Sea	t No.:	Enrolment No.	
		GUJARAT TECHNOLOGICAL UNIVERSITY	
		M. E SEMESTER – II • EXAMINATION – SUMMER • 2014	
Sul	bject	code: 1721307 Date: 23-06-2014	
Sul	bject i	Name: Economics and Evaluation of Transportation Projects	
Tir	ne: 02	2:30 pm - 05:00 pm Total Marks: 70	
Ins	struc	tions:	
	1.	Attempt all questions.	
	2.	Make suitable assumptions wherever necessary.	
	3.	Figures to the right indicate full marks.	
Q.1	(a)	Determine toll for expressway for different categories of vehicles on it for 50 km travel.	07
	(b)	Derive monthly transport cost by a new car in urban area for 10 km travel per day for 25 days in month.	07
Q.2	(a)	i. Explain concept of time value of money.	04
		ii. What is MARR?	03
	(b)	Explain PPP models of highway financing?	07
	(1.)	OR	0.7
	(b)	What is importance of sensitivity analysis? Discuss steps to conduct it?	07
Q.3	(a)	Carry out transport cost analysis for mass transit system.	07
	(b)	Explain method to derive maintenance cost of a car and a truck.	07
0.3	(a)	OR Write principles of economic analysis of transportation projects.	07
Q.3	(a) (b)	Explain method to derive National Income.	07
	` ´		
Q.4	(a)	Name and explain the method of economic evaluation which is best suggested for transportation projects. Also, Write various softwares used for economic evaluation.	07
	(b)	What are the benefits of economically viable transportation projects?	07
	` /	OR	
Q.4	(a)	What is transport demand and transport supply? Explain break even point analysis.	07
	(b)	How to derive travel time cost? What is the total cost of transportation project?	07
Q.5	(a)	What is the role of GDP and GNP in transportation project development?	07
-	(b)	Write steps of economic appraisal of transportation project. OR	07
Q.5	(a)	How evaluation of traffic system affects economic evaluation of transportation project?	07
	(b)	Explain marginal cost pricing with sketch.	07
