## USN

## Eighth Semester B.E. Degree Examination, June/July 2015 **Urban Transport Planning**

Max. Marks:100 Time: 3 hrs.

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

- a. Define "System Approach". Explain with flow diagram, system approach to transport 1 planning.
  - b. Define Transport Planning. Explain the "Interdependence of land use and traffic". (10 Marks)
- a. Define "Zone". Mention the different factors considered in dividing the whole area of 2 (10 Marks) zones.
  - b. Explain the Inventory of transportation facilities.

(06 Marks)

c. Mention the factors selection for an urban transport study area.

(04 Marks)

Explain the factors governing trip generation and attraction rates.

(10 Marks)

- What is Category analysis? Mention the assumptions made in category analysis. (10 Marks)
- Write a short notes on:
  - Trip generation.
  - b. Trip distribution.
  - c. Model split.
  - d. Scope of Urban transport planning.

(20 Marks)

## PART - B

a. The total trips produced in and attracted to the three zones A, B and C of a survey area in 5 (10 Marks) the design year are tabulated as:

Zone	Trip produced	Trips attracted
A	2000	3000
В	3000	4000
С	4000	2000

It is known that the trips between two zones are inversely proportional to the second power of the travel time between zones, which is uniformly 20min. If the trip interchange between zones B & C is known to be 600, calculate the trip interchange between zones A & B, A & C, B and A, C and B.

b. Explain Growth factor method and Synthetic methods.

(10 Marks)

- Define Modal split. Explain in brief the factors affecting modal split. (10 Marks) 6
  - b. What are the advantages and disadvantages of pre distribution modal split? (10 Marks)
- What is Traffic Assignment? Explain the applications of the traffic assignment. (10 Marks) 7
  - What are the Traffic Assignment Techniques? Explain the All or nothing assignment (10 Marks) technique.
- Explain the difficulties in transport planning for small and medium cities. (10 Marks) 8 (10 Marks)
  - b. How you are using quick response techniques for small and medium cities?