

ECON 1000C/1001C: Introduction to Economics
Midterm Examination, October 21, 2014

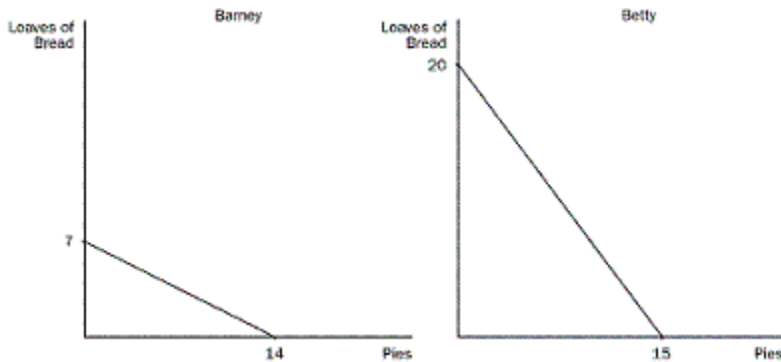
Student Name: _____ **Student Number:** _____

Answer ALL questions in both Sections. Answer multiple choice questions (Section A) on the answer sheet provided (last page).

SECTION A (50 points; 2 points per question)

These figures illustrate the production possibilities available to Barney and Betty with eight hours of labour in their bakery.

Figure 1



- 1) Refer to Figure 1. What is the opportunity cost of one loaf of bread for Barney?
 - a. 1/4 pie
 - b. 1/2 pie
 - c. 1 pie
 - d. 2 pies

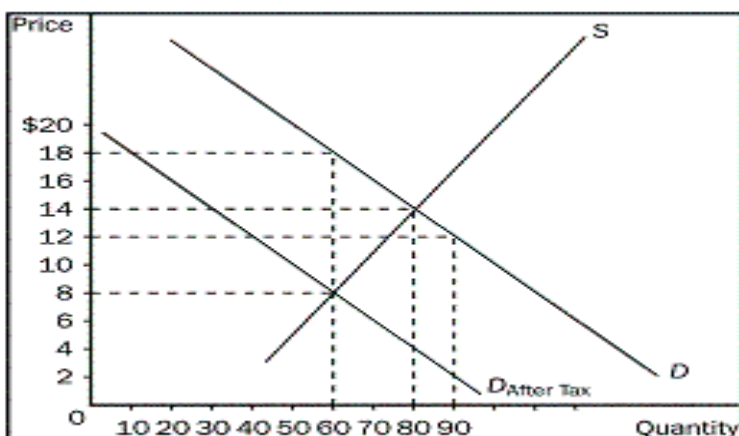
- 2) Refer to Figure 1. What is the opportunity cost of one pie for Betty?
 - a. 1/4 loaf of bread
 - b. 3/4 loaf of bread
 - c. 1 loaf of bread
 - d. 4/3 loaves of bread

- 3) Refer to Figure 1. Who has an absolute advantage in each product?
 - a. Barney has an absolute advantage in both goods, and Betty has an absolute advantage in neither good.
 - b. Barney has an absolute advantage in loaves of bread, and Betty has an absolute advantage

- in pies.
- c. Barney has an absolute advantage in neither good, and Betty has an absolute advantage in both goods.
 - d. Barney has an absolute advantage in pies, and Betty has an absolute advantage in loaves of bread.
- 4) Refer to Figure 1. Who has a comparative advantage in each product?
- a. Barney has a comparative advantage in both goods, and Betty has a comparative advantage in neither good.
 - b. Barney has a comparative advantage in loaves of bread, and Betty has a comparative advantage in pies.
 - c. Barney has a comparative advantage in neither good, and Betty has a comparative advantage in both goods.
 - d. Barney has a comparative advantage in pies, and Betty has a comparative advantage in loaves of bread.
- 5) Refer to Figure 1. If Barney and Betty both specialize in the good in which they have a comparative advantage, what would the total production be?
- a. 7 loaves of bread and 15 pies
 - b. 20 loaves of bread and 14 pies
 - c. 27 loaves of bread and 29 pies
 - d. 34 loaves of bread and 22 pies
- 6) What might be the reason when quantity demanded has increased at every price?
- a. The number of buyers in the market has decreased.
 - b. Income has increased and this good is an inferior good.
 - c. The consumer prefers another good more than this good.
 - d. The price of a substitute good has increased.
- 7) Market demand is given as $Q_d = 75 - P$. Market supply is given as $Q_s = 3P + 15$. What would result if the market price were \$10?
- a. a shortage of 20
 - b. a surplus of 20
 - c. a surplus of 45
 - d. a shortage of 45
- 8) What will happen to the equilibrium price and quantity of landline phone services if new technologies lower the costs of providing such services and, at the same time, alternatives such as the Internet or mobile phones become more popular?
- a. price will fall and the effect on quantity is ambiguous
 - b. price will rise and the effect on quantity is ambiguous
 - c. quantity will fall and the effect on price is ambiguous
 - d. quantity will rise and the effect on price is ambiguous

- 9) Suppose that when the price of corn is \$2 per bushel, farmers can sell 10 million bushels. When the price of corn is \$3 per bushel, farmers can sell 8 million bushels. Which of the following statements describes what will happen and why?
- The demand for corn is income inelastic, and so an increase in the price of corn will increase the income of corn farmers.
 - The demand for corn is income elastic, and so an increase in the price of corn will increase the income of corn farmers.
 - The demand for corn is price inelastic, and so an increase in the price of corn will increase the income of corn farmers.
 - The demand for corn is price elastic, and so an increase in the price of corn will increase the income of corn farmers.
- 10) If a 6 percent increase in income results in a 10 percent increase in the quantity demanded of pizza, what is the income elasticity of demand for pizza, and what type of good is pizza?
- negative, and therefore pizza is an normal good
 - negative, and therefore pizza is an inferior good
 - positive, and therefore pizza is an inferior good
 - positive, and therefore pizza is a normal good
- 11) If the quantity supplied responds only slightly to changes in price, what is true about supply?
- Supply is said to be elastic.
 - Supply is said to be perfectly elastic.
 - Supply is said to be inelastic.
 - Supply is said to be unit elastic.
- 12) Knowing that the demand for wheat is inelastic, if all farmers voluntarily cut back 10 percent of their wheat crop, what would happen?
- Consumers of wheat would buy more wheat.
 - Wheat farmers would suffer a reduction in their revenue.
 - Wheat farmers would increase their revenue.
 - The demand for wheat would decrease.

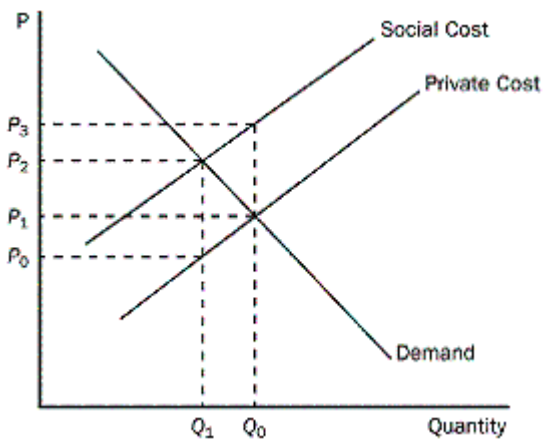
Figure 2



- 13) Refer to Figure 2. What is the price buyers will pay after the tax is imposed?
- \$8.00
 - \$12.00
 - \$14.00
 - \$18.00
- 14) Refer to Figure 2. What is the price sellers receive after the tax is imposed?
- \$8.00
 - \$12.00
 - \$14.00
 - \$18.00
- 15) Refer to Figure 2. What is the amount of the tax per unit imposed in this market?
- \$4.00
 - \$6.00
 - \$8.00
 - \$10.00
- 16) Refer to Figure 2. What is the share of the tax burden per unit that buyers would pay?
- \$4.00
 - \$6.00
 - \$8.00
 - \$10.00
- 17) Refer to Figure 2. What is the share of the tax burden per unit that sellers would pay?
- \$4.00
 - \$6.00
 - \$8.00
 - \$10.00
- 18) On which side of the market does a tax burden fall most heavily?
- A tax burden falls most heavily on the side of the market that is more elastic.
 - A tax burden falls most heavily on the side of the market that is more inelastic.
 - A tax burden falls most heavily on the side of the market that is closer to unit elastic.
 - A tax burden falls most heavily on the side of the market that is closer to perfect elastic.
- 19) What happens if a government increases the tax rate?
- As the tax rate increases, tax revenue continually rises and deadweight loss continually falls.
 - As the tax rate rises, tax revenue rises for a while, but eventually begins to fall; deadweight loss rises but also begins to fall as tax revenue falls.
 - As the tax rate rises, tax revenue rises for a while, but eventually begins to fall; deadweight loss continually rises.
 - As the tax rate rises, tax revenue rises for a while, but eventually begins to fall; deadweight loss falls for a while, but begins to rise as tax revenue falls.

- 20) Denmark is an importer of computer chips and is also a price taker in the chip market. The world price of these computer chips is \$12. If Denmark imposes a \$5 tariff on chips, who will gain?
- Consumers and producers will both gain.
 - Consumers and producers will both lose.
 - Consumers will gain, and producers will lose.
 - Consumers will lose, and producers will gain.
- 21) Turkey is an importer of goose down pillows. The world price of these pillows is \$50. Turkey imposes a \$7 tariff on pillows. Turkey is a price taker in the pillow market. As a result of the tariff, what will Turkey's price of pillows be and what will happen to the quantity of pillows purchased?
- \$50 and the quantity of pillows purchased will decrease
 - \$50 and the quantity of pillows purchased will increase
 - \$57 and the quantity of pillows purchased will decrease
 - \$57 and the quantity of pillows purchased will increase

Figure 3



- 22) Refer to Figure 3. How is the negative externality measured?
- $P_2 - P_1$
 - $P_3 - P_2$
 - $P_3 - P_0$
 - $P_3 - P_1$
- 23) Refer to Figure 3. Which price and quantity combination represents the social optimum?
- P_0 and Q_1
 - P_1 and Q_2
 - P_2 and Q_1
 - P_2 and Q_2

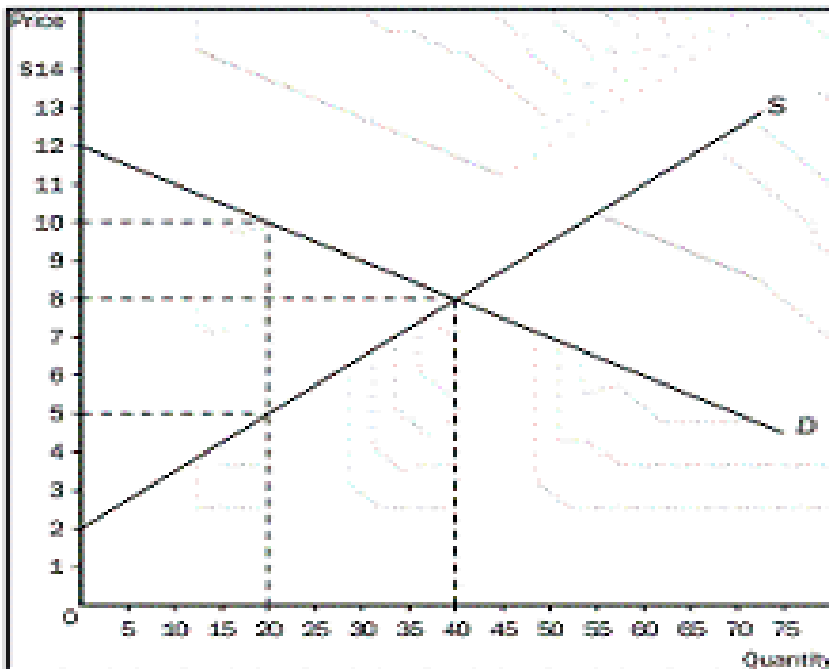
- 24) Dick owns a dog whose barking annoys Dick's neighbour Jane. Suppose that the benefit of owning the dog is worth \$500 to Dick and that Jane bears a cost of \$700 from the barking. Assuming Dick has the legal right to keep the dog, what is a possible private solution to this problem?
- Jane pays Dick \$499 to get rid of the dog.
 - Dick pays Jane \$650 for her inconvenience.
 - Jane pays Dick \$650 to get rid of the dog.
 - There is no private solution that would improve this situation.
- 25) What results once tradable pollution permits have been allocated to firms?
- The government controls the price of permits.
 - Firms that can reduce pollution only at high cost will be willing to pay the most for the pollution permits.
 - The value of pollution-saving technology is always lower than the market value of a pollution permit.
 - The total amount of pollution governed by the permit will always decrease.

Section B (50 points)

- 1) Suppose the world price of lumber is above the Canadian price of lumber. What would be the impacts of free trade in lumber between Canada and the rest of the world? Use a diagram to show the impact on: Canadian price; Canadian consumption; Canadian production; Consumer Surplus and Producer Surplus. **(15 points)**

2) Answer the following questions based on the graph that represents JR's weekly demand for ribs at Judy's Rib Shack. **(20 points)**

- a. At equilibrium price, how many ribs would JR be willing to purchase? _____
- b. How much is JR willing to pay for 20 ribs? _____
- c. How much would JR's consumer surplus be at the equilibrium price? _____
- d. At the equilibrium price, how many ribs would Judy be willing to sell? _____
- e. How much must the price of ribs be for Judy to supply 20 ribs to the market? _____
- f. At the equilibrium price, what is total surplus in the market? _____
- g. If the price of ribs rose to \$10, what would happen to JR's consumer surplus? _____
- h. If the price of ribs fell to \$5, what would happen to Judy's producer surplus? _____
- i. Explain why the graph shown verifies the fact that the market equilibrium (quantity) maximizes the sum of producer and consumer surplus.



3) Using carefully labelled demand and supply diagrams, show the impacts on equilibrium price and quantity in the following situations: **(15 points)**

a) New cars are normal goods. What will happen to the equilibrium price and quantity of new cars if the price of gasoline falls, the price of steel increases, public transportation becomes more expensive and less comfortable, auto workers receive higher wages, and automobile insurance becomes less expensive?

b) Scientists reveal that consumption of oranges decreases the risk of diabetes and, at the same time, farmers use a new fertilizer that makes orange trees more productive. Illustrate and explain what effect these changes have on the equilibrium price and quantity of oranges.

c) The impacts in a particular market for good 'x' which is an inferior good if buyers suffer a fall in their incomes and, at the same time, the price of inputs for good 'x' falls.

ECON 1000C/1001C – MULTIPLE CHOICE ANSWER SHEET

NAME: _____

SIGNATURE: _____

STUDENT NUMBER: _____

Write the letter that corresponds to your answer in **CAPITAL** letters. Make sure your answers are **CLEARLY LEGIBLE.**

QUESTION NUMBER	ANSWER
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