GUJARAT TECHNOLOGICAL UNIVERSITY ME Semester –III Examination Dec. - 2011

Subject code: 731902 Date: 08/12/2011 **Subject Name: Transportation Economics and Project Evaluation** Time: 10.30 am – 01.00 pm **Total Marks: 70**

Instructions:

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.
- (a) What is the significance and purpose of the study of transport 07 Q.1 economics?
 - (b) Discuss the basic principles of of economic evaluation of 07 transportation projects.
- 0.2 (a) What is consumer's surplus? How it may affect transportation cost? 07
 - (b) Mention the various costs and benefits that may be considered while 07 evaluating a transport project.
 - OR
 - (b) What is meant by internal rate of return? How is it different from 07 other methods of economic evaluation?
- (a) Present a comparative analysis of various methods of economic 07 Q.3 evaluation.
 - (b) Differentiate between road user cost and non user cost. 07

OR

- (a) What is maintenance cost? How is it related to accident cost?
- Q.3 07 (b) Discuss about various social costs and benefits from transportation 07 projects.
- (a) What is capital cost? How interest during construction may affect 07 Q.4 capital cost?
 - (b) What is congestion cost? How traffic restraint may affect road 07 pricing?

OR

(a) What are the economic principles behind road pricing? Q.4 07

- (b) Mention the requirements of a good road pricing system. 07
- (a) What may be the possible approaches for monetary evaluation of 07 0.5 passenger's travel time?
 - (b) How travel time savings affect transportation costs and benefits? 07

OR

- (a) How transportation projects may be related to welfare economics? 0.5 07
 - (b) Discuss the limitations of benefit cost ratio method of economic 07 evaluation.
