SET-2

Reg No.:_____   Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SECOND SEMESTER (R) M Tech DEGREE EXAMINATION, MAY 2023

Discipline: CIVIL ENGINEERING

Course Code & Name: 222ECE049 - Intelligent Transportation Systems

Max. Marks: 60   Duration: 2.5 Hours

PART A
Answer all questions. Each question carries 5 marks   Marks

1	What are the prevailing challenges and promising opportunities in the field of Intelligent Transportation Systems?	(5)
2	How can public transport operations be optimized to enhance efficiency, accessibility, and sustainability within urban environments?	(5)
3	What strategies and technologies can be implemented to mitigate the risks of both lateral and longitudinal collisions in automotive safety systems?	(5)
4	How does the integration of smart car technologies propel the progression of Intelligent Transportation Systems	(5)
5	What sets apart the Intelligent Transportation Systems (ITS) approach from traditional methods when tackling transportation challenges?	(5)

PART B
Answer any 5 questions. Each question carries 7 marks

6	How do Intelligent Transportation Systems (ITS) differ in their implementation and effectiveness between metropolitan and rural areas?	(7)
7	How do pre-trip information and en-route driver information contribute to enhancing transportation efficiency and safety?	(7)
8	Discuss the role of Commercial Vehicle Operation technologies in enhancing the efficiency of freight transportation networks.	(7)
9	How does Artificial Intelligence contribute to the development of smart transportation systems?	(7)
10	Investigate two case studies in India where ITS solutions have been implemented to address specific transportation challenges?	(7)
11	What are the environmental, economic, and safety implications of Intelligent Transportation Systems (ITS)?	(7)
12	How do Emergency Management Systems and Incident Management Systems differ in their functions and applications?	(7)