

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**M.Tech. Summer 2017 - 18 Examination**

**Semester: 1**  
**Subject Code: 03211102**  
**Subject Name: Urban Transportation Planning**

**Date: 24/05/2018**  
**Time: 2:00PM TO 4:30 PM**  
**Total Marks: 60**

**Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1**A) Explain system approach to transport planning. (05)  
 B) Enlist the stages of transportation planning process and explain briefly any one. (05)  
 C) How is the home interview survey conducted and what is its use? (05)
- Q.2** Answer the following questions. (Attempt any three) (Each five mark) (15)  
 A) Discuss about BRTS and write about its features.  
 B) Explain para-transit mode of transportation.  
 C) Write about urban transportation problems.  
 D) Discuss about Metro mode of transportation.
- Q.3**A) What are the factors affecting trip generation and attraction rates? (07)  
 B) Calculate the future trip distribution in each zone by uniform growth factor method. The origin and destination matrix is given below: (Do for one iteration only)

O\D	A	B	C	D	T <sub>i</sub>
A	0	25	50	25	300
B	25	0	150	75	1000
C	50	150	0	200	800
D	25	75	200	0	300
T <sub>j</sub>	300	1000	800	300	

(08)

**OR**

- B) Explain the methods of route assignments. (08)
- Q.4** What are the factors to be considered while selecting a land-use model? (07)

**OR**

- A) Discuss about Urban Goods Movement. (07)
- B) What do you understand by the term "Modal Split"? Discuss. Also explain the factors affecting modal split. (08)