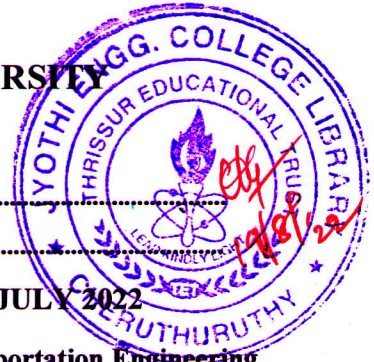


APJ ABDULKALAM TECHNOLOGICAL UNIVERSITY  
08 PALAKKAD CLUSTER



Q. P. Code: TE0822224-I

(Pages: 2)

Name: .....

Reg. No: .....

SECOND SEMESTER M.TECH. DEGREE EXAMINATION JULY 2022

Branch: Civil engineering

Specialization: Transportation Engineering

08CE6224 Intelligent Transportation Systems

Time: 3 hours

Max. Marks: 60

Answer all six questions.

Modules 1 to 6: Part 'a' of each question is compulsory and answer either part 'b' or part 'c' of each question.

Q. No.	Module 1	Marks
1. a	Describe the functions of ITS?	3
	Answer b or c	
b	Briefly explain the commercial vehicle operations?	6
c	Discuss about the architectures involved in ITS ?	6
Q. No.	Module 2	Marks
2. a	What are the advantages of route guidance	3
	Answer b or c	
b	Define and explain route guidance system and its classification?	6
c	What are variable message signs and explain it based on its performance ?	6
Q. No.	Module 3	Marks
3. a	Explain the uses of electronic payment system?	3
	Answer b or c	
b	Describe the working of dynamic speed adaptation?	6
c	Write a short note on different active and passive tags?	6

<b>Q. No.</b>	<b>Module 4</b>	<b>Marks</b>
<b>4. a</b>	Write down the facts about Adaptive cruise control system?	<b>3</b>
<b>Answer b or c</b>		
<b>b</b>	Note down the roles of GIS in ITS?	<b>6</b>
<b>c</b>	List and explain the essential characteristics of different ITS systems?	<b>6</b>

<b>Q. No.</b>	<b>Module 5</b>	<b>Marks</b>
<b>5. a</b>	Describe AHS and its characteristics?	<b>4</b>
<b>Answer b or c</b>		
<b>b</b>	Explain the 5 layer architecture control systems for AHS with help of flow chart?	<b>8</b>
<b>c</b>	Write a short note on any one of the vehicle platooning systems to reinforce the concept of AHS?	<b>8</b>

<b>Q. No.</b>	<b>Module 6</b>	<b>Marks</b>
<b>6. a</b>	Explain any one of the application of fleet management?	<b>4</b>
<b>Answer b or c</b>		
<b>b</b>	Justify the statement, ITS approach is an best method for solving problems related transportation.	<b>8</b>
<b>c</b>	Demonstrate applications of ITS in India?	<b>8</b>