



ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF BUSINESS, ECONOMICS AND ACCOUNTING

DEPARTMENT OF BUSINESS ADMINISTRATION AND MANAGEMENT

EXAMINATION PAPER

COURSE CODE : CPS 213

COURSE TITLE : TRANSPORT ECONOMICS

SPECIAL REQUIREMENTS : NO SPECIAL REQUIREMENTS

DURATION : 3 Hours

LEVEL : ~~4~~ 2.1

DATE : 09. FEB 2022

INSTRUCTIONS TO CANDIDATES:

1. No cell phones are allowed in the examination venue.
2. **QUESTION ONE IS COMPULSORY**
3. Answer **QUESTION ONE AND ANY THREE (3)** questions.
4. Electronic calculators are allowed
5. Begin each question on a new page.
6. The number of marks for each question or part question is shown in brackets []

QUESTION 1

Zambia has been getting its fuel through Zimbabwe. A considerable number of haulage tanks are required to transport gasoline into Zambia thus creating increased demand for these trucks. A research student has estimated its demand and got the following:

$$Q = 120 - 2.5P$$

where; Q is the quantity of haulage tanks and P is price of a trip.

- a) State the Minister and Deputy Minister of Transport in Zimbabwe. [4]
- b) The Minister of Transport got interested in the demand function estimated by the student. Give an explanation to the meaning of 120. [4]
- c) What is the highest price that will lead to no demand of haulage trucks? Explain [6]
- d) Advise the Minister if there are other factors omitted in the demand function. Make the advice comprehensive. [11]

QUESTION 2

If congestion is such a bad thing, why do economists argue that the optimal amount of congestion is something greater than zero? [25]

QUESTION 3

Pricing is a vital component in the provision of transport services. The price determines who gets and who does not get a particular service as well as the distribution of rewards between the users and the providers of transport services.

- a) Conceptualise the concept of price discrimination in transport services. [10]
- b) With illustrations, show how the theory of second best works in pricing transport services. [15]

QUESTION 4

Consider two firms in the transport industry. Firms A and B each produce 80 units of pollution. The government wants to reduce pollution levels. The marginal costs associated with pollution reduction are:

$$MC_A = 30 + 3Q_A \text{ for firm A}$$

$$MC_B = 20 + 6Q_B \text{ for firm B}$$

where Q_A and Q_B are the quantities of pollution reduced by each firm.

Society's marginal benefit from pollution reduction is given by

$MB = 400 - 3Q_T$ where Q_T is the total reduction in pollution.

- a) What is the socially optimal level of each firm's pollution reduction? [5]
- b) How much total pollution is there in the social optimum? [5]
- c) Explain why it is inefficient to give each firm an equal number of pollution permits (if they are not allowed to trade them). [7]
- d) Explain how the social optimum can be achieved if firms are given equal numbers of pollution permits but are allowed to trade them. [8]

QUESTION 5

Discuss whether the objective of firms in the transport sector should always be that of profit maximisation. [25]

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