

**Economics 01 Midterm I Name \_\_\_\_\_**  
**Practice Exam**  
**Winter 2009 TA and Section Time \_\_\_\_\_**

**Be sure to include your name and ID number on the Scantron form. Write the answers to the problem/short answers on the test.**

**Multiple Choice (2 points each): Choose the best answer given.**

1. The “bowed out” shape of the production possibilities frontier (PPF) arises because:

- a) Since resources are scarce, producing more of one good means we must produce less of another
- b) To continue to get the same increment in the production of a particular good requires that more and more of the other good be given up
- c) As we move farther inside the production possibilities frontier, an economy loses increasing amounts of both goods
- d) The opportunity cost associated with a move from a point on the production possibilities frontier to a point outside the production possibilities frontier increases in terms of what must be given up to get there

Ans: b

2. Suppose sushi is a normal good. When income increases, but the number of producers in the market decreases

- a) The equilibrium price of sushi falls and the equilibrium quantity of sushi rises
- b) The equilibrium price of sushi falls and the equilibrium quantity of sushi falls
- c) The equilibrium price of sushi falls and the change to the equilibrium quantity of sushi is ambiguous
- d) The equilibrium price of sushi rises and the change to the equilibrium quantity of sushi is ambiguous

Ans: d

3. How will the market for bicycles be affected by an increase in the price of gasoline and an increase in the desire for exercise?

- a) The equilibrium price and quantity of bicycles will increase
- b) The equilibrium price of bicycles will fall and the equilibrium quantity will increase
- c) The equilibrium price of bicycles will rise but we do not have enough information to determine the change in equilibrium quantity
- d) The equilibrium quantity of bicycles will rise but we do not have enough information to determine the change in equilibrium price

Ans: a

4. When the government imposes a price floor in a market, which of the following inefficiencies may occur?

- a) The good may be offered for sale with inefficiently high quality
- b) The good may be offered for sale with inefficiently low quality
- c) A shortage of the good may occur
- d) A black market may develop, where the good or service is exchanged at a price higher than the price floor

Ans: a

5. Suppose we have a production possibility frontier (PPF) that is a straight line. On the y-axis, we have coconuts and on the x-axis, we have pineapples. Which of the following statements best describe this PPF?

- a) The opportunity costs of producing an additional pineapple is the same at every point
- b) The opportunity cost of producing an additional pineapple increases as the amount of coconuts produced increases
- c) The opportunity cost of producing an additional pineapple decreases as the amount of coconuts produced decreases
- d) The opportunity cost of producing an additional pineapple is zero at every point

Ans: a

6. If your income increases and your consumption of nachos decreases, nachos are considered

- a) a positive good
- b) a normal good
- c) a negative good
- d) an inferior good

Ans: d

7. Suppose an economist asserts that Belgium has a comparative advantage in the production of chocolate and the United States has a comparative advantage in the production of laptops. Which of the following statements is another way of stating the same idea expressed in the assertion?

- a) Belgian chocolate tastes better than American chocolate
- b) Belgium can produce laptops at a lower opportunity cost than the U.S. can
- c) American laptops are more chic than Belgian laptops
- d) The U.S. can produce laptops at a lower opportunity cost than Belgium can

Ans: d

8. If goods A and B are substitutes, a decrease in the price of good B will

- a) increase the demand for good A
- b) increase the quantity demanded of good B
- c) decrease the demand for good A
- d) both b and c

Ans: d

9. The cross price elasticity of Pepsi and Coke is

- a) equal to zero
- b) larger than zero
- c) less than zero
- d) cannot be determined

Ans: b

10. If the government imposes a price ceiling in a market, the resulting shortage

will be smaller when demand is \_\_\_\_\_ and supply is \_\_\_\_\_.

- a) elastic; inelastic
- b) inelastic; inelastic
- c) elastic, elastic
- d) perfectly inelastic; elastic

Ans: b

11. If the demand curve is perfectly price elastic,

- a) consumer surplus will equal zero
- b) consumer surplus will equal producer surplus
- c) consumer surplus will equal total surplus
- d) consumer surplus will be greater than producer surplus

Ans: a

12. Suppose the demand curve for agricultural products is inelastic, then

- a) the demand curve will be relatively steep
- b) buyers are relatively unresponsive to changes in price
- c) total farm income will decrease if the market price falls
- d) all of the above

Ans: d

13. As the price of apples that the producers can charge rises, the producer surplus in the apple market

- a) increases
- b) decreases
- c) does not change
- d) may increase, decrease, or stay the same

Ans: d

14. When the government imposes a price floor above the equilibrium price in a market, consumer surplus \_\_\_\_\_ and total surplus\_\_\_\_\_.

- a) may fall; may rise
- b) will fall; will fall
- c) will rise; will rise
- d) may rise; may fall

Ans: b

15. In general, the price elasticity of supply of a good that requires skilled workers to produce

- a) decreases over time
- b) increases over time
- c) remains constant over time
- d) may increase or decrease over time

Ans: b

16. Which of the following will not shift the demand curve for coffee?

- a) a change in the price of coffee
- b) an announcement from the U.S. government, saying that there is now definitive evidence which shows that drinking coffee is good for your health
- c) a change in the technology of producing coffee
- d) both (a) and (c)

Ans: d

17. If the price of good B decreased, you would expect the \_\_\_\_\_

- a) demand of good B to increase
- b) quantity demanded of good B to decrease
- c) quantity demanded of good B to increase
- d) demand curve of good B to shift to the left

Ans: c

18. The demand curve shows

- a) the maximum amount consumers are willing to pay for particular units of a good
- b) the minimum amount consumers are willing to pay for particular units of a good
- c) the average amount consumers are willing to pay for particular units of a good
- d) that consumers want to pay the lowest price

Ans: a

19. Ma is a famous musician who plays only five concerts a year, each to an audience of 3,000 people. He allows no recordings of his music. The price of a concert ticket increases by \$20 each year, but Ma does not change the number of concerts he gives, the number of seats per concert, or his recording policy. Ma is behaving like a:

- a) perfectly elastic supplier
- b) perfectly inelastic supplier

- c) unit-elastic supplier
- d) perfectly inelastic consumer

Ans: b

20. If the free market equilibrium price of an iPod is \$300, Pat is willing to buy an iPod but Jennifer is not. If we let Pat buy the iPod but then take it away from her and give it to Jennifer,

- a) The total consumer surplus for Pat and Jennifer will rise
- b) The total consumer surplus for Pat and Jennifer will fall
- c) producer surplus will rise
- d) producer surplus will fall

Ans: b

### Short Answer Questions

1. (10 points) True or false and explain. Illustrate with a graph where appropriate.

- a) rent control for apartments creates surplus of rental apartments

False.

Rent control reduces the quantity of apartments supplied and increases quantity of apartments demanded, thereby creating a shortage of apartments.

Graphs is given in chapter 5, figure 5-2.

- b) Since demand for agricultural products is inelastic, higher prices mean lower incomes for farmers

False.

Inelastic demand means price effect is stronger than quantity effect. Hence as price goes up, the incomes of farmers will go up as there is no response from demand side.

Total revenue is  $P \cdot Q$ . With inelastic demand, as price goes up,  $Q$  does not change and so revenue increases.

(Chapter 6-page 151)

2. (10 points) The weekly supply and demand for movie tickets at the UCSC Cinema are shown in the following table:

Price	Demand	Supply
\$1.0	9,000	0
\$2.0	8,000	500
\$3.0	7,000	1,000
\$4.0	6,000	1,500
\$5.0	5,000	2,000
\$6.0	4,000	2,500
\$7.0	3,000	3,000
\$8.0	2,000	3,500
\$9.0	1,000	4,000
\$10.0	0	4,500

a) The equilibrium price for movie tickets at the UCSC Cinema is \$ 7.0 and the equilibrium quantity is 3,000 tickets per week.

b) Using the midpoint method, calculate the price elasticity of demand and the price elasticity of supply when the price of the movie tickets goes up from \$3.0 to \$4.0.

Apply the following formula with P2 as \$4.0 and P1 as \$3.0; Q2 as 6000 and Q1 as 7000 to find price elasticity of demand.

Apply the same formula with P2 as \$4.0 and P1 as \$3.0; Q2 as 1500 and Q1 as 1000 to find price elasticity of supply.

$$e = \frac{Q_2 - Q_1}{(Q_2 + Q_1)/2} \cdot \frac{P_2 - P_1}{(P_2 + P_1)/2}$$

Price elasticity of demand is -7/13

Price elasticity of supply is 7/5

3. (10 points) State whether each of the following events will result in a movement along the demand curve for Jack in the Box Sourdough Cheeseburger or whether it will cause the curve to shift. If the demand curve shifts, indicate whether it will shift to the left or the right and draw a graph to illustrate the shift.

a) The price of McDonald's Big Mac hamburger increases.

This causes a shift of the demand curve to the right. Big Mac being a substitute, a rise in its price, reduces its own demand and increases demand for the Cheeseburger.

b) Because of a shortage of potatoes, the price of French fries increases

French fries can be considered as complements with the Cheeseburger. Hence increase in



their price would reduce the demand for cheeseburgers and shift the demand curve to the left.

4. (10 points) In each of the following markets explain what will happen, if you can, to consumer, producer and total surplus. Show your answers graphically.

a) bottled water market: a newspaper reports an unhealthy level of bacteria in tap water

Demand for tap water will go down and demand for bottled water will go up as these are substitutes. The demand curve for bottled water will shift out. Equilibrium price increases. Changes in producer and consumer surplus are shown in graph.

Graphs are attached in a separate file named 'Graphs'.

b) orange juice market: the frosty weather destroys a large amount of oranges, which are used to make orange juice

As input (oranges) decreases in quantity, price of input goes up which reduces the quantity supplied of orange juice. So supply curve shifts to the left. Changes in producer and consumer surplus are shown in graph.

Graphs are attached in a separate file named 'Graphs'.

5. (10 points) For each of the following pair of goods, identify which goods in the pair has the higher price elasticity of demand. Explain your answers.

c) Diet Pepsi; soft drink industry

For the soft drink industry: close substitutes are available

For diet pepsi: less substitutes are available.

So price elasticity of demand is higher for soft drink industry and lower for diet pepsi.

d) water; diamond

Diamond is a luxury good.

Water is a necessary good.

So price elasticity of demand is higher for diamond and lower for water.

6. (10 points) The following table shows the maximum output of coconut and fish for two countries: Indy and Poli.

Coconut Fish  
Indy 1000 1000  
Poli 500 250

a) Which country has the comparative advantage in the production of coconuts?  
Why?

	Indy	Poli
1 coconut	1	$\frac{1}{2}$
1 fish	1	2

To produce 1000 fish Indy has to give up 1000 coconuts.  
So to produce 1 fish Indy has to give up 1 coconut.

But to produce 1 fish Poli has to give up  $\frac{1}{2}$  coconuts only.  
So, Poli has comparative advantage in coconuts.  
(And Indy in fish)

b) Will these countries benefit from trading with each other? Why or why not?

Since each has comparative advantage in 1 item, they will both benefit from trading with each other.