

Kadavarva Vishwavidyalaya
LDRP INSTITUTE OF TECHNOLOGY & RESEARCH, GANDHINAGAR.
M.E. (Civil) Infrastructure Engineering Semester -III
MID SEM EXAMINATION

Branch : CIVIL

Subject Name: Economic Evaluation of Transport project

Time : 08:30 AM to 10:00 AM

Date : 23/08/2014

Sub Code : MECV 301

Max. Marks : 30

Instructions: 1) All questions are compulsory

2) Figures to the **right** indicate full marks.

3) Indicate **clearly**, the options you attempt along with its respective question number.

Q.1 (a) Discuss about various methods of economic evaluation with their peculiarities and limitations or with their advantages and disadvantages. [5]

(b) Explain with graphical representation Elasticity of demand and supply [5]

Q.2 (a) What is Project appraisal [5]

(b) What is utility? Describe forms of utility [5]

OR

(a) What are the benefits from highway improvement [5]

(b) A single lane road 50 km long is to be widened to 2-lane at cost of Rs. 8 lac per km including all improvements. The cost of operation of Rs. 8 lac per km including all improvements. The cost of operation of vehicle on the single lane road is Rs. 1.2 per veh.km. where it is Rs.1 /veh km includes facility. Avg. traffic may be assume 2500 veh/day. Design period 20 yrs the interest rate 10 % per annum. The cost of maintenance Rs. 5000/km, their existing road and rs. 10,000 /km on the improved road. Is the investment improvement is worth wise. Use B/C ratio method. [5]

Q.3 (a) Cash flow streams for investment are as follows. [5]

Year	Investment project	Year	Investment project
0	-3,00,000	6	30,000
1	40,000	7	30,000
2	40,000	8	20,000
3	40,000	9	30,000
4	40,000	10	30,000
5	40,000		

Calculate payback period, NPV, IRR and B/C ratio for above cash which would you chose and why?

(b) Explain shadow pricing. [5]

OR

(a) Concept of time value of money [5]

(b) What are the factors affecting road user costs. How road user cost is calculated [5]

*****ALL THE BEST*****