

BY MECHANICAL TRANSPORT

A : CALCULATION OF TRIP RATE OF 1210/42 SE MODEL TATA TRUCK (Including loading, unloading and stacking etc.)

Sl No	Lead in Kms (L)	Average Speed Km/hr (S)	No of trips per day	Kms done per day (K)	Total Cost per day of vehicle & labour	Cost per Trip (6 / 4)	Increase in Cost per Km over previous 1 Km	Average Cost per additional 1.0Km after 1st 5Kms
1	2	3	4	5	6	7	8	9
1	1	16.00	7.11	20.22	8660.00	1218.00		
2	2	17.00	6.48	31.92	8660.00	1336.42		
3	3	17.50	5.96	41.76	8660.00	1453.02		
4	4	18.00	5.54	50.32	8660.00	1563.18		
5	5	18.50	5.19	57.90	8660.00	1668.59		
6	6	19.00	4.90	64.80	8660.00	1767.35	98.76	
7	7	19.50	4.66	71.24	8660.00	1858.37	91.02	Beyond 5km
8	8	20.00	4.44	77.04	8660.00	1950.45	92.08	upto 20km
9	9	20.50	4.26	82.68	8660.00	2032.86	82.41	72.04
10	10	21.00	4.10	88.00	8660.00	2112.20	79.34	
11	11	21.50	3.95	92.90	8660.00	2192.41	80.21	
12	12	22.00	3.83	97.92	8660.00	2261.10	68.69	
13	13	22.50	3.71	102.46	8660.00	2334.23	73.13	
14	14	23.00	3.61	107.08	8660.00	2398.89	64.66	
15	15	23.50	3.51	111.30	8660.00	2467.24	68.35	
16	16	24.00	3.43	115.76	8660.00	2524.78	57.54	
17	17	24.50	3.35	119.90	8660.00	2585.07	60.29	
18	18	25.00	3.28	124.08	8660.00	2640.24	55.17	
19	19	25.50	3.21	127.98	8660.00	2697.82	57.58	
20	20	26.00	3.15	132.00	8660.00	2749.21	51.39	

NOTES :-

- 1 No. of trips per day of 8 hours $N = 8 / (2L / S + 1)$,
where L = Lead in Kms, S = Speed in Km per hour,
1 (one) hour is allowed for loading and unloading time.
- 2 Kms done per day of 8 hours $K = 2NL + 6$,
where N = No. of trips per day, L = Lead in Kms, allowance of
6 (six) Kms is made for movement of truck from parking place
to duty and back.
- 3 Hire rate of truck includes all POL, etc. and it is as
per Analysis of Rate 2006 = Rs.7,160.00
- 4 Unskilled labour (Mazdoor) = 6 nos is included for loading,
unloading and stacking etc. and wages per day per head is
Rs.250.00
- 5 Total Cost per day of vehicle & labour
= $7160.00 + 250.00 \times 6 = \text{Rs.}8,660.00$