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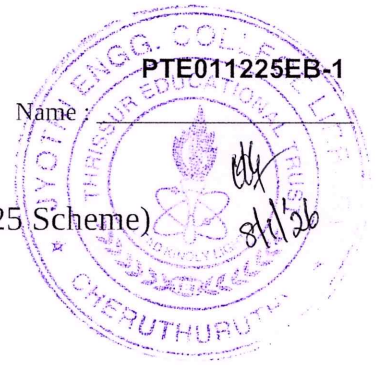
PTE011225EB-1



Jyothi Engineering College(Autonomous)

M.Tech Degree S1 (R) Examination, December 2025 (2025 Scheme)

25PTET123- GEOINFORMATICS IN
TRANSPORTATION ENGINEERING



Total Mark: 60

Total Time: 2hr 30min

CO MARK

PART A

Answer All Questions

1. Discuss about the need to collect data in the transportation planning process. What are the various types of data that are required to be collected? CO1 (5)
2. Substantiate the statement "Transportation and land use are interconnected". CO2 (5)
3. Elaborate on various applications of Geographical Information systems in transport sector. CO3 (5)
4. Illustrate ITS architecture. CO4 (5)
5. Explain automated highway system. CO5 (5)

PART B

Answer Any Five Question(s)

6. Explain how spot speed data are presented and the results used in traffic engineering. CO1 (7)
7. With a neat flowchart, explain the traditional four step travel demand forecasting process. CO2 (7)
8. Explain how the use of different transportation planning software aid a transport planner in various studies. CO3 (7)
9. What are Advanced Traveller Information systems? Describe in detail the different types of Information dissemination systems available to support ATIS. CO4 (7)
10. Describe the application of GIS in land use and transportation planning with a case study. CO5 (7)
11. Explain the application of ITS in electronic toll collection and incident management system. CO4 (7)
12. Illustrate and explain the sequence of activities and equation systems of Lowry model. CO2 (7)
