

Code: 13A01801

B.Tech IV Year II Semester (R13) Advanced Supplementary Examinations July 2017

URBAN TRANSPORTATION PLANNING

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

PART - A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- What is the use of desire lines?
 - What do you understand about horizon year & base year?
 - Write the factors affecting trip generation.
 - Specify advantages & disadvantages of growth factor methods.
 - Write a short note on benefit cost ratio method.
 - Write a short note on scope of urban transport planning.
 - Explain in brief the factors affecting the mode split.
 - Write down the advantages of pre distribution models.
 - Mention the factors' selection for urban transport study area.
 - What are the surveys required for planning process?

PART - B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT - I

- 2 What are the various methods of conducting O-D surveys? Explain in detail.

OR

- 3 Explain about the relation between land use and travel.

UNIT - II

- 4 Write about the transportation planning process and explain stages in transportation planning process with a flow chart.

OR

- 5 Explain about the road side interview survey.

UNIT - III

- 6 What is trip generation? Explain in detail the factors governing trip generation and attraction rates.

OR

- 7 The target year productions and relative attractiveness of the four zone city have been estimated as in table 1.

Table 1		
Zone	Productions	Attractiveness
1	1500	0
2	0	3
3	2600	2
4	0	5

Table 2				
$i \backslash j$	1	2	3	4
1	5	10	15	20
2	10	5	10	15
3	15	10	5	10
4	20	15	10	5

The calibration of gravity model for a city estimated the parameter n as 2 and all socio-economic adjustment factors k to be equal to unity. Apply gravity model to estimate all target interchanges and to estimate the total target year attractions of each zone given that the target year inter-zonal impedances are given in table 2.

Contd. in page 2

Code: 13A01801**UNIT - IV**

8 What is modal split? Explain factors affecting modal split.

OR

9 What is trip assignment? State various models of trip assignment. What is the outcome of trip assignment? Explain.

UNIT - V

10 Explain about points to be considered in evaluation of transportation projects.

OR

11 Explain about different methods of economic evaluation.

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