



Total Pages: 1

Reg. No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
FIRST SEMESTER (R) M.TECH. DEGREE EXAMINATION, DECEMBER 2023

**CIVIL ENGINEERING**  
**221ECE056 GEOINFORMATICS IN TRANSPORTATION ENGINEERING**

Max. Marks: 60

Duration: 2.5 Hours

**PART A**

*Answer All Questions.*

Q. No.		Marks
1.	What do you meant by conflict points and how they are created?	(5)
2.	Explain the need for TLUM models in transportation engineering.	(5)
3.	Differentiate Spatial and Non spatial data sets used for transportation planning.	(5)
4.	What is ITS? Explain the components of ITS in detail.	(5)
5.	What do you meant by Travel time analysis using GPS – GIS?	(5)

**PART B**

*Answer Any 5 Questions.*

6.	What do you mean by Sampling? Explain various sampling techniques used for traffic surveys.	(7)
7.	Explain the four stage planning process in detail.	(7)
8.	Write short note on Lowry model with its advantages and drawbacks.	(7)
9.	Explain network analysis and shortest path determination using GIS.	(7)
10.	Write short note on any two GIS - T software.	(7)
11.	List out the applications of ITS in transportation and explain any two of them.	(7)
12.	Explain the integration of GPS and GIS in transportation with a case study.	(7)