

<b>Name:</b>	
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, December 2018**

**Course: Intelligent Transport System (ITS)**  
**Programme: M. Plan**  
**Time: 03 hrs.**  
**Instructions:**

**Semester: III**  
**Course Code: MPLO 802**  
**Max. Marks: 100**

**SECTION A**

S. No.	All Questions are compulsory	Marks	CO
Q 1	What is the application and use of software in Intelligent Transport Systems? List four (4) no of Companies working in ITS field.	4	
Q 2	Intelligent Transport Systems play an important role in urban transportation and traffic management. Discuss any three benefits of using ITS in urban transport sector.	4	
Q 3	Development and Implementation of ITS projects are equally important in urban conditions. Elaborate the procedures of same in the context.	4	
Q 4	How costing plays an important role in Intelligent Transport Systems projects? List any 5 no of components in ITS while estimating the cost.	4	
Q 5	Passenger Information System (PIS) is an integral part of any transport system irrespective of its usage. Discuss the various PIS components.	4	

**SECTION B**

	All Questions are compulsory		
Q 1	In present context, few Indian cities have achieved some practical practices and cases in integration of ITS with existing public transport system. Discuss the case of Mysuru City Bus System in terms of ITS.	10	
Q 2	What are the Automated Fare Collection Systems (AFCS)? How they support the Intelligent Transportation? Explain with figure/sketch.	10	
Q 3	What are the Depot and Control Centre in any Transport System? How they support the Intelligent Transport Management? Explain with figure/sketch.	10	
Q 4	Write briefly upon Advanced Traffic Management System (ATMS) and Advanced Public Transport System (APTS). Explain their use with the examples.	10	

	<p>OR</p> <p>What is Parking Guidance and Management System? What are the Key benefits of the system in Transport? Explain their use with two examples.</p>		
<b>SECTION-C</b>			
	All questions are compulsory		
Q 1	<p>“Indian cities have much more complex institutional and organizational structure systems compare to any other third world cities. ITS play an important role in city’s improved and enhanced Traffic and Transport Management. But the cities still face barriers to implement the ITS in major transport infrastructure.” Discuss, comment and explain the statement within the context. What kind of (Short Term, Medium Term and Long Term) projects can be identified under pan city program? Support the answer with examples, sketches and graphs.</p>	<b>20</b>	
Q 2	<p>“Pricing system in any area of transport sector plays an important and critical role to assess the overall profit, loss and viability of system.” Explain the Concept of Pricing in Urban Transport System. What are Electronic Road Pricing (ERP) system and Electronic Toll Collection (ETC) systems? Discuss the support of them in development of Transport Infrastructure? Explain citing examples in India and outside India. Support your answer with graphs/sketches.</p> <p>OR</p> <p>“Intelligent Transport Systems play an important role in increasing the Efficiency, Performance and Productivity of a Public Transport System.” Comment, explain and review in detail citing examples of Metro Rail System and Bus Rapid Transit System (BRTS). Discuss the benefits of Intelligent Transport Systems in urban transport sector with the perspective of end users. Support your answer with graphs/sketches.</p>	<b>20</b>	