-10nos.		90 m <sup>2</sup>
26.	Roughening existing road surface by picking for proper bonding with new consolidation		
	i) Jhama metal surface-		90 m <sup>2</sup>
	unskilled-2nos.		
	ii) Stone metallad surface-		90 m <sup>2</sup>
	unskilled-3nos.		
	iii) Black top surface-		90 m <sup>2</sup>
	unskilled-6nos.		90 m <sup>2</sup>

1.	2.	3.
27.	Labour for priming on water bound Macadam surface. a) when matrix applied hot (a group of 1sk. & 4s.sk. & 24un.sk.)	360 sq.m
28.	Labour for surface dressing one coat on black top surface (Hot matrix to be applied). Skilled - 1no. Semi-skilled- 3nos. Unskilled-41 nos.	900m <sup>2</sup>
29.	Labour for surface dressing including thorough cleaning of the surface of screening and cleaning of stone chips, applying uniformly requisite quantity of hot matrix, spreading uniformly dry stone, rolling with power roller with necessary hand packing or spreading of chips to obtain completed surface excluding cost of Matrix, Stone and Roller hire charges but including cost of carriage of stone chip from road side stacks within lead of 150 metre. (a) Single coat or 1st coat on water bound macadam surface. Surface using 100 kg. of matrix and 1.5 Cu.m. of stone chips (12mm nominal size) per 100 sq.m. of surface Skilled-1no. Semi-skilled- 3 nos. Unskilled- 55 nos. (b) Second coat or renewal coat (on black top surface) using 110 kg. of matrix and 1.2 cu.m. of stone chips (10mm nominal size) per 100 sq metre of surface. Skilled -2 Semi-skilled -4 Unskilled-41	835 m <sup>2</sup> 930 m <sup>2</sup>
30.	Premix Carpet (open graded) 20mm thick using 1.8 cu.m. 13.2 mm size and 0.9cu.m 11.2 mm size stone chips per 100 sq.m. surface area including thorough cleaning of the surface applying tack coat screening, cleaning and pre-heating stone chips and fully precoating the same with hot matrix 54 kg. per cu. m. of stone chips laying the premix chips uniformly and rolling by power roller excluding the cost of stone chips & matrix but including the cost of carriage of material from road side stacks within a lead of 150m. (a) on W.B.M. surface applying tack coat 100 kg/100 sq.m. Skilled - 2 nos. Semi-skilled- 3 nos. Un-skilled- 61 nos. (b) On black top or concrete surface or similar surface applying tack coat (a 50 kg/100 sq.m.) Skilled- 3nos. Unskilled - 50 nos.	555 m <sup>2</sup> 510 Sq.m
31.	(a) Labour for laying seal coat excluding cost of sand/stone chips 6mm down and matrix. (i) (Matrix to be applied hot). Skilled -1 no. Semi-skilled - 1 no. Unskilled - 20 nos.	1100 Sq.m
32.	Laying of Hume pipe and setting collar including preparation of bed with earth cushion with materials supplied at site: (i) Up to 60 cm. dia Skilled -1 Semi-skilled -1 Un-skilled -4 (ii) Up to 1.2 m. dia ... Skilled -1 Semi-skilled -1 Un-skilled -6	In a Group 7.5 m. (3 H.P.) In a Group 7.5 m. (3. H.P.)
33.	Bench cutting in hilly tracks and making formation of roads including removing the surplus boulder to a distance of 15m and stacking properly as directed., Semi-skilled -2) Unskilled -6)	In a Group 25 m <sup>2</sup>
34.	Dry rubble masonry wall with boulders obtained from nearby stacks within a lift of 1.5m. (a group of 1 skilled and 3 unskilled) i) Within a lead of 15m ii) Beyond 15m and up to 30 m. iii) Beyond 30 m & up to 50 m.	1.5 m <sup>3</sup> 1.0 m <sup>3</sup> 0.6 m <sup>3</sup>

- iv) Lift beyond 1.5 m
- |                                     |     |
|-------------------------------------|-----|
| a) 1.5 to 2.5 m. Multiplying factor | 0.9 |
| b) 2.5 to 3.5 m. -do-               | 0.8 |
| c) 3.5 to 4.5 m. -do-               | 0.7 |
35. Repairing pot holes and making up small depressions with ramming or power rolling including screening, cleaning chips of metals and washing, drying as necessary and heating the chips or metal where necessary cutting pot holes to rectangular shape, deepening the edges inclined towards the back, cleaning surface, heating matrix and applying tack coat (including edges) 5kg. or 10kg. of martix 10 m<sup>2</sup> of road surface according as the road surface is in old bituminous stage or WBM stage respectively and finishing the top of repaired surface levelled with adjoining area.
- a group of
- a) By grouting method using matrix @ 70 kg. per m<sup>3</sup> of loose net volume of coarse aggregate. Requirement of key aggregate may be taken as 10% of coarse aggregate and size 11.2 mm.
- |                 |              |
|-----------------|--------------|
| Skilled -1      |              |
| Semi-skilled -1 |              |
| Unskilled-63    | 250.00 Sq.m. |
36. Built up spray grout 50 mm. compacted thickness (as base course or otherwise) including thorough cleaning the surface, preparing the base as specified screening and cleaning of stone materials, applying tack coat spreading uniformly 1st layer of stone metals conforming to required grading @ 6.7 m<sup>3</sup> /100m<sup>2</sup> area including hand packing rolling by power roller to proper camber, grade and superelevation and covering with hot bitumen layer 18 kg/ 10m<sup>2</sup> of surface completely covering the surface uniformly by spreading 13.2 mm.size graded stone chips @ 1.3 m<sup>3</sup>/100m<sup>2</sup> and with necessary hand packing thoroughly compacting by power roller and proper camber grade and super elevation.
- A group of Skilled-1
- |                |           |
|----------------|-----------|
| Semi-skilled-3 |           |
| Unskilled-46   | 300 Sq.m. |

#### E. Protective work

37. In the bamboo piling bamboos or salbullah should be driven about its half length into the ground at a very close spacing of 15 cm. c/c bamboo side by side including necessary bamboo ties, stays, struts etc. as per direction and specification.
- A group of 1-Skilled
- |                                  |                   |
|----------------------------------|-------------------|
| 4-Un-skilled to work at a time   |                   |
| a) with bamboo 8 to 10 cm $\phi$ | 24m (wall length) |
| b) with salbullah                |                   |
| i) 7.5 cm to 10 cm $\phi$        | 28m -do-          |
| ii) 12.5cm to 15 cm $\phi$       | 25m -do-          |
| iii) 17.5 cm to 20 cm $\phi$     | 20m -do-          |
38. Protective walling to retain embankment with drum sheet or bamboo walling pieces including cutting, flatening and perforating the sheet (excluding the cost of sheet) supplied at site
- |                |                  |
|----------------|------------------|
| Semi-skilled-2 | 20m <sup>2</sup> |
| Unskilled -1   |                  |
39. Embankment protection with pitching with materials supplied at site (a group of 1 skilled and 4 mazdoor to work at a time).
- |   |                  |
|---|------------------|
| i) with boulder or stone materials (20-30 m. th.) | 16m <sup>2</sup> |
| ii) with brick (single layer flat)                | 28m <sup>2</sup> |
| iii) with brick (double layer flat)               | 15m <sup>2</sup> |
| iv) with brick edge over B.F soling               | 14m <sup>2</sup> |

#### F. MASONRY WORK :

40. Dismantling all types of masonry except cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m.
- |                    |                |                   |
|--------------------|----------------|-------------------|
| a) in ground floor | Semi-skilled-1 | 1.7m <sup>3</sup> |
|--------------------|----------------|-------------------|

1.	2.	3.
41.	Dismantling all types of plain cement concrete works, stacking serviceable materials at site and removing rubbish within a lead of 75 m. Semi-skilled-1	0.5m <sup>3</sup>
42.	Taking out carefully roof covering from roof, stacking serviceable materials at site and removing rubbish as directed. a) R.P. Tile Roof b) G.C.I. Roofing c) Asbestos Sheet Roofing	100 sq.m. 150 sq.m. 150 sq.m.
43.	Cutting chase upto 125 x 150 cm and subsequent mending of damages. a) In brick wall : b) In concrete wall	7 metre. 4 metre.
44.	Cutting holes and subsequent mending good of damages. a) Diameter up to 150mm: i) In brick work ii) In concrete work b) Diameter exceeding 150 mm but not exceeding 300mm. i) In brick work ii) In concrete work c) Diameter exceeding 300 mm but not exceeding 450 mm. i) In brick work ii) In concrete work	4 metre. 2.5 metre. 2.5 metre. 1.2 metre. 1.2 metre. 0.6 metre.
45.	Labour for laying of brick khoa of ordinary bats of size (38mm x 63mm) in 100 mm layer filling in gaps with small pieces rammed and compacted as directed with true to level and grade. ... Unskilled -1	17.0 m <sup>2</sup>
46.	Lime concrete with Jhama Khoa/Gravel/Boulder (25mm to 10mm size) Surki/Sand and Stone-lime (excluding shuttering but inclusive of Labour for side supports if any). (A group of 2 - skilled and 3 unskilled to work in a team)	2.1 m <sup>3</sup>
47.	Cement concrete with graded Jhama Khoa/Gravel/Boulder (40 mm size) excluding shuttering. [A group of 2-skilled and 3-unskilled to work in a team]	2.1 m <sup>3</sup>
48.	Cement concrete with graded stone chips (40 mm.) excluding Shuttering A group of 2-Skilled and 3-Un-skilled in a team	2.0 m <sup>3</sup>
49.	Cement concrete with graded stone chips/gravel/boulder chips (20 mm size) excluding shuttering and reinforcement if any in Ground Floor. [A group of 2-skilled and 3-un-skilled to work in a team]	2.0 m <sup>3</sup>
50.	Extra for each additional floor height i.e. each additional height of 3.65 m above in initial of 4.56 m of concrete work. Skilled - 1 Unskilled - 2	5 m <sup>3</sup>
51.	25 mm thick D.P.C. (4 : 2 : 1) with stone chips 6 mm down, double chequered complete including mixing water proofing compound as directed complete in all respect. Skilled - 2 Unskilled - 3	18.0 m <sup>2</sup>
52.	a) Grey artificial stone in floor, skirting, dado, staircase, etc. with cement concrete (4 : 2 : 1) with stone chips (6 mm down) laid in panels including 3 mm thick topping including levelling, smooth finishing and rounding off corners. Skilled - 5 Unskilled - 3	24.0 m <sup>2</sup>



1.	2.	3.
	b) 25 mm. thick mosaic flooring including 19 mm thick base course and 6 mm thick topping (A group of 2 Skilled 5 Unskilled)	7.5 sq.m
53.	Providing and laying in foundation mud concrete with graded stone aggregate 40. mm nominal size excluding cost of form work. Skilled - 1 Un-skilled - 18	20.0 m <sup>3</sup>
54.	Add extra labour for each additional storey over the quantity for ground floor on item No. 50 Unskilled - 0.5	9.0 m <sup>2</sup>
55.	Labour for shuttering with centering and necessary staging upto 4 m. using approved stout props and thick hard wood planks of approved thickness with required bracing including fitting, fixing and striking out after completing of works (up to roof of Gr. floor). Carpenter -Skilled - 2 Un-skilled - 1	
	i) For roof slab and cantilever slab ...	14.0 sq.m.
	ii) For beam, lintels, pillars etc. ...	15.0 metre.
	[Note :- 30% to be reduced where staging is not necessary]	
56.	Extra labour for works beyond the roof of ground floor per additional floor over the item 53 (i) & 53 (ii). Unskilled - 1	
57.	Reinforcement for reinforced concrete work in all sorts of structure including distribution bars, stirrups, binders etc. including initial straightening and removal of loose rust cutting to requisite length, hooking and binding to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection complete. Rod binder (skilled) - 3 Unskilled - 2	220kg.
58.	Extra labour for works beyond the roof of Gr. floor/initial 4 m. for each additional floor. Unskilled - 1	200kg.
59.	Brick work with any class of bricks with cement mortar or cinder/surki/sand-lime mortar including raking out joints scaffolding & curing etc. a) in foundation & plinth (a group of 1skilled and 2 unskilled.) b) in super structure (a group of 1skilled & 2 unskilled) c) brick work in arches with, ordinary bricks including shaping the bricks (a group of 1 skilled & 2 unskilled)	1.40 cu.m. 1.1 cu.m. 1.0m <sup>3</sup>
60.	Extra labour for each additional floor height i.e. each additional height of 3.65 m. above an initial of 4.56m of brick work Skilled-1 Unskilled-2	5.6 Cu.m.
61.	125 mm thick brick work with any class of brick with any type of mortar including carriage of materials from stack within a distance of 30 m. and curing, scaffolding etc. complete Skilled -3 Unskilled-4	24.0 sq.m.
62.	Extra for each additional floor for above brick work Unskilled - 1	18.0 sq.m.
63.	75mm. thick brick work with any class of brick and with any type of mortar including carriage of materials from near by stack within a distance of 30m. and curing and labour for scaffolding etc. compete. Skilled-2 Unskilled-3	24.0 sq.m.

1	2	3
64.	Extra for each additional floor for above brick work, Un-skilled-1	28.0 sq.m.
65.	Rubble masonry work with any type of mortar including recking out the joints, scaffolding and curing etc. complete. Skilled-2 Unskilled-3	2.0 cu.m.
66.	Brick work with mud mortar with any type of brick including racking out joints, scaffolding and carriage of materials from nearby stack within a lead of 30 m. Skilled-2 Unskilled-3	2.0 cu.m.
67.	Extra for each additional floor height of i.e. each additional height of 3.65 m above in initial of 4.65 m of rubble masonry work. Skilled -1 UnSkilled-4	10.00 cu.m.
68.	Surki/Sand/Lime /Cement plaster work with materials supplied at site: (i) 6-12 mm thick plaster to ceiling and concrete surface etc. Skilled-2 Unskilled-3	18.0 m <sup>2</sup>
	(ii) 20mm thick. Skilled-5 Unskilled-8	36.0 m <sup>2</sup>
	(iii) 25 mm thick plaster Skilled-3 Unskilled-4	18 sq.m
69.	Extra for each additional floor height i.e each additional height 3.65 m. above on initial of 4.56 m. of plaster work. (i) 6 mm. thick plaster: Skilled-1 Unskilled-4	100.0 m <sup>3</sup>
	(ii) Above 6 mm thick and up to 200 mm thick Skilled-1 Unskilled-5	140 m <sup>2</sup>
70.	Labour for neat cement punning Skilled-2 Unskilled-1	50 m <sup>2</sup>
71.	Flush pointing or rule pointing to walls etc. Skilled-2 Unskilled-1	18.0 m <sup>2</sup>
72.	(a) Making "V" shaped drain in hill roads or in cutting with dry boulders including placing powdered earth in the surface and in the side of the drain properly graded. Skilled-1 Unskilled-2	40.0 m
	(b) Making "V" shaped drain in hilly road or in cutting with dry boulders excluding placing sand, cement mortar in the intersection and joints with pointing complete Skilled-1 Unskilled-2	30.0 m.
<b>G. JOINERY WORK</b>		
73.	Wood work in Door and window frames works (7.5 x 10 cm size) including fixing. Carpenter-3 Unskilled-1	20.00 m

1.	2.	3.
74.	(i) Door, window shutter panelled, 'Z' battened and bridge deck work (1.5 cm to 3.75 cm. thick): Carpenter –4 (Skilled) Semi-skilled–1	2.00 m <sup>2</sup>
	(ii) 20mm thick Door-window venetian shutter works Carpenter–5 (Skilled) Semi-skilled–2	1.90 m <sup>2</sup>
	(iii) Extra for door shutters of one side raised panel over item 72 (i) Carpenter–1 (Skilled)	4.4 m <sup>2</sup>
	(iv) Extra for door shutter of both side raised panel over item 72 (i) Carpenter–1 (Skilled)	2.2 m <sup>2</sup>
	(v) 20 mm. thick glazed shutter Carpenter–3 (Skilled) Semi-skilled–1	2.4 m <sup>2</sup>
	(vi) 20 mm thick wooden 1/3rd panelled and 2/3rd glazed shutters. Carpenter–7 (Skilled) Semi-skilled–2	4.0 m <sup>2</sup>
	(vii) 20 mm. thick wooden framed fly proof shutter. Carpenter–11 (Skilled) Semi-skilled-4	8.0 m <sup>2</sup>
	(viii) 40 mm thick wooden frame and planked (false panel) shutters with 20 mm thick planks, and 20 mm thick, frame fitted an fixed in position Skilled–5 Unskilled–1.5	3.8 m <sup>2</sup>
	(ix) Fitting, fixing glass panes in door & windows (a) with nails/spring, putty (Glazer)Skilled–1	3.00 m <sup>2</sup>
	(b) with wooden fillets Skilled–1 Glazer–1	5.00 m <sup>2</sup>
75.	Roof truss, with scantlings (10 cm x 15 cm size) including fitting fixing with necessary bolts, nuts and screw etc. Carpenter–2 (Skilled) Unskilled–3	12.0m <sup>2</sup>
76.	Fitting fixing door and window frames into walls including jamming the holes with concrete. Skilled–1 Unskilled–1	4 nos.
77.	Fitting fixing door and windows shutters with necessary hinges Skilled – 1 Unskilled – 1	2 nos.
78.	Joinery work with Sal or Bamboo frame and split bamboo strips: (i) Door and Window frames and leaves. Skilled – 1 UnSkilled – 2	18 m <sup>2</sup>
<b>H. ROOFING WORKS :</b>		
79.	Roof truss with (10 cm dia) bamboo and purlin with split bamboo (1/6th) including fitting fixing with necessary nails etc. complete. Carpenter–1 (Skilled) Unskilled–2	12.0 m <sup>2</sup>

1.	2.	3.
80.	Roofing work with cladding of roof surface materials over frame work including materials supplied at site.	
	(i) Tile roof	
	Skilled-1	
	Semi-skilled-2	25 m <sup>2</sup>
	Unskilled-3	
	(ii) Tile roof including cement pointing.	
	Skilled-2	
	Semi-skilled-2	25 m <sup>2</sup>
	Unskilled-4	
	(iii) Corrugated iron or asbestos sheet roof	
	Carpenter-1	
	Helper-4	37 m <sup>2</sup>
	Unskilled-2	
81.	Roof tarracing (7:2:2) with khoa, surki and lime properly mixed with other adhesive materials and laying properly to required slope and thickness (av. 10 cm.) complete.	
	Skilled-3	18 m <sup>2</sup>
	Unskilled-4	
82.	Beating the terraced roof with sprinkling of lime water and other adhesive materials including supply of mallets (Beating to be continuous for 7 days)	
	Semi-skilled-1	10 m <sup>2</sup>
	Un-skilled-14	
	(a) Making halor (Ghoondi) on lime teracing (7:2:2) in roof work	
	Skilled-2	100.00 m.
	Un-skilled-3	
83.	Thatched roofing work over bamboo or wooden frame up to a thickness of 25 cm.	
	Skilled-2	40 m <sup>2</sup>
	Unskilled-2	

**WHITE WASHING & PAINTING**

84.	Scraping of Moss blisters etc. thoroughly from exterior surface of walls necessitating the use of scraper wire brush etc.	
	Unskilled-1	40 m <sup>2</sup>
85.	Scraping and removing greasy soot from walls or ceiling of kitchen or similar smoke affected rooms and preparing the surface.	
	Unskilled-1	30 m <sup>2</sup>
86.	White Washing/colour washing including cleaning and smoothing surface thoroughly (5 parts of stone lime and 1 part of shell lime should be used in finishing coat.)	
	(a) One coat	
	Skilled-2	
	Unskilled-1	95.0 m <sup>2</sup>
	(b) Two coat	
	Skilled-2	60.0 m <sup>2</sup>
	Un-skilled-1	
87.	Colour washing out side wall for both new and maintenance work including scraping, sand papering etc.	
	(a) One coat	
	Painter-1	75.00 m <sup>2</sup>
	Unskilled-1	
	(b) Two coat	
	Painter-1	50.00 m <sup>2</sup>
	Unskilled-1	
38.	Cement washing including cleaning and smoothing surface thoroughly (Cement to be used 15 kg% m <sup>2</sup> for one coat and 25 kg.% m <sup>2</sup> for two coats)	
	a) One coat	
	Skilled-1	110 m <sup>2</sup>
	Un-skilled-1	
	b) Two coat	
	Skilled-1	55 .m <sup>2</sup>
	Un-skilled-1	
39.	Removing lpose scales, blisters etc. from old painted surface and thoroughly smoothening the surface to make the same suitable for receiving fresh coat of paint.	
	Un-skilled-1	20.00 m <sup>2</sup>

1.	2.	3.
90.	Removing old paint from blistered painted surface with application of Soda-Sajimati or any approved chemical paint remover and exposing the original surface including cleaning and thoroughly washing. Unskilled-1	12.0 m <sup>2</sup>
91.	Removing old paint from blistered painted surface of steel or other metal by chipping including scraping and cleaning and exposing the original surface. Unskilled-1	10.0 m <sup>2</sup>
92.	Priming one coat on timber, plaster or on steel or other metal surface with synthetic enamel/oil bound primer of approved quality including smoothening surfaces by Sand papering etc. a) Wooden surface b) Steel surface	Painter (Skilled)-1 Painter (Skilled)-1 22.0 m <sup>2</sup> 20.0 m <sup>2</sup>
93.	Painting with best quality oil bound paint including sand papering etc. and including application of approved putty over primed surface. (a) One coat (b) Two Coats	Timber or Plastered surface Metal Surface i) Timber or plastered surface ii) Metal Surface Painter-1 Painter-1 Painter-1 Painter-1 22.00 m <sup>2</sup> 24.00 m <sup>2</sup> 12.00 m <sup>2</sup> 12.00 m <sup>2</sup>
94.	Synthetic enamel painting one coat including one coat of priming a) On timber or plastered surface b) Iron or metal surface	Painter-1 Painter-1 10.0 m <sup>2</sup>
95.	Synthetic enamel painting one coat over painted/Primed surface	Painter-1 20.00 m <sup>2</sup>
96.	Copal varnishing two coats on timber surface including sand papering cleaning and applying putty etc. Painter-1	9.00 m <sup>2</sup>
97.	Painting with Black Japan on metal surface including sand papering and cleaning (i) One coat (ii) Two coats	Painter-1 Painter-1 22.00 m <sup>2</sup> 13.00 m <sup>2</sup>
98.	Coal taring to wooden surface. (a) One coat (b) Two coats	Unskilled-1 Unskilled-1 25.0 m <sup>2</sup> 15.0 m <sup>2</sup>

#### J. DUG WELL & OTHER WORKS

99.	Earthwork in cutting and digging wells (any diameter) but not exceeding 10m <sup>2</sup> area in plan, including removal of spoil and disposal of the same to a distance of 30m and lift 1.5m. A group of and Skilled-1 Unskilled-2	
	(a) Loose soil	6.00 m <sup>3</sup>
	(b) Hard or Dense soil/Moorum/Laterite	5.00 m <sup>3</sup>
	(c) Mud	4.00 m <sup>3</sup>
	(i) Lift beyond in 1.5m up to 4.0m	Multiplying facture 0.8
	(ii) Beyond 4.00 m upto 6.00 m	-do- 0.75
	(iii) " 6.00 m " 8.00 m	-do- 0.66
	(iv) " 8.00 m " 10.00 m	-do- 0.54
	(v) " 10.00 m " 12.00 m	-do- 0.45
	(vi) " 12.00 m " 15.00 m	-do- 0.37
100.	The portion of earthwork in well is or under water, the quantum of output will be	20% less of item No. 92.
101.	a) Lowering burnt earthen rings or precast R.C.C. rings complete. (upto 1.5m dia) Skilled-1 Unskilled-3	12m.
	b) Making brick walls with cement mortar 25 cm. thick around the periphery of the well. (A group of skilled-1 and unskilled-2 to work in a team).	1.3m <sup>3</sup>

02. Constructing annular 1.0m wide masonry platform around the periphery to the dugwell over a brick flat soling and top finished with cement punning including providing raised edging at the periphery and making outlet for draning out water.
- i) For well of 1.2 m dia (inner) 1 set of platform  
 A group of Skilled-1.5  
                   Unskilled-4
  - ii) For well 2.4 m dia (inner) 1 set of platform  
 A group of Skilled – 2.5  
                   Unskilled – 5
  - iii) For well 3.6 m dia (inner) 1 set of platform  
 A group of Skilled – 3.0  
                   Unskilled – 5
103. Constructing annular masonry well above G.L. 25 cm. thick with cement mortar (1:6) and plastering both interior and outer surface complete and finished with neat cement punning (up to 1.0m high) and brick pillars of 1.5m height, 25cm. thick-2 Nos. for fixing Wooden/Iron beam and fixing pully complete.
- (i) For wells of 1.2m dia (inner) 1 set of well  
 A agroup of Skilled-2.50  
                   Unskilled-4.0
  - (ii) For wells of 2.4 m dia (inner) 1set of well  
 A agroup of Skilled-4.00  
                   Unskilled-6.00
  - (iii) For well of 3.6m dia (inner) 1 set of well  
 A agroup of Skilled-5.00  
                   Unskilled-9.00

**TUBE WELL WORK :**

104. Boring G.l. pipes 4 cm dia by means of water jet system upto required depth lifting the bored pipes, lowering pipes with strainers, blank pipe filled with arkets all complete.
- Skilled-1
  - A group of Semi-skilled-1
  - Unskilled-5
- (a) Up to 50.00 m deep 25.00 m
  - (b) Beyond 50.00 m and up to 90m 22.00 m
  - (c) Beyond 90.00 m and up to 130.00m 20.00 m
105. Taking out 4 cm. dia sunk pipes and lowering down the same by fixing required length of strainer including fixing sockets. 90 m
- Skilled-1, Unskilled-4,
106. Fitting fixing hand pump and pumping out water till sand-free water comes out and increasing the yield of fresh water. 1 Tubewell.
- Skilled-1/2, Unskilled-2
107. Cutting damaged portion of old pipes and refixing with sockets including cutting threads 18 Sockets/Threads
- Skilled-1, Un-skilled-1
108. Boring 8 cm. dia. G.l. pipes by means of water jet system.
- Skilled-1, Semi-skilled-1, Unskilled-5
  - i) depth upto 50.00 7.00 m.
  - ii) Beyond 50m upto 100.00 m. 5.00 m.
109. Taking out sunk pipes and lowering down 8 cm. dia. pipes including fixing sockets complete. 15 m
- Skilled-1
  - Unskilled-4
110. Taking out 4 cm. dia. pipes from derelict tube well and cleaning the pipes and stacking property. 30.0 m
- Skilled-1
  - Semi-skilled-1
  - Un-skilled-5

1.	2.	3.
111.	Taking out 8 cm. dia pipes from derelict tubewell and cleaning the pipes and stacking properly. Skilled-1 Semi-skilled-1 Un-skilled-5	13.0m
112.	Bucket washing for 8 cm. dia G.I. Pipes Skilled-1 Un-skilled-2	Each Tubewell
113.	Making 1.2 m x 1.2 m or 1.5 m dia. Cement conc. Platform (1 : 3 : 6) 10 cm. thick over a brick flat soling and top finished with cement plaster (1 : 4) and neat cement punning including providing raised edging at the periphery making outlet including making drain 1.00 m length having 15 cm waterway with above specification. Skilled-1 Semi-skilled-1 Un-skilled-2	1 Platform with drain

#### L-BRIDGE WORK

114.	<b>Joining Sal bullah-Eucalyptus</b> bullah pile of 20 cm. to 30 cm. dia with half lap (Joints at least 90 cm. long) with 3 nos. of collars made of 50 cm. x 6 mm. M. S. Flat, clamps, bolts and nuts and washers as per approved drawing and design. Skilled - 1 Semi-Skilled - 3 Un-Skilled - 2	Nos.	4 Nos.
115.	<b>Butt joining Sal-Eucalyptus bullahpiles</b> of varying diameter from 20 cm. to 30 cm. inserting 25 mm. dia and 45 cm. long M.S. Rod as dowelbar 22 cm. minimum at the centre of each bullah and fastened with 4 Nos. 75 cm. long 65 mm. x 65 mm. x 10 mm M.S. angles placed diametrically opposite to each other and fixed by nuts and bolts (16 mm. dia)-8 Nos; and washers being tied with 4 Nos. 50 mm. x 6 mm. M.S. Flat suitably profiled to grip the M.S. angle at upper and lower ends of M.S. angles fitted and fixed with nuts, bolts and washers etc. including coal-tarring two coats complete etc. as per drawing and direction of the Engineer-in-Charge. Skilled - 1 Semi-Skilled - 3 Un-Skilled - 2	Nos.	3 Nos.
116.	Labour for fitting and fixing 10 cm. to 13 cm. dia salbullah as ties and runners including necessary nails, bolts and nuts. Skilled - 1 Semi-Skilled - 1 Un-Skilled - 2	Nos.	50 m.
117.	<b>Sal wood work rough dressed</b> including necessary hoisting and fitting, and fixing in position with bolt, nuts nails but excluding cost of bolts, nuts and washer. Skilled - 2 Semi-Skilled - 5 Un-Skilled - 8	m <sup>3</sup>	0.14 m <sup>3</sup>

No.	Description of Items	Unit	Amount of work per day
18.	<b>Sal wood work rough dressed</b> in bridge floor fitted and fixed with patent or round headed nails excluding cost of materials and fitting. Skilled -4 Semi-Skilled - 5 Un-Skilled - 4	m <sup>3</sup>	1 m <sup>3</sup>
19.	<b>(a) Labour for Undress Salwoodwork</b> in scantling in bridge floor, railing post, wheel guard. Skilled - 2 Semi-Skilled - 2 Un-Skilled - 8		
20.	<b>Labour for Sal wood work</b> in bridge member with old timber including cutting out rotten portion sizing, dressing, cutting to sizes, taking out nails etc. complete with supply of new snap headed country nails. Skilled - 1 Semi-Skilled - 2 Un-Skilled - 5	m <sup>3</sup>	1 m <sup>3</sup>
21.	<b>(a) Dismantling old wood work</b> in bridges and culvert including taking out bolts, nuts, nails clamps and cleats etc. and carrying and stacking materials in the nearest stackyard (measurement to be allowed for cubic content of the wood). Semi-Skilled - 1 Un-Skilled - 3 <b>(b) Taking out Sal Eucalyptus piles</b> from river bed or from elsewhere including carrying stacking materials in the nearest stackyard (measurement to be allowed for the length that was embedded in the ground). Skilled-0.5 Semi-skilled-3 Unskilled-3	m <sup>3</sup>	1m <sup>3</sup>
	i) up to 17.5 cm. dia	m	60m
	ii) Above 17.5 cm. and up to 25 cm. dia	m	50m
22.	<b>Supplying and fitting and fixing M.S. Iron pile shoe</b> on timber pile as per approved type drawing. Semi-skilled-1 Unskilled-1	kg	4 kg.
23.	<b>Supplying and fitting and fixing M.S. Iron ring</b> with 50 mm. X 6 mm. flat over the head of pile for driving including cutting of head of pile. Semi-skilled-0.5 Unskilled-1	kg	4 kg.
24.	<b>M.S. Works in bolts and nuts</b> of different sizes fitted and fixed in position including drilling holes and welding including cost of labour. Semi-skilled-0.5 Unskilled-1	kg	2.5 kg.



Item No.	Description of Items	Unit	Amount of work per day
125.	<b>Labour for M.S work in R.S. joists, channels, angles, Tees, plate etc. including cutting to sizes, forging or welding,drilling holes, rivetting or bolting, hoisting &amp; fixing and placing in position including rivets, welding including providing staging and removing the same after completion of work etc. complete.</b> Skilled-1 Semi Skilled-1 Un-skilled-2	kg	240 kg.
126.	<b>Dismantling old M.S. Works in joists, runners bracing etc. including cutting rusty bolts and nuts etc. from damaged bridges, stacking the materials within 150 m. of site.</b> Skilled-1 Semi Skilled-1 Un-skilled-2	Qt	2.5 Quintal
127.	<b>Cutting to requisite length or shape of departmental R.S. joist, angles, Tees, plates, and other steel materials by sawing (payment to be made on area of cut surface).</b> Semi-Skilled-1	Sq.cm	100 Sq. cm
128.	<b>Drilling holes of requisite dia -in departmental R.S. joist, channels, angles, Tees and plates etc.</b> Semi-skilled-1 (a)(i) Diameter upto 12 mm and depth up to 10 mm. (ii) Extra for drilling Beyond depth of 10 mm. (b)(i) Diameter above 12 mm and depth above 10 mm. (ii) Extra for drilling beyond 10 mm.	No. of holes No. of holes No. of holes No. of holes	40 holes 20 holes 35 holes 25 holes
129.	<b>Taking out through plates from the old bridges and stacking same at the site as directed.</b> Skilled-0.5 Semi-skilled-1 Un-skilled-1	m <sup>2</sup>	7m <sup>2</sup>
130.	<b>Refixing trough plate in position with necessary bolts and washers etc.</b> Skilled-0.5 Semi-skilled-1 Un-skilled-1	m <sup>2</sup>	4.57 m2
131.	<b>Labour for dismantling iron railing including wheel guard, railing standard hand rails.</b> Skilled-0.5 Semi-skilled-1 Un-skilled-1	m	9 m.
132.	<b>Re-fitting the railing with old and new bolts as required.</b> Skilled-0.5 Semi-skilled-1 Un-skilled-1	m	7m.

Item No.	Description of Items	Unit	Amount of work per day
133.	<b>Straightening</b> curved or twisted joists and channel.	kg	120 kg.
	Skilled-0.5		
	Semi-skilled-1		
	Un-skilled-1		
134.	a) <b>Straightening</b> curved or twisted, angles Tees etc.	kg	150 kg.
	Skilled-0.5		
	Semi-skilled-1		
	Un-skilled-1		

Item No.	Description of Items	Unit	Amount of work per day
<b>M. MISCELLANEOUS :</b>			
135.	Labour for driving Sal bullah/Eucalyptus bullah piles by monkey in sorts of soil including hoisting and placing piles in position, protecting the pile head with iron ring and cutting and shaping heads before and after driving		
	a) Water is not involved.		
	A group of Skilled-1 Un-skilled-4		
	(i) 100 mm diameter		28.00 m.
	(ii) 125 mm. diameter		25.00 m.
	(iii) 150 mm. diameter		25.00 m.
	(iv) 175 mm. diameter		20.00 m.
	(v) 200 mm. diameter		20.00 m.
	b) Water is involved		
	A group of Skilled-1 Un-skilled-4		
	(i) 100 mm. diameter		22.00 m.
	(ii) 125 mm. diameter		21.00 m.
	(iii) 150 mm. diameter		21.00 m.
	(iv) 175 mm. diameter		17.00 m.
	(v) 200 mm. diameter		17.00 m.
136.	Making gabion with split bamboo strips including carrying the strips from the stacks, fitting fixing with nails etc. complete and stacking at a place as directed.		
	Semi-skilled - 1		3 nos.
	Un-skilled - 2		
137.	Making sausage (Gabion) work by filling boulder (30kg. to 40 kg. weight) obtained from nearby stacks within a lead of 15m and placing tie them with G.I. wire netting for protection of river embankment or slope of hilly roads.		
	Skilled - 1		3 m <sup>3</sup>
	Un-skilled - 4		
138.	Preparing mud, kneading, with water including mixing crushed hay and sand (in case of prominently clayee soil) and making walls to required thickness.		
	Skilled - 1		1.5 m <sup>3</sup>
	Un-skilled - 3		
139.	Preparing mud with admixture of cowdung, crushed hay, wood dust etc. for mud punning work and plastering to walls and floors.		
	Semi-skilled - 1		20 sq.m
	Un-skilled - 1		
140.	Labour for making split bamboo mat for wall, door & window (In bundle generally 2 m. length is available) diagonally woven including both longitudinal and transverse intermediate stiffeners (about 30 cm. centre each way) made of paris of 1/8th split bamboo (one on each face) and tied with 18 B. W.G. galvanised wire. Complete.		
	Skilled - 1		15 sq.m
	Un-skilled - 1		
141.	Fitting & Fixing the split bamboo mat on the frame work with 18 B. W.G. Galvanised wire or coir rope and also making the Door-Window in position as per direction.		
	Skilled - 1		25 sq.m
	Un-skilled - 1		

Item No.	Description of Items	Unit	Amount of work per day
142.	Fitting & Fixing the Door and Window (made of split bamboo mat) in position on Wooden frame or on bamboo frame (made of half bamboo) with hinge, chain or galvanised wire etc. complete. Skilled - 1 Un-skilled - 1		12 sq.m
143.	Labour for 10 cm thick dab wall made on bamboo walling (with crushed Bamboo twigs) mud plastered both sides and finished with leaping of earth mixed with Cowdung and straw chopping etc. Skilled - 1 Un-skilled - 1		15 sq.m
144.	Earthwork in excavation in foundation trenches in hard rock surface with chisel, pick axe etc. including removing spreading or stacking the spoil within a lead of 15m as directed. Skilled - 1 Semi-skilled - 7 Un-skilled - 4		1. cu.m