

Total No. of Questions : 6]

SEAT No. :

P8

[Total No. of Pages : 2

APR.-17/BE/Insem.-9

B.E. (Civil)

ADVANCED TRANSPORTATION ENGG.

(2012 Pattern)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Neat diagrams must be drawn wherever necessary.
- 2) Figures to the right side indicate full marks.
- 3) Use of Calculator is allowed.
- 4) Assume Suitable data if necessary.

Q1) a) Explain how 'Road Side Interview' survey is carried out and state the outcome of such a survey. [5]

- b) The distribution of present trips among zones 1,2 and 3 are given in the O-D matrix. The future trip generated in zone 1,2 and 3 are 218, 332 and 450 respectively. Using the uniform Growth factor Method distribute the future trip among the zones. (Perform one iteration only)[5]

O\D	1	2	3	t_i	T_i
1	30	40	38	?	?
2	46	42	34	?	?
3	22	34	26	?	?

OR

Q2) a) Write a note on recent Transport Policy of India. [5]

- b) Define 'trip' and discuss the various factors affecting the trip generation within a study area. [5]

Q3) a) It is well known that 'Public transport is a more sustainable form of transport'. How would you as a transport planner aim to increase the mode share of public transport over the private vehicles. [5]

- b) Discuss the salient features of Pune Metro Project. [5]

OR

P.T.O.

Q4) a) What are the problems associated with Pune Bus Rapid Transit Systems and how do you propose to solve them. [5]

b) Using examples of system and their functions, explain the benefits of intelligent transport systems(ITS). [5]

Q5) a) Write a short note on vehicle operating cost. [5]

b) Consider a project which entailed an investment of Rs. 1,00,000. Calculate the NPV if the discounting rate is 16%. Also state whether the project is feasible or not. [5]

Years	Cash Flows (Rs)
1	40,000
2	30,000
3	50,000
4	60,000

OR

Q6) a) Differentiate between BOT and BOOT type of financial schemes. [5]

b) Explain first year Rate of Return method of economic evaluation. What is the criteria for deciding the priority of the project based on FYRR?[5]

