

Subject Code: H2203/R13

M. Tech –II Semester Regular/ Supply Examinations, October, 2015

LAND USE AND REGIONAL TRANSPORTATION PLANNING

(Transportation Engineering)

Time: 3 Hours

Max Marks: 60

Answer any FIVE questions

All questions carry EQUAL marks

1. (a) Write the objectives, assumptions, supply-demand and major analytical tools of Von Thunan land use model?
(b) Write the variables affecting land use functional structure of a city?
2. (a) Explain the salient features of Garin Lowry Models?
(b) Write the need of land use models with example case studies
3. (a) Explain the methodology for Selecting a Land Use Model with any three examples?
(b) Explain the assumptions, salient features and criticisms on Multiple Nuclei Theory?
4. (a) State the factors affecting Goods and Passenger Flows with reference to regional travel demand?
(b) Explain the interactions between the various players in an urban system with reference to complexity of functional linkages in urban system dynamics?
5. (a) Write the advantages and drawbacks of the mode specific models used to estimate freight and passenger demand?
(b) Write an overview on Abstract Mode models used to estimate freight and passenger demand?
6. (a) Describe the land-use transport feedback cycle?
(b) Explain how Graph Theory is used for Inter-urban Traffic Flow Estimation?
7. (a) Explain how accessibility is evaluated with reference to regional transport planning?
(b) Explain details of use of multi-objective goal programming techniques for regional transportation planning?
8. (a) Write the details of circuit block properties according to Graph Theory?
(b) Write the applications of transportation land use forms and structures at urban and regional levels of planning?
