PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech. Summer 2021 - 22 Examination

Semester: 8   Date: 30/03/2022
Subject Code: 203104441   Time: 10: am to 01:00 pm
Subject Name: Public Transportation System   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 **Objective Type Questions** - (Each of one mark)   **(15)**
  1. What is the uniform growth factor method?
  2. The imaginary external line which shows the study area is termed as_____
  3. Two major aspect in travel demand analysis are_____
  4. No. of independent variable in univariate linear regression equation is _____
  5. Write down the formula for Detroit method_____
  6. Percentage of vehicle arrivals with less than a fixed time deviation from schedule is referred as____
  7. What does macroscopic stream models represent?
  (a) Change in behavior of one parameter with respect to another
  (b) The flow density
  (c) The maximum passengers the vehicle can accommodate
  (d) The characteristics of vehicles with respect to pedestrians
  8. Among the following city which is a mega city
   (a) Delhi (b) Kota (c) Surat (d) Vadodara
  9. Which of the following is an Informal Terminal?
  (a) Curb Parking (b) Bus Stops (c) Garages (d) Airports
  10. What is the PCU value for motorcycle?
  (a) 1 (b) 0.5 (c) 2 (d) 3
  11. What is formula for uniform growth factor method?
  12. Write full name of BRTS
  13. Write a full name of CVPD
  14. What is parking load
  15. Write down the example of circular combined with radial street system

Q.2 Answer the following questions. (Attempt any three)   **(15)**
  A) Explain factors affecting in planning of transport system of city
  B) Write short note on trip generation
  C) Write short note on model split
  D) What is shopping trip and recreational trip?

Q.3 A) Explain aggregate and disaggregate approaches.   **(07)**
  B) What is uniform growth factor method? The distribution of present trips of zones A, B and C and   **(08)**
  future trips generated (Ti) are also given. Distribute the future trips using Average Growth Factor
  Method.

O/D	A	B	C	T_i
A	70	100	200	360
B	200	20	300	1260
C	100	300	20	3120

OR

  B) Explain factors affecting travel demand.   **(08)**

Q.4 A) What are the various types of surveys conducted for traffic?   **(07)**

OR

  A) Explain transportation planning process with the help of flow chart   **(07)**
  B) Enlist different growth factor models for trip distribution. Explain in detail Fratar models.   **(08)**