| Seat No.: Enrolment No GUJARAT TECHNOLOGICAL UNIVERSITY M. E SEMESTER – III • EXAMINATION – WINTER 2012 | | | | | | | | | | |
|---|--------------------------|--|---|------------------------------------|---|---|--|------------|-----------------------------------|----------|
| Subj | ect N e: 10. ructi | ode: 731902 Name: Transpo .30 am – 01.00 ons: Attempt all questic | pm | Econo | mics aı | nd P | rojec | t Evalu | 26/12/2012 nation narks: 70 | |
| | 2. | Make suitable assu Figures to the righ | mptions v | | | ry. | | | | |
| Q.1 | (a) (b) | | What is the need of economic evaluation? Why is it carried out? Define Cost of project and describe different forms of Cost. | | | | | | | 07 07 |
| Q.2 | (a) | Calculate the net I following data: | 3/C ratio fo | Ye 0. 1. 2. 3. 4. | Casl (la 00 -1 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | iderin n flow ncs) .20 .25 .30 .35 .40 | _ | est rate o | f 12% with | 07 |
| | (b) | What are the meth | ods of eco | | valuation | | _ ain eac | ch method | l briefly. | 07 |
| Q.2 | (a) (b) | | al cost of s | stretch o | OR OT and BOLT. tretch of highway from the following data at the rate of e cost of Rs. 3 lacs / year: | | | | | 07 07 |
| | | | Item | | Cost in | lacs | Life i | n Years | | |
| | | | Land | | 25 | | | 100 | | |
| | | | Earthwor | | 17 | | | 40 | | |
| | | | Bridge & Pavemen | | 30 | | | 50 15 | | |
| Q.3 | (a) (b) | A transportation company is offered an investment for a project proposal to invest Rs. 70 lacs to get a return of Rs. 25 lacs for the first two years and Rs. 15 lacs for the next 3 years. The rate of interest is 10% per year. Find out NPV and state whether the investment is feasible or not. Define: - Inflation, Disinflation, and Deflation. | | | | | | | 07 07 | |
| 0.2 | (2) | Coloulota avama | onnucl and | with mot- | OR of vehicle | 00 hr- | noin ~ 4 | followie ~ | doto | 07 |
| Q.3 | (a) | Calculate average | annuai gro | 2000 2001 2002 2003 | to 2001 to 2002 to 2003 to 2004 to 2005 | Vel 43 47 52 55 58 | using 1 500 080 000 000 000 | onowing | uata: | 07 |

| | Year | Vehicles | | |
|------|------|----------|-------|--|
| 2000 | to | 2001 | 43500 | |
| 2001 | to | 2002 | 47080 | |
| 2002 | to | 2003 | 52000 | |
| 2003 | to | 2004 | 55000 | |
| 2004 | to | 2005 | 58000 | |
| 2005 | to | 2006 | 60500 | |
| 2006 | to | 2007 | 68500 | |

(b) Explain GNP, GDP, and NNP.

07

Q.4 (a) Explain factors affecting Road User Cost. **07**

(b) What are the benefits from Highway Improvement?

07

OR

| Q.4 | (a) | Explain factors affecting VOC. | 07 |
|-----|------------|--|----|
| | (b) | What are the special considerations for transportation economics in analysis for developing countries? | 07 |
| Q.5 | (a) | What are the criteria to be considered for ranking of transportation projects? | 07 |
| | (b) | Explain social cost in context of benefit in transportation project. | 07 |
| | | OR | |
| Q.5 | (a) | Explain Road Investment Decision Model (RIDM) for economic evaluation of road project. | 07 |
| | (b) | Write a short note on Techno Economic Feasibility Study | 07 |
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