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10CV843

**Eighth Semester B.E. Degree Examination, June/July 2017**  
**Urban Transport Planning**

Time: 3 hrs.

Max. Marks:100

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

**PART - A**

- 1 a. Define "System Approach". Explain the system approach to transport planning with a flow diagram. (10 Marks)
- b. Explain the Interdependence of Land use and Traffic. (10 Marks)
- 2 Define :
  - a. Trip Generation.
  - b. Trip Purpose.
  - c. Trip Distribution.
  - d. Modal Split.
  - e. Trip Assignment. (20 Marks)
- 3 a. Explain Zoning and Study area. (10 Marks)
- b. Explain the surveys that are usually carried out during Urban Transport Planning. (10 Marks)
- 4 a. What are the factors Governing Trip Generation and Attraction rates? (10 Marks)
- b. Explain Multiple Linear Regression Analysis used in Trip Generation. Give examples. (10 Marks)

**PART - B**

- 5 a. Explain any two growth factor methods and any one synthetic method. (10 Marks)
- b. Estimate the future trip distribution by Furness method from the following data : (10 Marks)

| O \ D        | 1   | 2   | 3   | 4   | Future Trips |
|--------------|-----|-----|-----|-----|--------------|
| 1            | 10  | 20  | 15  | 18  | 140          |
| 2            | 21  | 16  | 17  | 14  | 150          |
| 3            | 30  | 21  | 25  | 27  | 200          |
| 4            | 10  | 9   | 16  | 13  | 100          |
| Future Trips | 150 | 120 | 180 | 160 |              |

- 6 a. What are the factors affecting modal split? (08 Marks)
- b. Draw the flow diagram for modal split carried out between Trip Generation and Trip Distribution and explain. (12 Marks)
- 7 a. List the different Assignment Techniques and explain any one Assignment techniques. (10 Marks)
- b. Discuss on Traffic Assignment Applications in India. (10 Marks)
- 8 a. Explain the difficulties in Transport Planning. (10 Marks)
- b. Discuss about Recent case studies on Urban Transport Planning. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
 2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.