CARLETON UNIVERSITY
Department of Economics
ECON 1000 V – Introduction to Economics
2015 Summer

INSTRUCTOR: SULTAN AHMED

ASSIGNMENT 1: Covers Chapters 1-6. Topics: *The Perspectives and Principles of Economics, Economists' way of thinking, Theories behind trading interdependence including comparative advantage, Fundamentals of supply and demand and application to government policies, Concept and application of Elasticity*.

There are THREE sections: MCQs (section 1, 40 MARKS), Short free response questions (section 25 MARKS) and longer free response questions (Section 3, 35 MARKS). TOTAL MARKS: 100

The deadline to submit the answers online (through cuLearn) is MAY 21 at the specified time. This deadline will be strictly enforced.

GOOD LUCK!

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SECTION 1: Multiple Choice (40 marks). ANSWER ANY 20. EACH QUESTION IS WORTH 2 MARKS.
IF YOU ANSWER EXTRA QUESTIONS, THEY WILL BE CROSSED OUT.

Identify the choice that best completes the statement or answers the question.

__ 1. What is the economy experiencing when a society cannot produce all the goods and services people wish to have?
   a. scarcity
   b. communism
   c. externalities
   d. market failure

__ 2. What happens if Japan chooses to engage in trade?
   a. It will only benefit if it trades with countries that produce goods it cannot produce.
   b. It cannot benefit if it trades with less developed countries.
   c. It should first attempt to produce the good itself.
   d. It can benefit by trading with any other country.

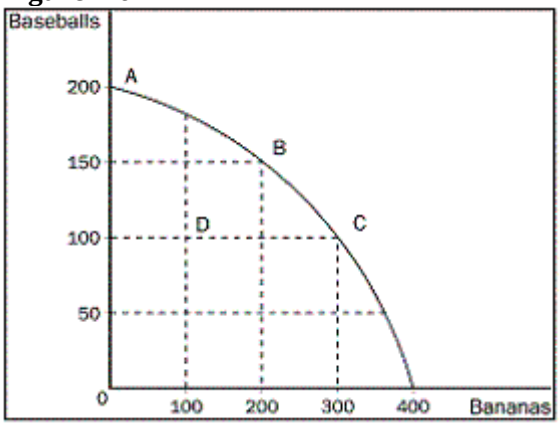
__ 3. How does a market economy reward people?
   a. according to their need for goods and services
   b. according to how willing they are to work
   c. according to their ability to produce things that other people are willing to pay for
   d. according to their ability to produce things of cultural importance

__ 4. If an externality is present in a market, what may enhance economic efficiency?
   a. government intervention
   b. increased competition
   c. better informed market participants

d. more defined property rights

__ 5. In a circular-flow diagram, which flows are involved?
a. Taxes flow from households to firms, and transfer payments flow from firms to households.
b. Income payments flow from firms to households, and sales revenue flows from households to firms.
c. Resources flow from firms to households, and goods and services flow from households to firms.
d. Inputs and outputs flow in the same direction as the flow of dollars, from firms to households.

Figure 2-6



__ 6. Refer to Figure 2-6. What is the opportunity cost to society of the movement from point A to point C?
a. 50 baseballs
b. 100 baseballs
c. 100 bananas
d. 300 bananas

__ 7. When can a country's consumption possibilities frontier be outside its production possibilities frontier?
a. if additional resources become available
b. if there is an increase in the level of technology
c. if the country engages in trade
d. if resources are shiftable

__ 8. Currently, a farmer can either grow 40 bushels of wheat or 120 bushels of corn per acre. If he were able to trade 80 bushels of corn for 30 bushels of wheat, would he be better off or worse off?
a. worse off, because his opportunity cost of wheat would increase from 2.7 bushels of corn to 3 bushels of corn
b. better off, because his opportunity cost of wheat would fall from 80 bushels to 50 bushels
c. better off, because his opportunity cost of wheat would fall from 3 bushels of corn to 2.7 bushels
d. worse off, because his opportunity cost of wheat would increase from 50 bushels of corn to 80 bushels of corn

Table 3-5

	Hours needed to make one unit:		Amount produced in 2400 hours:	
	Cars	Airplanes	Cars	Airplanes
Canada	40	160	60	15
Japan	50	150	48	16

__ 9. Refer to Table 3-5. What is the opportunity cost of one car for Japan?
a. 4 airplanes
b. 3 airplanes
c. 1/3 airplane
d. 1/4 airplane

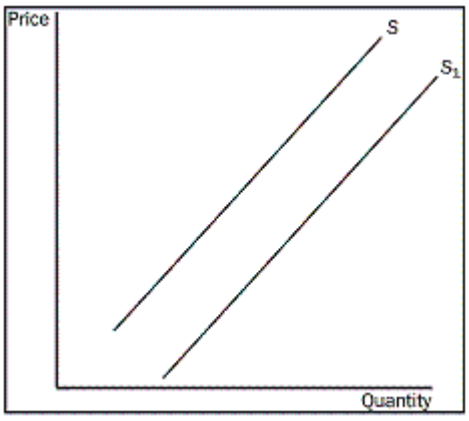
Table 3-6

	Labour hours needed to make one unit:		Amount produced in 40 hours:	
	Cheese	Bread	Cheese	Bread
England	1	2	40	20
Spain	2	8	20	5

__ 10. Refer to Table 3-5. If England and Spain trade based on the principle of comparative advantage, which country will export or import each product?
a. England will export bread, and Spain will export cheese.
b. England will export bread, and Spain will export bread.
c. England will export cheese, and Spain will export cheese.
d. England will export cheese, and Spain will export bread.

__ 11. What are exports?
a. limits placed on the quantity of goods brought into a country
b. goods produced abroad and sold domestically
c. a country's ability to produce a good
d. goods produced domestically and sold abroad

Figure 4-1



__ 12. Refer to the Figure 4-1. What is the movement from S_1 to S called?

a. a decrease in supply
b. a decrease in quantity supplied
c. an increase in supply
d. an increase in quantity supplied

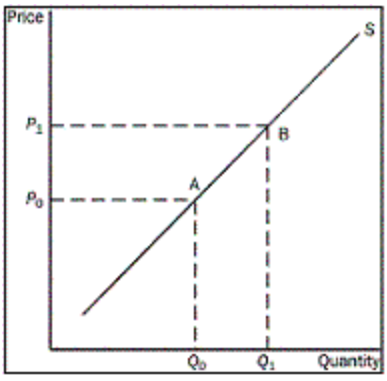
__ 13. Market demand is given as Qd = 140 – 5P. Market supply is given as Qs = 2P. In a perfectly competitive equilibrium, what will be price and quantity traded in the market?
a. price will be $20 and quantity will be 40
b. price will be $120 and quantity will be 40
c. price will be $40 and quantity will be 120
d. price will be $40 and quantity will be 20

__ 14. Which best describes the relationship shown by a demand table?
a. the price of a good and the quantity supplied
b. income and the quantity of the good demanded
c. the price of a good and the quantity buyers are willing and able to purchase
d. the determinants of demand and the quantity demanded

__15. Given a fixed demand curve, which of the following is affected when the price changes?
a. income
b. tastes
c. expectations
d. quantity demanded

___16.Suppose that the Canadian Medical Association announces that men who shave their heads are less likely to die of heart failure. What could we expect to happen?
a. the current demand for hair gel to increase
b. the current demand for razors to increase
c. the current demand for combs to increase
d. the current demand for hair dye for men to increase

Figure 4-10



___17.Refer to the Figure 4-10. What would cause the movement from point A to point B on the graph?
a. a decrease in the price of the good
b. an increase in the price of the good
c. an increase in technology
d. a decrease in input prices

___ 18. As elasticity of demand increases, what happens to the demand curve?
a. It gets flatter and the price elasticity of demand will eventually be less than 1.
b. It gets steeper and the price elasticity of demand will eventually be greater than 1.
c. It gets flatter and the price elasticity of demand will eventually be greater than 1.
d. It gets steeper and the price elasticity of demand will eventually be less than 1.

Table 5-1

Price per Baseball Ticket	Quantity Demanded
$20	2 000
$16	4 000
$12	6 000
$ 8	8 000
$ 6	10 000
$ 4	12 000
$ 2	14 000

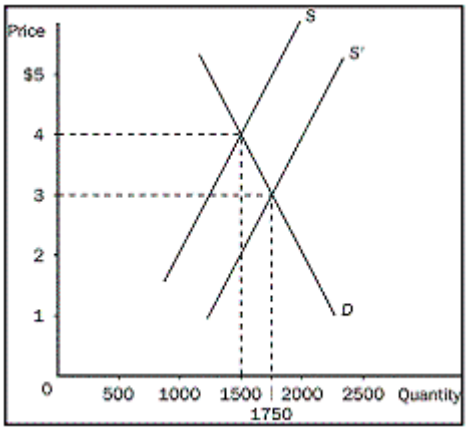
___ 19. Refer to Table 5-1. Notice that lowering the price from $8 to $6 per ticket decreases revenue by $4000. In the $6 to $8 price range, what must the demand for baseball tickets be?
a. price inelastic
b. price elastic
c. price unit elastic
d. income elastic

___ 20. What does the price elasticity of supply measure?
a. how much the quantity supplied responds to changes in input prices
b. how much the quantity supplied responds to changes in the price of the good
c. how much the price of the good responds to changes in supply
d. how much sellers respond to changes in technology

____ 21. If the elasticity of supply of a product is greater than 1, then what is supply?
a. inelastic
b. elastic
c. unit elastic
d. not very sensitive to a change in price

___ 22. Which of the following statements applies to a perfectly elastic supply curve?
a. The elasticity of supply is 0.
b. The supply curve is vertical.
c. Very small changes in price lead to large changes in quantity supplied.
d. The firm would likely be operating in the short run.

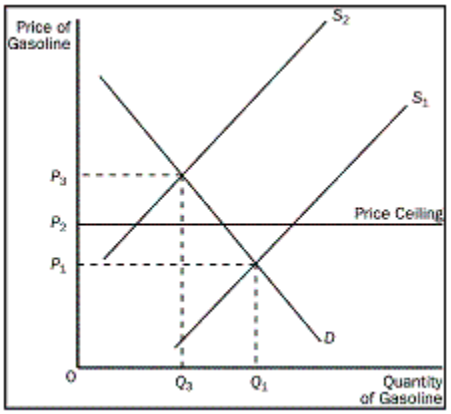
Figure 5-12



___ 23. Refer to Figure 5-12. When a new, more productive strawberry plant was developed, causing supply to increase, what happened to strawberry farmers' total revenue, and why?
a. It fell from $6000 to $5250, since supply is elastic.
b. It fell from $6000 to $5250, since demand is inelastic.
c. It fell from $6000 to $5250, since supply is inelastic.
d. It fell from $6000 to $5250, since demand is elastic.

___ 24. What will a binding price ceiling make it necessary to do?
a. supply more of the product
b. develop a way of rationing the product, because there will be a shortage
c. develop a better marketing plan, because there will be a surplus
d. increase demand for the product

Figure 6-4

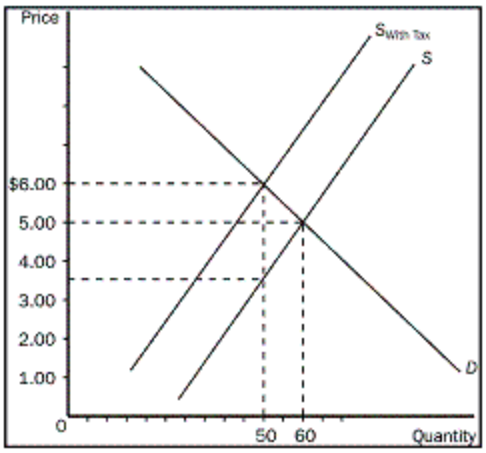


___25.Refer to Figure 6-4. With a price ceiling present in this market, what will happen when the supply curve for gasoline shifts from S_1 to S_2?
a. The price will increase to P_3.
b. A surplus will occur at the new market price of P_2.
c. The market price will stay at P_1 due to the price ceiling.
d. A shortage will occur at the price ceiling of P_2.

___ 26. Upon whom does a minimum wage have its greatest impact?
a. older workers
b. male workers
c. female workers
d. teenage workers

___ 27. What happens when government imposes price ceilings and floors in a market?
a. Price no longer serves as a rationing device.
b. Efficiency in the market is increased.
c. Shortages and surpluses are eliminated.
d. Buyers and sellers are both better off.

Figure 6-10



___ 28. Refer to Figure 6-10. What is the share of the tax burden per unit that sellers would pay?
a. $1.00
b. $1.50
c. $2.50
d. $3.00

___29.If a tax is imposed on a market with inelastic demand, how is the burden of the tax distributed?
a. Buyers will bear most of the burden of the tax if the supply is elastic.
b. Sellers will bear most of the burden of the tax if the supply is elastic.
c. Buyers will bear most of the burden of the tax if the supply is inelastic.
d. Sellers will bear most of the burden of the tax if the supply is inelastic.

___ 30. Market demand is given as $Q^D = 140 - 5P$. Market supply is given as $Q^S = 2P$. Which legally imposed price would constitute a binding price floor?
a. $20
b. $25
c. $35
d. $55

SECTION 2: SHORT FREE RESPONSE QUESTIONS. TOTAL MARKS: 25 MARKS

INSTRUCTIONS: Your answers to the following questions should take advantage of the relevant economic tools, principles and perspectives. Your answers must be precise.

1. The prairie dog has always been considered a problem for Canadian cattle ranchers. They dig holes that cattle and horses can step in, and they eat grass necessary for cattle. Recently, ranchers have discovered that there is a demand for prairie dogs as pets. In some areas, prairie dogs can sell for as high as $150. Cattlemen are now fencing off prairie dog towns on their land so these towns will not be disturbed by their cattle. **(10 marks, each part carries 2 marks)**

Draw a production possibilities frontier demonstrating a rancher's production option between cattle production and prairie dog production, showing increasing opportunity cost and what would happen in each of the following situations (using a separate graph for each situation):

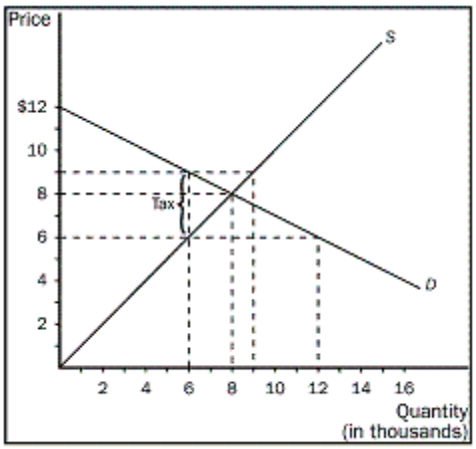
a. The outcome is efficient, with ranchers choosing to produce equal numbers of cattle and prairie dogs.
b. As a protest against the government introducing the grey wolf back into the wild in their province, ranchers decide not to use 25% of the available grassland for grazing.
c. The price of prairie dogs increases to $200 each, so ranchers decide to allot additional land for prairie dogs.
d. The government grants new leases to ranchers, giving them 10 000 new hectares of grassland each for grazing.
e. A drought destroys most of the available grass for grazing of cattle, but not prairie dogs since they also eat plant roots.

2. Suppose that a worker in Taiwan can make 2 TVs or 10 pairs of shoes per week, and a worker in Korea can make 3 TVs or 20 pairs of shoes per week.
   a. In what sense do TVs and shoes cost less in Korea than in Taiwan?
   b. In what sense do TVs cost less in Taiwan than in Korea?
   c. If Taiwan and Korea were to engage in trade, which country would export which good?
   d. How would the answer to the question in part c change if a worker in Korea could make 4 TVs per week?

   (8 marks, each part carries 2 marks)

3. Using the graph shown below, answer the following questions.
   a. What was the equilibrium price and quantity in this market before the tax?
   b. What is the amount of the tax?
   c. How much of the tax will the buyers pay?
   d. How much of the tax will the sellers pay?
   e. How much will the buyer pay for the product after the tax is imposed?
   f. How much will the seller receive after the tax is imposed?
   g. As a result of the tax, what has happened to the level of market activity?

   (7 MARKS)



SECTION3: LONGER FREE RESPONSE QUESTIONS.
TOTAL MARKS: 35

INSTRUCTION: Take a few minutes to plan and outline each answer. In answering the questions, you should emphasize the line of reasoning that generated your results; it is not enough to list the results of your analysis. Include diagrams, if useful, in explaining your answers. All diagrams should be correctly labeled.

1. An economic principle is that people respond to incentives. Identify the incentives and discuss the possible outcomes in each of the following situations.
   a) The City of Winnipeg decides to set a rather high regulated parking fee in downtown in order to reduce traffic congestion.
   b) A very popular hip-hop singer asks his managers to set concert prices very low such that everybody can afford them.
   (7 marks, each part carries 3.5 marks)

2. Suppose you have your own pizza delivery business and receive a call to deliver to a remote client. You need to decide whether to take the call. If you don't, there are no consequences, since someone else will. Based on the distance to the client, you calculate that it would cost you $5 to deliver, and expect to receive $6 for the service. You also pay monthly rent for the car, which on average, based on past experience, comes down to about $2 per trip. Your time doesn't matter, as you have nothing more enjoyable or useful to do for the time being. How do you make this decision? What economic principle is at work in your decision process? **(6 marks)**

3. The purpose of this exercise is to acquaint you with some simple mathematical relationships and how they translate into graphs. Economic models can come under the form of equations such as Y=F(L), where Y is sometimes called the "dependent variable" and L is the "independent variable." F, called "function," tells us what the precise relationship between Y and L is. Theoretical relationships (models) are those that can be described by an equation like this. When equations are sufficiently simple, they can be put under the form of a curve in a graph. Consider the equation $Y=2\times L$, where Y is the number of apple pies that Jonathan can cook in L hours. This equation describes the process of producing apple pies.

   a. How many pies does Jonathan cook in 2, 3, 4, and 5 hours?
   b. Draw a vertical axis and label it Y; draw a horizontal axis and label it L. Show on this graph the four pairs (L, Y) you determined in part a.

c. Draw a line connecting your four points and extend it to the left until it reaches the vertical axis.
d. Identify a few assumptions that underlie your apple pie production model.
e. Are your assumptions realistic?

(10 marks, each part carries 2 marks)

4. How will each of the following changes in demand and/or supply affect equilibrium price and equilibrium quantity in a competitive market; that is do price and quantity rise, fall, remain unchanged, or are the answers indeterminate, depending on the magnitudes of the shifts in supply and demand? You should rely on supply and demand diagrams to verify answers.**(12 marks, 6 marks each):**

a. Scientists reveal that consumption of oranges decreases the risk of diabetes, and at the same time, farmers use a new fertilizer that makes the orange trees MORE productive

b. Scientists reveal that consumption of oranges decreases the risk of diabetes, and at the same time, farmers use a new fertilizer that makes the orange trees LESS productive