



## BUS102 Introduction to Microeconomics

Questions, Notes & Guideline for Group Assignment

**EACH GROUP MUST HAVE TWO MEMBERS ONLY**

**Due 3.00pm, Saturday 13 May 2017**

 *Three Problem-Solving Questions that require written answers*

### 1. General information

- 1.1 This group assignment is worth 20 per cent of total assessment and is to be submitted by **3.00pm, Saturday 13 May 2017**.
  - There are 3 questions and answer all 3 questions, worth a total of 60 marks all together. Then the marks will be converted to a total of 20 marks scale to be uploaded in Moodle for 20 per cent of your total course assessment.
  - **A hard copy** of the assignment must be submitted to KOI Librarian in Kent street campus by 3.00pm, Thursday 13 May 2017. You must keep the receipt after the submission for your own record. You are also required to upload **an electronic copy** of the assignment in Moodle Turnitin by Saturday 13 May 2017.
  - Late submission will attract loss of 4 marks out of 20 marks (20 per cent), and the assignment submitted after 3.00pm Saturday 13 May 2017 will not be accepted and marked zero.
- 1.2 This assignment is **a group assignment** and each student must belong to a group of **two (2) people**.
- 1.3 Names and ID numbers of students in the group must be clearly printed on the Assignment Cover Sheet. A member, **who has not contributed to the discussion and assignment**, must be marked as "Not contributed" in a bracket following the student's name and ID.
- 1.4 You must follow the appropriate format explained below. *Not following the appropriate format will cause a loss of some marks.*
  - All written answers must be clearly typed and printed. Hand-written answers will NOT be accepted.
  - All assignment questions and sub-questions must be typed in order at the heading.
  - Separate each main question by different page. For example, if Question 1 (a) (b) (c) and (d) are answered on pages 1-2, then start Question 2 on page 3, etc.
  - You must analyse, explain and show how and why you draw your answers. Providing just answers without explanation will not receive full marks.

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- You must also draw and include appropriate and relevant graphs and tables together in your explanation. Draw them *using Microsoft Power Point/Word/Excel, NOT hand-drawn*.

1.5 Copying the assignment contents from other group assignment is a serious violation of copyright. It will be penalized and will attract a VERY heavy loss of marks – “Fail”.

- Please remember that it is not difficult to identify the contents that are copied from other group(s). Write the answers in your own English words.
- Please make sure that nobody in your group shows your assignment to other group(s). **Both the person who shows the assignment and the one who copies the assignment will lose their marks heavily and fail in the assessment.**

1.6 Each group must have a coordinator, who will submit a **hard copy** of the assignment to the KOI librarian and upload an **electronic copy** of the assignment in Moodle Turnitin. **Only ONE COPY** of the assignment from each group is required to be submitted (& uploaded).

1.7 Make sure you discuss and work together for **ALL THREE** questions. You MUST read and check the assignment before submission, once completed.

**Question 1:** Answer the following questions – 30 marks

**Part I: Production Possibility Frontier (PPF)**

Table 1.1 – Production Capacity of Newland.

<b>Cars</b>	<b>Bicycles</b>
30,000	0
28,000	1,000
24,000	2,000
18,000	3,000
10,000	4,000
0	5,000

**Use information in Table 1.1 above to answer the following question:**

- a. Using the above figures, map out the Production Possibilities Frontier (PPF) for the production of the Cars and bicycles (Hint! Use Microsoft Excel, for accuracy) **(3 marks)**
- b. In your own words, while making use of the graph that you have created in part a, explain what the PPF is. Clearly state all assumptions and properties of the PPF. **(6 marks)**
- c. Newland usually has a demand of 3,000 bicycles and 18,000 cars. Suddenly Newland receives notice that the demand has increased to 4,000 bicycles and 20,000 cars. Discuss and explain at least three possibilities of how Newland could meet that demand. (Hint: State any appropriate assumptions made). **(6 marks)**

**Part II: Demand and Supply**

**Table 1.2**

<b>Price (cents per bag)</b>	<b>Quantity demanded (million bags per week)</b>	<b>Quantity supplied (million bags per week)</b>
50	160	130
60	150	140
70	140	150
80	130	160
90	120	170
100	100	180

Table 1.2 sets out the demand and supply schedules for potato chips. Use the information to answer the following questions:

- (a) What are the market equilibrium price and quantity? Why? **(3 marks)**
- (b) Suppose a new dip increases the quantity of potato chips that people want to buy by 30 million bags per week at each price. How the demand and/or supply of chips change? Also, explain how the price and quantity of chips change. Show the changes on a graph. **(5 marks)**
- (c) The quantity of potato chips that people want to buy increases by 30 million bags per week at each price. Now suppose, at the same time, a new breed of potato increases production of potato crops and the quantity of potato chips produced increases by 40 million bags a week at each price. Explain how the market equilibrium price and quantity of chips change. What are the new market equilibrium price and quantity? Show the changes on a graph. **(7 marks)**

**Question 2: Answer the following questions – 10 marks**

**Elasticity of Demand and Supply, and Income**

- (a) When Judy's income increased from \$130 to \$170 a week, she increased her demand for concert tickets by 15 per cent and decreased her demand for bus rides by 10 per cent. Calculate Judy's income elasticity of demand for (a) concert tickets and (b) bus rides. Show your calculation. Are the concert ticket and bus ride income elastic or inelastic? Is the concert ticket normal good or inferior good to Judy? Is the bus ride normal good or inferior good to Judy? Explain. **(4 marks)**
- (b) If a 5 per cent rise in the price of sushi decreases the quantity of soy sauce demanded by 2 per cent and decreases the quantity of sushi demanded by 1 per cent, calculate the price elasticity of demand for sushi and the cross price elasticity of demand for soy source with respect to the price of sushi. Does the elasticity indicate that sushi and soy source are substitutes or complements? **(3 marks)**
- (c) Market analysts estimate that the price elasticity of demand for domestic beef is  $-1.30$ . How much would the price of domestic beef have fallen if the demand for domestic beef increases by 6.5 per cent? However, this price fall decreases the quantity demanded for imported beef by 4 per cent. What is the cross price elasticity of demand for imported beef with respect to the price of domestic beef? Does the elasticity indicate that domestic beef and imported beef are substitutes or complements? **(3 marks)**

**Question 3: Answer the following questions – 20 marks**

**Part I: Government Actions in Markets – Price floor**

**Table 3.1**

Price (dollar per tonne)	Quantity demanded (kilo tonnes)	Quantity supplied (kilo tonnes)
100	2,000	0
150	1,400	600
200	1,200	800
250	1,000	1,000
300	800	1,200
350	600	1,400
400	0	2,000

Table 3 shows the demand and supply schedules for US wheat market. The US Farm Bill 2012 indicates that the domestic price of wheat will be set at \$300 per tonne, which is above the market equilibrium level of \$250 per tonne, in order to support for domestic wheat growers. At the market equilibrium, 1,000 *kilo tonnes* (Kt) are supplied.

(a) On a graph, explain how the price control in the US would change the consumer surplus, producer surplus, and deadweight loss in the domestic wheat market. In your explanation, compare and show the changes in surpluses and deadweight loss *before and after the price control*. Assume that the US does not trade wheat internationally. **(5 marks)**

**Part II: Global Markets in Action – International Trade Restrictions (Import Quotas)**

With free trade between Australia and Canada, Australia exports beef to Canada. But Canada imposes an import quota on Australian beef.

(b) Draw a graph and explain how this quota would influence the consumer prices of beef in Canada, consumer surplus (CS) and producer surplus (PS), benefits of beef importers, and the amount of deadweight loss in Canada. **(6 marks)**

(c) The volume of import quota on Australian beef is less than Australia's total export volume of beef to Canada. Explain how this import quota would influence Australia's beef exports to Canada, consumer price of beef in Australia's domestic market, consumer surplus (CS) and producer surplus (PS) in Australia. **(4 marks)**

**Part III: Global Markets in Action – International Trade Restrictions (Import Tariff)**

Korea imports a large quantity of beef. With no beef trade, Korea's equilibrium price for beef was \$8 million per kilo tonne and equilibrium quantity was 375 kilo tonne. If Korea opens its beef market to trade with no tariff, domestic demand would be 625 kilo tonne and domestic supply would be 125 kilo tonne at the world price of \$4 million per kilo tonne. However, Korea currently imposes 40 per cent tariff rate on all imported beef. With 40 per cent tariff, Korea's domestic supply and domestic demand were 250 kilo tonne and 500 kilo tonne respectively in 2013. Assume that intercept of supply curve is \$2 million and demand curve is \$15 million per kilo tonne. <Yeon Kim 2015>

**(d)** Based on the information given above, draw a graph to show the areas of gains and losses from the trade with 40 per cent tariff rate. Then, calculate the actual *value of change* in consumer surplus, producer surplus, tariff revenue and the amount of deadweight loss *before and after the tariff*. Show your calculation. **(5 marks)**

**END OF ASSIGNMENT**

**DUE Saturday 13 May 2017**