

UNIVERSITY OF SWAZILAND

DEPARTMENT OF ECONOMICS

FINAL EXAMINATION PAPER

MAY 2011

TITLE OF PAPER: TRANSPORT ECONOMICS

COURSE CODE: ECON 423

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS:

- 1. ANSWER FOUR QUESTIONS
TWO QUESTIONS FROM SECTION A;
QUESTION 1 IS COMPULSORY, AND ANY TWO
QUESTIONS FROM SECTION B.**
- 2. ALL QUESTIONS CARRY EQUAL MARKS, OF
25 EACH.**

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN
GRANTED BY THE INVIGILATOR.**

SECTION A**ANSWER QUESTION 1 AND ANY OTHER QUESTION IN THIS SECTION****QUESTION 1**

You are a transport manager for a freight company based in Matsapha. Your task is to calculate the amount to charge for shipping 1000 boxes, each weighing 20 kilograms and measuring 3 cubic metres, to Johannesburg, which is a distance of 800 kilometres for a return trip. The capacity of the trailer is 35,000 kilograms and 31000 cubic metres.

The following information is also available to you:

<u>Equipment</u>	<u>Purchasing Price</u>	<u>Depreciation</u>	<u>Interest</u>
Truck Horse	E750,000.00	10 years / 700,000 km	10 %
Trailer	E250,000.00	15 years / 800,000 km	10 %

<u>Vehicle Data</u>	<u>Power Unit</u>	<u>Trailer</u>
Residual Value	E200,000.00	E100,000.00
Repair and Maintenance per kilometer	E0.40	E0.10
Vehicle Insurance per annum	E50,000.00	E20,000.00
Number of tyres	10	12
Cost per tyre	E8,000.00	E8,000.00
Lifetime of tyre in kilometres	60,000	60,000
Fuel Consumption in Litres/km	0.5	
Fuel Price per Litre	E9.00	

Other Costs

Driver Wages per Year	E100,000.00
Allowance on Expenses per Trip	E200.00
Profit Margi (%)	15
Efective Hours available for truck per year	2000
Pickup Time (Hrs)	6
Journey time for return trip (hrs)	30
Delivery / Off-loading (hrs)	4

(a) How much should the company charge for the shipment? **(15)**

(b) If after the transport company has agreed on a shipping price with the client, then a government regulation results in wages for drivers increasing by 30% and fuel prices increase by 50% and other costs remain the same. Is it still profitable for the company to charge the same price in (a)? **(10)**

QUESTION 2

Discuss the advantages and disadvantages of each of the following modes of transport: - Road, Railway, and Air. It will be advisable to make some comparisons, in your discussion, between these modes. **(25)**

QUESTION 3

- (i) Discuss any four (4) factors that affect the demand for transport. **(10)**
- (ii) Transport has an inelastic price elasticity of demand. Explain why? **(5)**
- (iii) Discuss any four (4) factors that affect travel time cost values. **(10)**

QUESTION 4

- (i) Discuss three benefits of privatisation in the context of transport. **(6)**
- (ii) Discuss any three factors that affect crash costs. **(9)**
- (iii) Transport is considered to be a major contributor to environmental impacts. Discuss any Four (4) impacts caused by transport? **(10)**

SECTION B**QUESTION 5**

- (i) Describe the two types of traffic congestion. (5)
- (ii) Discuss three; negative and positive, effects of traffic congestion. (15)
- (iii) Give two reasons why building more roads does not solve the congestion problem. (5)

QUESTION 6

The planning process for transport projects requires a number of stages to be undertaken. Describe the stages involved. (25)

QUESTION 7

Discuss the impacts of transportation in economic development of a country. (25)

QUESTION 8

- (i) Describe the decision-making process that can be followed by a middle income person, to decide to buy a car? (10)
- (ii) Discuss two actions for reducing congestion under the Travel Demand Management (TDM). (10)
- (iii) How can the Government recover the costs of constructing the road? (5)

GOOD LUCK!!GOOD LUCK!!