

URBAN TRANSPORTATION PLANNING

(Video Course under NPTEL)

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Questions for Self Evaluation

MODULE 3: TRIP GENERATION ANALYSIS

1. List two variables each that may influence the following: (i) Work-trip production, (ii) Shopping-trip production, (iii) Work-trip attraction and (iv) Shopping-trip attraction.
2. Explain the methodology and purpose of doing t test in the context of regression analysis.
3. Develop a model for shopping trip production for the following case and check for the statistical significance of the model in all respects. The table value of t for this case @ 5% level of significance is 2.35.

Zone Number	Average Household size	Average motor-vehicle ownership per household	Average number of shopping trips per day per household
1.	4.5	0.8	2.6
2.	4.9	0.9	2.7
3.	5.5	1.2	3.2
4.	5.0	1.1	3.4
5.	4.6	0.8	3.0
6.	5.5	1.2	3.1

4. Explain the concept of category analysis with the aid of a numerical example. Assume suitable numerical values for the purpose of explanation.