FIRST HOURLY EXAMINATION
ECON 200
Spring 2008
Version B

STUDENT'S NAME: ________________________________________________

STUDENT'S IDENTIFICATION NUMBER: _____________________________

DAY AND TIME YOUR SECTION MEETS: _____________________________

ENTER THE NUMBER 246531 UNDER "SPECIAL CODES" ON THE SCANTRON SHEET

BEFORE YOU BEGIN PLEASE MAKE SURE THAT YOUR EXAMINATION HAS BEEN DUPLICATED AND COLLATED CORRECTLY. THERE SHOULD BE 40 MULTIPLE CHOICE QUESTIONS. THE EXAM HAS 11 PAGES INCLUDING THIS COVER SHEET.

ANSWER ALL THE PROBLEMS ON THE SCANTRON SHEET.

BE SURE TO FILL-IN YOUR NAME (LAST NAME FIRST) AT THE TOP OF THE SCANTRON SHEET. FILL IN YOUR STUDENT IDENTIFICATION NUMBER UNDER "IDENTIFICATION NUMBER" ON THE SCANTRON SHEET.

WRITE YOUR TA'S NAME IN THE UPPER-RIGHT HAND CORNER OF YOUR SCANTRON SHEET.

University of Maryland Honor Pledge

The University is committed to Academic Integrity, and has a nationally recognized Honor Code, administered by the Student Honor Council. In an effort to affirm a community of trust, the Student Honor Council proposed and the University Senate approved Honor Pledge. The University of Maryland Honor Pledge reads:

"I pledge on my honor that I have not given or received any unauthorized assistance on this examination (or assignment)."

Please rewrite the exact wording of the pledge, followed by your signature in the space below:

Pledge:  __________________________________________________________________________
         __________________________________________________________________________
         __________________________________________________________________________

Your Signature: __________________________________________
Multiple Choice
(Each question is worth 2.5 points. Please select THE BEST answer.)

1. Suppose a tax of $1 per unit is imposed on a good. The more elastic the demand for the good, other things equal,
   a. the larger is the decrease in quantity demanded as a result of the tax.
   b. the smaller is the tax burden on buyers relative to the tax burden on sellers.
   c. the larger is the deadweight loss of the tax.
   d. All of the above are correct.

2. Demand is said to be elastic if
   a. the price of the good responds substantially to changes in demand.
   b. demand shifts substantially when income or the expected future price of the good changes
   c. buyers do not respond much to changes in the price of the good.
   d. buyers respond substantially to changes in the price of the good.

Figure 1. In this figure, a per unit tax of $14 is imposed on buyers of a product.

![Diagram](image-url)
3. Refer to Figure 1. The price that sellers receive after the tax is imposed is
   a. $24.
   b. $14.
   c. $10.
   d. $8.

4. Refer to Figure 1. The per-unit burden of the tax on buyers is
   a. $16.
   b. $14.
   c. $8.
   d. $6.

5. If, at the current price, there is a shortage of a good,
   a. sellers are producing more than buyers wish to buy.
   b. the market must be in equilibrium.
   c. the price is below the equilibrium price.
   d. quantity demanded equals quantity supplied.

Table 1

<table>
<thead>
<tr>
<th>BUYER</th>
<th>WILLINGNESS TO PAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIKE</td>
<td>$50.00</td>
</tr>
<tr>
<td>SANDY</td>
<td>$30.00</td>
</tr>
<tr>
<td>JONATHAN</td>
<td>$20.00</td>
</tr>
<tr>
<td>HALEY</td>
<td>$10.00</td>
</tr>
</tbody>
</table>

6. Refer to Table 1. If the table represents the willingness to pay of four buyers and the price of
   the product is $15, then who would be willing to purchase the product?
   a. Mike
   b. Mike and Sandy
   c. Mike, Sandy, and Jonathan
   d. Mike, Sandy, Jonathan, and Haley

7. A decrease in input costs to firms in a market will result in
   a. a decrease in equilibrium price and an increase in equilibrium quantity.
   b. a decrease in equilibrium price and a decrease in equilibrium quantity.
   c. an increase in equilibrium price and no change in equilibrium quantity.
   d. an increase in equilibrium price and an increase in equilibrium quantity.
8. How does total revenue change as one moves downward and to the right along a linear demand curve?
   a. It always increases.
   b. It always decreases.
   c. It first increases, then decreases.
   d. It is unaffected by a movement along the demand curve.

9. Other things equal, the demand for a good tends to be more inelastic, the
   a. fewer the available substitutes.
   b. longer the time period considered
   c. more the good is considered a luxury good.
   d. more narrowly defined is the market for the good

10. A relatively steep demand curve indicates that
    a. quantity demanded will adjust only slightly to a price change.
    b. quantity demanded will adjust significantly to a price change.
    c. quantity demanded will not adjust to a price change.
    d. the change in quantity demanded will exactly equal a change in price.

11. A tax on the sellers of cell phones will
    a. reduce the size of the cell phone market.
    b. place a burden on the sellers of cell phones but not on the buyers of cell phones.
    c. affect the price paid by buyers of cell phones, but not the size of the market.
    d. affect the size of the market, but it will have no effect on the effective price received by sellers of cell phones.

12. Buyers of a product will bear the larger part of the tax burden, and sellers will bear a smaller part of the tax burden, when
    a. the tax is placed on the sellers of the product
    b. the tax is placed on the buyers of the product.
    c. the supply of the product is more elastic than the demand for the product
    d. the demand for the product is more elastic than the supply of the product

13. The opportunity cost of an item is
    a. the number of hours needed to earn money to buy the item.
    b. what you give up to get that item.
    c. usually less than the dollar value of the item.
    d. the dollar value of the item.
14. Denise values a stainless steel dishwasher for her new house at $500. The actual price of the dishwasher is $650. Denise
   a. buys the dishwasher and on her purchase she experiences a consumer surplus of $150.
   b. buys the dishwasher and on her purchase she experiences a consumer surplus of $-150.
   c. does not buy the dishwasher and she experiences a consumer surplus of $150 on her non-purchase.
   d. does not buy the dishwasher and she experiences a consumer surplus of $0 on her non-purchase.

15. At a minimum wage that exceeds the equilibrium wage,
   a. the quantity demanded of labor will exceed the quantity supplied.
   b. the quantity supplied of labor will exceed the quantity demanded.
   c. the minimum wage will not be binding.
   d. the market for skilled workers is affected, but the market for unskilled workers remains unaffected.

16. An increase in the price of rubber coincides with an advance in the technology of tire production. As a result of these two events,
   a. the demand for tires increases and the supply of tires decreases.
   b. the supply of tires decreases and the demand for tires is unaffected.
   c. the supply of tires increases and the demand for tires is unaffected.
   d. none of the above is necessarily correct.

Table 2. For each of three potential buyers of oranges, the table displays the willingness to pay for the first three oranges of the day. Assume Alex, Barb, and Carlos are the only three buyers of oranges, and only three oranges can be supplied per day.

<table>
<thead>
<tr>
<th></th>
<th>First Orange</th>
<th>Second Orange</th>
<th>Third Orange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alex</td>
<td>$2.00</td>
<td>$1.50</td>
<td>$0.75</td>
</tr>
<tr>
<td>Barb</td>
<td>$1.50</td>
<td>$1.00</td>
<td>$0.80</td>
</tr>
<tr>
<td>Carlos</td>
<td>$0.75</td>
<td>$0.25</td>
<td>$0</td>
</tr>
</tbody>
</table>

17. Refer to Table 2. The market quantity of oranges demanded per day is exactly 5 if the price of an orange, P, satisfies
   a. $1.00 < P < $1.50.
   b. $0.80 < P < $1.50.
   c. $0.80 < P < $1.00.
   d. $0.75 < P < $0.80.

18. Refer to Table 2. If the market price of an orange is $0.40,
   a. 6 oranges are demanded per day and total consumer surplus amounts to $4.45.
   b. 6 oranges are demanded per day and total consumer surplus amounts to $5.10.
   c. 7 oranges are demanded per day and total consumer surplus amounts to $5.35.
   d. 7 oranges are demanded per day and total consumer surplus amounts to $5.50.
19. Refer to Table 2. If the market price of an orange increases from $0.60 to $1.05, total consumer surplus
   a. increases by $2.90.
   b. decreases by $2.25.
   c. decreases by $2.70.
   d. decreases by $3.85.

20. If the price elasticity of demand for tuna is 0.7, then a 1.5% increase in the price of tuna will decrease the quantity demanded of tuna by
   a. 1.05% and tuna sellers' total revenue will increase as a result.
   b. 1.05% and tuna sellers' total revenue will decrease as a result.
   c. 2.14% and tuna sellers' total revenue will increase as a result.
   d. 2.14% and tuna sellers' total revenue will decrease as a result.

21. Last year, Sheila bought 6 pairs of shoes when her income was $40,000. This year, her income is $52,000 and she purchased 7 pairs of shoes. Holding other factors constant and using the midpoint method, it follows that Sheila’s income elasticity of demand is about
   a. 0.59 and Sheila regards shoes as an inferior good.
   b. 0.59 and Sheila regards shoes as a normal good.
   c. 1.7 and Sheila regards shoes as an inferior good.
   d. 1.7 and Sheila regards shoes as a normal good.

22. Last month, sellers of good Y took in $100 in total revenue on sales of 50 units of good Y. This month sellers of good Y raised their price and took in $120 in total revenue on sales of 40 units of good Y. At the same time, the price of good X stayed the same, but sales of good X increased from 20 units to 40 units. We can conclude that goods X and Y are
   a. substitutes, and have a cross-price elasticity of 0.60.
   b. complements, and have a cross-price elasticity of 0.60.
   c. substitutes, and have a cross-price elasticity of 1.67.
   d. complements, and have a cross-price elasticity of 1.67.

23. Consumer surplus in a market can be represented by the
   a. area below the demand curve and above the price.
   b. distance from the demand curve to the horizontal axis.
   c. distance from the demand curve to the vertical axis.
   d. area below the demand curve and above the horizontal axis.

24. When a good is taxed,
   a. both buyers and sellers of the good are made worse off.
   b. only buyers are made worse off, because they ultimately bear the burden of the tax.
   c. only sellers are made worse off, because the government holds them responsible for sending in the tax payments.
   d. neither buyers nor sellers are made worse off.
25. When a tax is imposed on a good for which the supply is perfectly elastic and the demand is relatively inelastic,
   a. buyers of the good will bear most but not all of the burden of the tax.
   b. sellers of the good will bear most but not all of the burden of the tax.
   c. the buyers of the good will bear all the burden of the tax.
   d. the size of the market for the good will expand.

26. The negative relationship between price and quantity demanded
   a. applies to most goods in the economy.
   b. is represented by a downward-sloping demand curve.
   c. is referred to as the law of demand.
   d. All of the above are correct.

27. If a good is normal, then an increase in income will result in
   a. an increase in the demand for the good.
   b. a decrease in the demand for the good.
   c. a movement down and to the right along the demand curve for the good.
   d. a movement up and to the left along the demand curve for the good.

28. Which of the following changes would not shift the demand curve for a good or service?
   a. a change in income
   b. a change in the price of the good or service
   c. a change in expectations about the future price of the good or service
   d. a change in the price of a related good or service

29. Holding all other factors constant and using the midpoint method, if a pencil manufacturer increases production by 20 percent when the market price of pencils increases from $0.50 to $0.60, then supply is
   a. inelastic, since the price elasticity of supply is equal to .91.
   b. inelastic, since the price elasticity of supply is equal to 1.1.
   c. elastic, since the price elasticity of supply is equal to 0.91.
   d. elastic, since the price elasticity of supply is equal to 1.1.

30. The cross-price elasticity between I-Pods and portable CD players is 1.23. The income elasticity of portable CD players is -0.52. From this information we can conclude
   a. portable CD players are inferior goods and are substitutes for I-Pods.
   b. portable CD players are normal goods and are substitutes for I-Pods.
   c. portable CD players are inferior goods and are complements for I-Pods.
   d. portable CD players are normal goods and are complements for I-Pods.
31. When demand is inelastic within a certain price range, then within that price range,
a. an increase in price would increase total revenue because the decrease in quantity
demanded is proportionately less than the increase in price.
b. an increase in price would decrease total revenue because the decrease in quantity
demanded is proportionately greater than the increase in price.
c. a decrease in price would increase total revenue because the increase in quantity
demanded is proportionately smaller than the decrease in price.
d. a decrease in price would not affect total revenue.

32. Price controls are usually enacted
a. as a means of raising revenue for public purposes.
b. when policymakers believe that the market price of a good or service is unfair to
buyers or sellers.
c. when policymakers detect inefficiencies in a market.
d. All of the above are correct.

Figure 2

33. Refer to Figure 2. When the price ceiling applies in this market and 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 $P_2$. 
34. The demand for salt is inelastic and the supply of salt is elastic. The demand for caviar is elastic and the supply of caviar is inelastic. Suppose that a tax of $1 per pound is levied on the sellers of salt and a tax of $1 per pound is levied on the buyers of caviar. We would expect that most of the burden of these taxes will fall on
   a. sellers of salt and the buyers of caviar.
   b. sellers of salt and the sellers of caviar.
   c. buyers of salt and the sellers of caviar.
   d. buyers of salt and the buyers of caviar.

35. Over time, housing shortages caused by rent control
   a. increase, because the demand for, and supply of, housing are less elastic in the long run.
   b. increase, because the demand for, and supply of, housing are more elastic in the long run.
   c. decrease, because the demand for, and supply of, housing are less elastic in the long run.
   d. decrease, because the demand for, and supply of, housing are more elastic in the long run.

36. What will happen to the equilibrium price and quantity of traditional camera film if traditional cameras become more expensive, digital cameras become cheaper, the cost of the resources needed to manufacture traditional film falls and more firms decide to manufacture traditional film?
   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. The effect on both price and quantity is ambiguous.
37. Refer to Figure 3. A price floor is imposed in this market at a price given by the line CBI. Following the imposition of the floor, the consumer surplus is represented by
   a. the area of triangle ACB
   b. the area of triangle AHJ.
   c. the area of region ABIHJ.
   d. the area of triangle BGH.

38. Refer to Figure 3. The area that represents the amount of total surplus lost due to the price floor compared to what could be achieved with no price floor is
   a. the area of triangle BHI.
   b. the area of triangle BGH.
   c. the area of triangle FHA.
   d. the area of region AEGB.
Figure 4. The figure below represents a $10 per unit tax on a good. On the graph, Q represents quantity and P represents price.

39. Refer to Figure 4. The tax causes producer surplus to decrease by the area
   a. D + F.
   b. D + F + G.
   c. D + F + J.
   d. D + F + G + H.

40. Refer to Figure 4. The government collects tax revenue that is represented by the area
   a. L.
   b. B + D.
   c. C + F.
   d. F + G + L.