MIDTERM 1 - Version A

Thursday, April 26

Directions: This test is comprised of 2 parts for a total of 100 points. The first part is 33 multiple choice questions, with each question worth 2 points for a total of 66 points. The second part is short answer problems worth a total of 30 points. You get 4 points for marking down your name on the test. Mark your multiple choice answers on a Scantron with a #2 pencil. Put your name and student ID number on both the Scantron and this test. Then hand in both the Scantron and the test when you are finished.

PART 1: MULTIPLE CHOICE

1. If your friend cancels a movie date with you to go hiking with another friend, then which activity has a higher opportunity cost for your friend?
   a) A movie date with you.
   b) Hiking with another friend.
   c) It depends on the marginal cost of the movie.
   d) It depends on what your friends comparative advantage is.

2. Your cousin says that she has an idea to start a new business that no one has thought of before, but will make a lot of profit. What economic principle would make you cautious?
   a) Ockham’s Razor
   b) Comparative Advantage.
   c) Efficient Markets Hypothesis.
   d) Ceteris Paribus.

3. Which of the following is a normative statement?
   a) Health care costs too much.
   b) Hospital bills are greater in Canada than the United States.
   c) Pharmaceutical companies earn profits from selling prescription drugs.
   d) An effective price ceiling on drug prices will cause excess demand.

4. Jenny gives a nonrefundable $100 fee to a bus company to reserve a bus for her sorority sisters to travel to Corvallis for a Civil War athletic contest. If she sells 20 tickets at $4 each for a total of $80, should Jenny cancel the trip?
   a) Yes, because she will lose $20 on the venture.
   b) No, because losing $20 is better than losing the full $100 nonrefundable bus fee.
   c) Yes, because the $100 is lost no matter what.
   d) No, because she is making $80.
5. Refer to Figure 1. Which point on the production possibility frontier (PPF) represents necessarily a more preferred bundle of capital and consumer goods for society?

a) A  
b) B  
c) All points are equally preferred on the production possibility frontier.  
d) Cannot be determined from given information.

6. Refer to Figure 1. On average, the opportunity cost of each consumer good over the interval from C to B is

a) 4 capital goods.  
b) 1/4 capital goods.  
c) 80 capital goods.  
d) 1/20 capital goods.

7. Refer to Figure 1. The PPF is “bowed out” from the origin to reflect

a) decreasing opportunity costs of both goods.  
b) constant opportunity costs of both goods.  
c) increasing opportunity costs of both goods.  
d) negative opportunity costs of both goods.

8. Refer to Figure 1. If the economy were currently at point F, which of the following would allow it to get out to the PPF?

a) Stop using all the economies resources.  
b) Have production switch from using poor technology to using the best technology available.  
c) Drop prices so people buy more.  
d) Switch all production to the good with the lowest opportunity cost.
9. Consider two countries, Germany and Sweden. Germany devotes a larger portion of its production to capital. Which of the following statements is most likely true?

   a) Germany is a poorer country than Sweden.
   b) Germany will move up its production possibility curve faster than Sweden.
   c) Sweden is producing inside its production possibility frontier, while Germany is producing at a point on its production possibility frontier.
   d) Germany's production possibility frontier will shift up and out farther and faster than Sweden's over time.

10. In a command economy, as opposed to a market economy, the basic economic questions are answered by

   a) the government.
   b) the markets.
   c) consumer sovereignty.
   d) None of the above.

11. Which of the following is not supplied by households

   a) Land.
   b) Labor.
   c) Capital.
   d) Finished goods.

12. Which of the following is does NOT affect demand for automobiles?

   a) Incomes of consumers.
   b) Gasoline prices (a complementary good).
   c) The wages paid by the automobile makers.
   d) The amount of advertising by automobile makers.

13. A decrease in the equilibrium price of a good could be the result of

   a) an increase in the price of a substitute good.
   b) an increase in income if it is a normal good.
   c) an increase in worker productivity in that market, which lowers production costs.
   d) a growing population.
14. Refer to figure 2. What is the price elasticity of supply along the supply curve, S1, over the price range of $500 to $600. Use the midpoint formula.

a) 1.22  
b) -1.22  
c) 0.03  
d) 0.25

15. Refer to figure 2. Which of the following is true?

a) The supply curve, S1, is perfectly inelastic.  
b) The supply curve, S1, represents the long-run supply curve, while the supply curve, S0, represents the short-run supply curve.  
c) The demand curve, D, is perfectly elastic.  
d) The supply curve, S0, is perfectly elastic.

16. Refer to figure 2. If the local city council decided to put a price ceiling on rents at $600, which of the following change would occur in the market?

a) Excess supply of 5 thousand apartments in the long-run.  
b) Excess supply of 5 thousand apartments in the short-run.  
c) Excess demand of 2 thousand apartments in the short-run.  
d) Nothing. Equilibrium price would remain at $500 and equilibrium quantity would remain at 12,000.

17. Goods for which the price elasticity of demand is relatively inelastic

a) have many substitutes.  
b) tend to be luxury items.  
c) have few substitutes.  
d) are usually in excess demand.
Use the following information and table 1 to answer questions. You go to the local fraternity party and there are 3 types of goods you can consume there: Beer, Cheetos and Brownies. You have the following schedule of marginal utility (MU) for each of the products:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>MU&lt;sub&gt;BEER&lt;/sub&gt;</th>
<th>MU&lt;sub&gt;CHEETOS&lt;/sub&gt;</th>
<th>MU&lt;sub&gt;BROWNIES&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>50</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>2nd</td>
<td>42</td>
<td>26</td>
<td>36</td>
</tr>
<tr>
<td>3rd</td>
<td>35</td>
<td>22</td>
<td>32</td>
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<td>4th</td>
<td>28</td>
<td>15</td>
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<td>5th</td>
<td>20</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>6th</td>
<td>12</td>
<td>5</td>
<td>16</td>
</tr>
</tbody>
</table>

18. Refer to table 1. What would be your total utility if you drank 4 beers?
   a) 28.
   b) 50.
   c) 155.
   d) 187.

19. Refer to table 1. Suppose you had already drank 2 beers, but ate no cheetos or brownies yet. Given the table of marginal utility schedules, what would you want to consume next?
   a) A Brownie.
   b) A Cheetos.
   c) A Beer.
   d) Cannot be determined from information given.

20. Refer to table 1. Suppose each quantity of Beer, each quantity of Cheetos, and each quantity of Brownies always costs $1, how many of each will you purchase if you have $10 and want to maximize your utility?
   a) 5 Beers, 1 Cheetos, and 4 Brownies.
   b) 4 Beers, 2 Cheetos, and 4 Brownies.
   c) 4 Beers, 3 Cheetos, and 3 Brownies.
   d) 3 Beers, 3 Cheetos, and 4 Brownies.
21. Refer to table 1 on the previous page. Now suppose the price of beer is $2 instead of $1. Assume you still have $10 to spend and the prices of both Cheetos and Brownies are still $1. How much would you purchase of each to maximize utility?

- a) 0 Beers, 5 Cheetos, and 5 Brownies.
- b) 4 Beers, 2 Cheetos, and 4 Brownies.
- c) 1 Beers, 3 Cheetos, and 5 Brownies.
- d) 2 Beers, 3 Cheetos, and 5 Brownies.

22. During an economic downturn when consumer income falls, the demand for ice cream increases and the demand for chocolate cake decreases. This implies that

- a) ice cream and chocolate cake are complements.
- b) ice cream is a normal good and chocolate cake is an inferior good.
- c) ice cream is an inferior good and chocolate cake is a normal good.
- d) ice cream is an economic bad and chocolate cake is an economic good.

23. You are the owner of a small town newspaper. A rival (substitute) newspaper raises their price and the price of newsprint (an input into production of newspaper) goes up. This will lead to

- a) an increase in the equilibrium price for your newspaper, but equilibrium quantity could increase or decrease.
- b) an increase in the equilibrium quantity for your newspaper, but equilibrium price could increase or decrease.
- c) both the equilibrium price and equilibrium quantity increase.
- d) both the equilibrium price and equilibrium quantity decrease.

24. Which of the following is NOT an opportunity cost of attending college?

- a) The tuition you pay.
- b) The cost of the food that you consume while you are attending college.
- c) The alternative uses of the time you spend studying.
- d) The income you could have earned if you didn’t attend college.

25. Why would you expect that demand is more price elastic for a Nissan Sentra car than for cars in general?

- a) The Nissan Sentra is an inferior good.
- b) The Nissan Sentra is a normal good and a luxury.
- c) The law of diminishing marginal utility.
- d) There are more substitutes for a Nissan Sentra.
26. Suppose the price of X is three times greater than the price of Y. Which of the following statements is true for a consumer buying the optimal amount of each good?

a) Marginal utility will be equalized across the two goods.
b) Marginal utility of X will be three times higher than that of Y.
c) Marginal utility of Y will be three times higher than that of X.
d) None of the above.

27. The University of Oregon wants to increase the quantity of women’s basketball season tickets that it sells by 5%. If the price elasticity of demand is -2.5 the UO must

a) increase price by 2.0%.
b) decrease price by 2.0%.
c) increase price by 0.5%.
d) decrease price by 0.5%.

28. Consumer surplus is equal to

a) the area under the demand curve and below the price.
b) the area under the demand curve and above the price.
c) the area above the demand curve and below the price.
d) the area above the supply curve and below the price.

29. When the price of milk falls, the consumer will buy more milk because otherwise the marginal utility

a) per dollar on milk will be too high.
b) per dollar on milk will be too low.
c) of milk will be too high.
d) of milk will be too low.

30. The owner of a local hot dog stand has estimated that if he lowers the price of hot dogs from $2.00 to $1.50, he will increase sales from 400 to 500 hot dogs per day. Using the midpoint formula, the demand for hot dogs is

a) price elastic.
b) price inelastic.
c) unitarily price elastic
d) perfectly price elastic.
31. Kathy eats five slices of pizza on a Saturday night but admits each slice of pizza doesn't taste as good as the previous one. This suggests that for Kathy

   a) the marginal utility of a slice of pizza is positive but decreasing.
   b) the marginal utility of a slice of pizza is negative.
   c) the total utility of slices of pizza is declining.
   d) the total utility of slices of pizza is increasing by larger and larger increments.

32. The Oregon State Park System needs to raise revenues and are proposing to raise daily user fees from $4 to $5. You agree their plan will raise revenue if

   a) demand for park services is perfectly price elastic.
   b) demand for park services is price elastic.
   c) demand for park services is price inelastic.
   d) demand for park service is unit elastic.

33. Johnny stuffs himself at dinnertime until he cannot eat another thing. At this point,

   a) his marginal utility is zero.
   b) his total utility is zero.
   c) his marginal utility is maximized.
   d) his marginal utility is minimized.

Turn to next page for short answer questions
PART 2: SHORT-ANSWER PROBLEMS

The Drug Wars. Illegal drug use has been a substantial concern for the United States for decades. The main strategy has been to restrict supply, which mainly comes from South American countries.

1. Figure 5a below shows the market for cocaine in the United States. Show what happens in the market when the United States government takes efforts to restrict supply (such as destroying coca fields in South America). Label the new equilibrium price and quantity as P*1 and Q*1.

2. Many would suggest that demand for cocaine is very inelastic, because its consumers are addicts. In Figure 5b below draw a perfectly inelastic demand curve and then show the effect of a supply restriction in this market, clearly marking the equilibrium prices and quantities, both before and after the supply restriction. Assume the supply curve is the same as in Figure 5a.

3. Explain why the elasticity of demand for cocaine is important for determining whether the supply restriction will lead to less cocaine usage.

4. Many South American countries think the United States should also try to limit demand for cocaine, rather than force the South American countries to spend resources to restrict supply. Thinking about a cocaine market as depicted in figure 5b, compare the effects on equilibrium price and quantity from a successful campaign to limit demand versus one to restrict supply:

   A) Difference in the effect on equilibrium quantity:

   B) Difference in the effect on equilibrium price:
Survivor and Comparative Advantage. Tina, Colby and Elisabeth are three remaining members on the latest Survivor T.V. show. Table 3 below indicates how much they can perform of each of the following tasks in one hour.

Table 3.

<table>
<thead>
<tr>
<th></th>
<th>Tina</th>
<th>Colby</th>
<th>Elisabeth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catching fish</td>
<td>2 fish</td>
<td>1 fish</td>
<td>4 fish</td>
</tr>
<tr>
<td>Collecting firewood</td>
<td>4 stacks</td>
<td>8 stacks</td>
<td>12 stacks</td>
</tr>
</tbody>
</table>

5. Who has the absolute advantage in catching fish? ____________________

6. What is the opportunity cost of catching 1 fish for:  
   A) Tina: ____________________  
   B) Colby: ____________________  
   C) Elisabeth: ____________________

7. Who has the comparative advantage in catching fish? ______________. Explain why.

Rock Concerts and “Consumer Friendly” Prices. This week in discussion sections you read about the Rolling Stones rock group and concert tickets. Suppose the Rolling Stones had an upcoming concert at the Portland Rose Garden that can seat a maximum of 10,000 people. Typically, the equilibrium price to fill 10,000 seats would be $70.

8. Show the what would happen in the market below if the Rolling Stones decided to “reward” their fans with $35 tickets. Clearly label the quantity demanded and quantity supplied at $35.

9. Name two consequences of “rewarding” fans with $35 tickets.  
   A) ____________________  
   B) ____________________

10. If the demand for Rolling Stones’ tickets is elastic, would total revenues increase in this situation. Explain why or why not. Better yet, show total revenue for $70 ticket prices and for $35 ticket prices.