FEEDBACK TUTORIAL LETTER

1st SEMESTER 2019

ASSIGNMENT 2

TRANSPORT ECONOMICS
TEC711S
NAMIBIA UNIVERSITY OF SCIENCE AND TECHNOLOGY

Centre for Open and Lifelong Learning (COLL)

Bachelor of Technology Degree: Economics

Transport Economics – TEC711S

Feedback Tutorial Letter (FTL) - Assignment 2/2019

Compiled by:
Eden Tate Shipanga
May 2019
1.1 USEFUL INFORMATION FOR WRITING ASSIGNMENTS

Below are valuable information for improving upon the quality of your next Distance Learning assignments:

- Be logical in your reasoning
- Avoid the use of “I”. Rather make use of “We”.
- Avoid plagiarising the work of others
- You are allowed to refer to other sources such as the internet but refrain from copying and pasting the answers you get from there. The idea is that you learn and are able to present your understanding of the underlying concepts. Therefore copying and pasting from various internet sources will not really help in your learning.
- Communicate in a simple and flowing language.
- Carefully paragraph your presentation.
- Ensure a logical flow when discussing your answers. Ensure consistency with regards to the numbering and sequencing.
- Always check for spellings and grammatical errors.
- Do extensive reading before writing your assignment
- The beauty of economics lies in the use of diagrams and appropriate mathematical models. Make use of these tools, whenever the need arise.
- Avoid duplicating your friend’s work. You are however encouraged to discuss your assignment in groups.
- Address specifically the questions raised.
- Make use of Time Management principles in approaching your assignment questions.
- Do not introduce irrelevant materials into your discussion.
- Always be sure that the demands of a question are clear to you before proceeding with your discussion.
- The total marks awarded should guide you on how long your answer should be.
- More emphasis should be placed on multiple choice questions as they are not as easy as students may think.

1.2 ASSIGNMENT QUESTIONS

Instructions

- All questions are compulsory.
- In deciding how much detail to provide and how much time to spend on each question, it is imperative that you use the mark allocation as a guide.
- Clarify all your statements, workings and assumptions.
- Use diagrams wherever appropriate. Diagrams must be clearly illustrated.
ASSIGNMENT 2

Question 1

a. We know that the equilibrium quantity will be where supply meets, or equals, demand. So first we'll set supply equal to demand

\[ 40 - 35p = 20p \]

If we re-arrange this we get

\[ 40 = 55p \]

Which simplifies to \( p = 0.72 \)

Now we know the equilibrium price, we can solve for the equilibrium quantity by simply substituting \( p = 0.72 \) into the supply or the demand equation. Substituting into the demand equation we get

\[ Q_d = 40 - 35(0.72) \]

This equals to 14.55

So therefore; Equilibrium price and quantity is given as 0.72 and 14.55 respectively

b.
c. With an addition of 15,000 to the daily demand; the new demand curve would be given as

\[ 40 + 15 - 35p = 20p \]

Thus: \[ 55 - 35p = 20p \]

Which simplifies \( P=1 \)

Substituting \( p \) in the new equation we get;

\[ Q_d= 55-35(1) \]

\[ Q_d = 20 \]

So therefore new equilibrium price and quantity demanded would be given as 1 and 20 respectively

Question 2

Baumol model of contestability

The theory of contestable market was first proposed by William J Baumol, in his article of American Economic Review (1982). “A contestable market is one into which entry is absolutely free and exit is absolutely costless” (Martin, 2000 p.10). The argument of contestable market is based on the fact that it’s pointless for markets to operate in a perfect competition. What really matters is; if the market is contestable or not. If a new firm tries to enter the market, the incumbent firm could act as if it was earning normal profit in order to deter the new firm from entering. If the incumbent firm fails to act this way, it will be vulnerable to exit the market. In a perfect market, one of the assumptions is free entry and free exit. In the case of a monopoly, if new firms are allowed in the market, it will literally take full control of the market, which cannot support two firms. This will only happen if incumbent firm is making abnormal profit instead of normal profit (contestable market). Thus, a monopoly firm could be economically efficient if the market is highly contestable. Let’s take a look at figure 46, to explain the position of a monopoly firm in a contestable market.

Source: (Cowie et al., 2010. P.159)
A monopoly in a potential contestable market will set its output level at $Q_L$ between $Q_m$ and $Q_{cm}$. In a case of relatively high contestability, that is barriers to entry and exits are low. The output level will move to $Q_{cm}$, which is also perfect competition output level. If the markets’ barrier to entry and exit are high, that is highly contestable market. The monopoly firm will set its output level at $Q_m$. This phenomenon is generally known as Bain’s model for limit-pricing theory. The idea is that monopoly firm will not set the price that will maximize its revenue (that is at $P_m$) but will rather set it at a lower level that prevents new firms from entering the market. In the long run, abnormal profit will be made based on the level of entry and exit.

Another area to consider under contestable market is that it suffers from hit and run. In the sense that if firms are making abnormal profit in a highly contestable market. New firms will enter the market and the incumbent firms will be forced to lower its prices. When the market tightens up and abnormal profit disappears, the new firms exit the market. Contestable market also suffers from cherry-picking. This is very common in the transport sectors whereby new entrant only takes a segment of the market rather than the whole market. In conclusion, due to the contestability of the market, monopoly firms tend to move closer to the perfect competition market price.

**Question 3**

a. | Output | Total Fixed Cost | Total Variable Cost | Total Cost | Average Fixed Cost | Average Variable Cost | Average Total Cost | Marginal Cost |
<table>
<thead>
<tr>
<th></th>
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</tr>
<tr>
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<td>8</td>
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<td>4</td>
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<td>10</td>
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<td>201</td>
<td>231</td>
<td>3</td>
<td>20.1</td>
<td>23.1</td>
<td>41</td>
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</table>

b. The firm would obtain Optimum Efficiency at 6 unit of output. The reason behind this is the fact in order for a firm to attain optimum efficiency the firm must produce at the minimum average total cost, according to the above table at the point 6, the bus service company is at its minimum average cost.

c. The following are necessary market conditions for price discrimination in public transport:

- Near monopoly control: the transport operator must have a near monopoly of the market. This argument is against perfect competition whereby the consumers have many options of suppliers to choose from. In a near monopoly situation, the transport operator can easily price discriminate.
• Consumer surplus: this is the extra money consumers are willing to pay. With the existence of consumer surplus, the transport operator can charge more than the market price. Thereby, transferring consumer surplus to the operators.

• Segmented market: in order for transport operators to effectively price discriminate, it must be possible to separate each market into different segments (time and day of the weeks). The segmentation must be done in such a way premium grade fare passengers do not downgrade to lower grade fare.

Types of price discrimination

• First degree price discrimination: First-degree price discrimination means finding out what your customers are willing to pay for an item and selling it at that price. This strategy either requires you to be open to haggling, such as a used-car dealer is, or to profile your customers and offer personalized prices based on past performance.

• Second-degree price discrimination refers to special deals and prices offered to customers who meet certain conditions or who are seeking certain special qualities.

• Third-degree pricing programs offer special discounts to members of certain groups, such as students, seniors or military personnel. Third-degree programs give you the opportunity to expand your market by selling to a group that might not buy otherwise, and rarely do they engender bad feelings among customers who do not fall into the discounted group as long as you have not raised prices in general to compensate for the discounts.

END

I wish you the best of luck for the Exam!!!!!!!!!!!!

TOTAL MARKS: 100

1.3 PERFORMANCE STATISTICS FOR ASSIGNMENT 2/2019

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Total number of students who submitted Assignment 1</td>
<td>37</td>
</tr>
<tr>
<td>Total score</td>
<td>3817</td>
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<tr>
<td>Average score</td>
<td>80%</td>
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<tr>
<td>Students who scored above 50%</td>
<td>36 (97.3%)</td>
</tr>
<tr>
<td>Borderline cases, that is, 50%</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Students who scored below 50%</td>
<td>1 (2.7%)</td>
</tr>
<tr>
<td>Highest score</td>
<td>100 %</td>
</tr>
</tbody>
</table>
1.4 EXAMINATION:

The First Opportunity Examination for June 2019 (as well as the Supplementary Examination taking place in July 2019) will cover the entire content of this course as suggested by the course outline and the current study guide. These are:

<table>
<thead>
<tr>
<th>Topic</th>
</tr>
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<tbody>
<tr>
<td>Introduction to the economics transport</td>
</tr>
<tr>
<td>Transport and economic development</td>
</tr>
<tr>
<td>The market for transport services</td>
</tr>
<tr>
<td>Transport demand elasticity</td>
</tr>
<tr>
<td>Transport costs</td>
</tr>
<tr>
<td>Perfect competition in transport markets</td>
</tr>
<tr>
<td>Imperfect competition in transport markets</td>
</tr>
<tr>
<td>The pricing of transport activities</td>
</tr>
<tr>
<td>Transport and the natural environment</td>
</tr>
<tr>
<td>Transport regulation and ownership</td>
</tr>
<tr>
<td>Transport appraisal.</td>
</tr>
</tbody>
</table>

Furthermore, you are strongly advised to study the previous Examination Question Papers for an insight into the standard of questions that may be set around the above-identified issues. Past questions are available electronically in the intranet of the Polytechnic. In case of any difficulty in accessing them, do phone the Subject Librarian. She will assist you. Her direct phone number is 2072326.
Also, do consider the formation of **Study Groups** in order to share and cross-fertilise ideas on issues related to the course. Furthermore, you should keep in close **contact with the full-time and part-time students** since they are benefiting a great deal from the daily face-to-face contacts with their Lecturer. Do not forget to read your Study Guide for the course from the beginning to the end. Finally, do not hesitate to contact Mr. Eden Tate Shipanga (The Lecturer for this course) should the need arise.

### 1.5 ACTIVITIES IN THE STUDY GUIDE

The activities in the study guide are meant to provide additional intellectual challenge to you. Do attempt to go through the activities in the study guide as they will really provide you with practice questions needed for the mastery of the content for this course.