Reg. No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SECOND SEMESTER (R) M.TECH DEGREE EXAMINATION, JUNE 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 Differentiate metropolitan ITS with rural ITS.   (5)

2 Describe the time line of incident management system.   (5)

3 Explain the functions of a traffic management centre in facilitating ITS. (5)

4 Explain how implementation of AHS is having an impact on environment.   (5)

5 Describe the ways in which ITS can be employed to improve the efficiency of public   (5)
   transit systems.

PART B

Answer any 5 questions. Each question carries 7 marks

6 Explain (i) EMS and (ii) Public transportation operations.   (7)

7 Explain the components in ITS systems and describe the system requirements for ITS   (7)
   with examples.

8 Elaborate on the process of ATIS data processing and dissemination, highlighting its   (7)
   significance and impact on transportation management.

9 If we are planning to implement AHS in India, discuss the implementation process   (7)
   specific to Indian condition.

10 Explain the relationship between problems, conventional approach and ITS approach.   (7)

11 What are Advanced Traveller Information Systems (ATIS)? Describe in detail the   (7)
   different types of information dissemination system available to support ATIS.

12 Discuss six distinct in vehicle ITS services focused on enhancing vehicle control and   (7)
   safety systems, highlighting their functionalities and contributions to improving road
   safety and driving experience.