

ECS1101: Introductory Microeconomics Assignment

Due date: Week 7; 18/4/2016 @ 1400HRS South Africa time

Weighting/Value: 15%

Presentation requirements:

- Assignment should be typed using an appropriate font (preferably Arial, Times New Roman, Calibri and Helvetica). Font size should be a minimum of 12 (apart from foot notes)
- Diagrams can be drawn by free-hand although computer aided diagrams are preferred. Pencils can be used to draw diagrams
- Check your spelling, punctuation and grammar before submitting your assignment.
- Attach a bibliography and use an acceptable form of citation for the footnotes and bibliography. Incomplete or inaccurate bibliographies will be penalized, however, assignments submitted without a bibliography will not be accepted.
- It is accepted that students will assist each other with problems associated with their studies and discuss issues with each other. Sometimes advice may be sought by one student from others relating to minor issues of comprehension, interpretation or further explanation of a point made by the lecturer during a class. **Students, however, must undertake all assigned work, independently** (No group work).
- Presentation is an important part of all written work and a skill, which needs to be developed. Assignments, which have serious deficiencies in this regard, will be penalized.

- Students can clarify their doubts regarding the questions asked in the assignment prior to submission. However, please don't expect us to evaluate/informally mark your assignment before submission. Moreover, once an assignment has been submitted and graded there is no provision for rewriting and reassessment.
- Remember DO NOT PLAGIARISE. <http://policy.monash.edu.au/policy-bank/academic/education/conduct/plagiarism-policy.html>

Estimated return date:

Within 3 weeks of submission deadline

Criteria for marking:

The following points represent the general guidelines to assist you in completion of the assignments. Please make every effort to present the assignments in word processed form, but diagrams can be drawn by hand. This will enhance your work and make it easier for examiners to read and assess. Attempt to fully utilise your acquired knowledge in answering each assignment. Also, clearly *acknowledge* your sources of information in an appropriate manner. The assignment will be judged on the basis of:

- The depth of your understanding of the topic and the issues involved
- Your ability to determine the requirements of the question and present the material in a clear, logical and well-structured format
- Use of appropriate theoretical framework
- Proper use of footnotes and reference list
- Quality of presentation – involving correct spelling, grammar, good writing style and neat professional presentation is expected.

Learning objectives assessed:

Please refer to unit guide

Submission details:

Students will submit their assignments in the assignment drop box. **Only under exceptional circumstances will the lecturer accept online submission.**

Penalties for late lodgment (optional - leave blank for none):

A late assignment, that is assignments submitted after the due date and where no extension has been granted, will be accepted, but in fairness to students who present their work on time, a penalty will be levied. A maximum penalty of 10% of the total mark allocated to this assessment will be deducted for each day that it is late.

Please note that this policy applies to this unit only; other lecturers may take a different approach

Assessment coversheet

Work submitted for assessment **MUST** be accompanied by a completed and signed assignment coversheet, available at URL:

<http://www.buseco.monash.edu.au/student/forms/>

NO assignment will be accepted or marked if it is not accompanied by a signed

Assignment coversheet.

Question One:

- a. Amazon.com, the online bookseller, wants to increase its total revenue. One strategy is to offer a 10% price discount on every book it sells. Amazon.com knows that its customers can be divided into two distinct groups according to their likely responses to the discount. The accompanying table shows how the two groups respond to the discount.

Table One

	Group A (sales per week)	Group B (sales per week)
Volume of sales before the 10% discount	1.55 million	1.50 million
Volume of sales after the 10% discount	1.65 million	1.70 million

- i. Using the midpoint method, calculate the price elasticities of demand for group A and group B. **(4 Marks)**
 - ii. Explain how the discount will affect total revenue from each group. **(2 Marks)**
 - iii. Suppose Amazon.com knows which group each customer belongs to when he logs on and can choose whether or not to offer the 10% discount. If Amazon.com wants to increase its total revenue, should discounts be offered to group A or group B, to neither group, or to both groups? Explain. **(3 Marks)**
- b. The market for gasoline is in equilibrium. OPEC, one of the principal producers (with the power to displace the supply curve) finds that they are earning low total revenue. In order to increase its revenue, the countries of

OPEC decide that they are going to reduce their supply to try to affect the equilibrium price. Assuming that the supply of gasoline is fairly elastic, analyze (graphically, with comments on the results that you acquire) how this decision will affect the total revenue of the gasoline producers if:

- i. Demand for gasoline is perfectly elastic. **(7 Marks)**
- ii. Demand for gasoline is perfectly inelastic. **(7 Marks)**
- iii. Demand for gasoline is unit elastic. **(7 Marks)**

Question Two:

- a. Suppose there are two goods (x and y), that the prices are given and that there is a consumer with a certain income.
 - i. Illustrate using a diagram how it is possible to split the effects of price reduction on good x into income and substitution effects if both goods are normal goods. **(8 Marks)**
 - ii. If good x had been inferior, what would have been different? **(5 Marks)**
 - iii. If good x had been a Giffen, would your illustration be different from scenarios i and ii? Explain **(5 Marks)**
- b. Consider a couple's decision about how many children to have. Assume that over a lifetime a couple has 200,000 hours of time to either work or raise children. The wage is \$10 per hour. Raising a child takes 20,000 hours of time.
 - i. Draw the budget constraint showing the trade-off between lifetime consumption and number of children. (Ignore the fact that children come only in whole numbers!) Show indifference curves and an optimum choice. **(6 Marks)**



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- ii. Suppose the wage increases to \$12 per hour. Show how the budget constraint shifts. Using income and substitution effects, discuss the impact of the change on number of children and lifetime consumption. **(8 Marks)**
- iii. We observe that, as societies get richer and wages rise, people typically have fewer children. Is this fact consistent with this model? Explain. **(3 Marks)**

[Hint: Assume consumption as well as raising children, both are normal goods.]

Question Three

- a. "Other things being the same, the surplus of workers associated with a price floor will be greater the greater the elasticity of both supply and demand." Is this statement true or false? Explain your stand. Use graphs to illustrate your explanation. **(8 Marks)**
- b. The table below describes the market for one bedroom apartment in a certain city-

Table Two

Monthly Rent/Rand	Quantity supplied	Quantity Demanded
0	0	2400
2,000	300	2100
4,000	600	1800
6,000	900	1500
8,000	1200	1200
10,000	1500	900
12,000	1800	600
14,000	2100	300



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- i. Using demand and supply diagram, graphically illustrate the given information. **(6 Marks)**
- ii. The local government is planning to impose a binding price ceiling on rent at R10000 per month. As an economic consultant to the local government, do you believe this is a good idea? Explain **(3 Marks)**
- iii. Will you have a different advice to offer if instead of R10000, the local government suggests a binding ceiling of R6000? **(3 Marks)**

Question Four

Suppose that the government places a tax of \$5 per tyre on the buyers of automobile tyres.

- i. Use a supply-demand diagram to show the effect of the tax on the tyre market and the incidence of taxation on buyers and sellers. **(6 Marks)**
- ii. Now suppose that the government switches to a tax of \$5 per tyre on the sellers of automobile tyres. Use a second supply-demand diagram to show the effects of this tax on the tyre market and the incidence of taxation on buyers and sellers. **(6 Marks)**
- iii. Can you say anything about the relative effects of the two alternative taxes on the tyre market and on the incidence of taxation? (Assume that the market equilibrium price before tax incidence was \$25). Support your answer with diagram(s). **(3 Marks)**