SECOND HOURLY EXAMINATION
ECON 200
Spring 2008
Version B

STUDENT'S NAME: ____________________________________________

STUDENT'S IDENTIFICATION NUMBER: ___________________________

DAY AND TIME YOUR SECTION MEETS: ___________________________

ENTER THE NUMBER 246135 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: ____________________________________________
1. Refer to Figure 1. If this market is currently producing at Q₁, then total economic well-being would definitely increase if output
   a. increased to Q₂.
   b. increased to Q₃.
   c. increased to Q₄.
   d. stayed at Q₁.

2. Refer to Figure 1. If all external costs were internalized, then the market’s equilibrium output would be
   a. Q₁.
   b. Q₂.
   c. Q₃.
   d. Q₄.

3. Changes in the output of a perfectly competitive firm, without any change in the price of the product, will change the firm's
   a. total revenue.
   b. marginal revenue.
   c. average revenue.
   d. all of the above are correct.

4. When a profit-maximizing firm in a competitive market has zero economic profit, accounting profit usually
   a. is negative (accounting losses).
   b. is positive.
   c. is also zero.
   d. could be positive, negative or zero.
5. An externality exists whenever
   a. the economy can benefit from government intervention.
   b. markets are not able to reach equilibrium.
   c. a firm sells its product in a foreign market.
   d. a person engages in an activity that influences the well-being of a bystander and yet
      neither pays nor receives payment for that effect.

6. Suppose the market for books is perfectly competitive and is initially in equilibrium at price $25. The price of cable television (a substitute) rises. At the original equilibrium price for books of $25,
   a. there would be excess demand and the price would now tend to rise.
   b. there would be excess supply and the price would now tend to rise.
   c. there would be excess demand and the price would now tend to fall.
   d. there would be excess supply and the price would now tend to fall.

7. As a general rule, when accountants calculate profit they account for explicit costs but usually ignore
   a. certain outlays of money by the firm.
   b. implicit costs.
   c. operating costs.
   d. fixed costs.

8. The proposition that if private parties can bargain without cost over the allocation of resources, they can solve the problem of externalities on their own, is called
   a. the transaction cost theorem.
   b. a corrective tax.
   c. the externality theorem.
   d. the Coase theorem.

9. Which of the following goods is not rival in consumption and excludable?
   a. a tornado siren
   b. an uncongested toll road
   c. a home
   d. the environment

10. Which of the following represents a way that a government can help the private market to internalize an externality?
    a. taxing goods that have negative externalities
    b. subsidizing goods that have positive externalities
    c. The government can never improve upon the outcomes of private markets.
    d. Both a and b are correct.
Scenario 1

As part of an estate settlement Mary received $1 million. She decided to use the money to purchase a small business in Anywhere, USA. If Mary would have invested the $1 million in a risk-free bond fund she could have made $100,000 each year. She also quit her job with Lucky.Com Inc. to devote all of her time to her new business; her salary at Lucky.Com Inc. was $75,000 per year.

11. Refer to Scenario 1. What are Mary's opportunity costs of operating her new business?
   a. $25,000
   b. $75,000
   c. $100,000
   d. $175,000

12. Refer to Scenario 1. At the end of the first year of operating her new business, Mary's accountant reported an accounting profit of $150,000. What was Mary's economic profit?
   a. $25,000 loss
   b. $50,000 loss
   c. $25,000 profit
   d. $150,000 profit

13. Suppose the price and quantity is originally at a point on the demand curve where the elasticity is 2. If the price rises by 1% then
   a. quantity demanded falls by 2% and total expenditure falls.
   b. quantity demanded falls by 20% and total expenditure falls.
   c. quantity demanded falls by 2% and total expenditure rises.
   d. quantity demanded falls by 20% and total expenditure rises.

14. On a 100-acre farm, a farmer is able to produce 3,000 bushels of wheat when he hires 2 workers. He is able to produce 4,400 bushels of wheat when he hires 3 workers. Which of the following possibilities is consistent with the property of diminishing marginal product?
   a. The farmer is able to produce 5,600 bushels of wheat when he hires 4 workers.
   b. The farmer is able to produce 5,800 bushels of wheat when he hires 4 workers.
   c. The farmer is able to produce 6,000 bushels of wheat when he hires 4 workers.
   d. All of the above are correct.
15. Refer to Figure 2. Which of the following can be inferred from the figure above?

(i) Marginal cost is increasing at all levels of output.
(ii) Marginal product is increasing at low levels of output.
(iii) Marginal product is decreasing at high levels of output.

a. (i) and (ii)
b. (ii) and (iii)
c. (i) and (iii)
d. (ii) only

Table 1

<table>
<thead>
<tr>
<th>Number of Workers</th>
<th>Boxes of Chocolates Produced per Week</th>
<th>Marginal Product of Labor</th>
<th>Cost of Factory</th>
<th>Cost of Workers</th>
<th>Total Cost of Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>630</td>
<td>330</td>
<td>150</td>
<td>275</td>
<td>425</td>
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<tr>
<td>2</td>
<td>890</td>
<td>150</td>
<td>825</td>
<td>975</td>
<td></td>
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<tr>
<td>3</td>
<td>950</td>
<td>60</td>
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<tr>
<td>4</td>
<td>10</td>
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<tr>
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<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,800</td>
</tr>
</tbody>
</table>
16. Refer to Table 1. What is the total cost associated with making 890 boxes of premium chocolates per week? (The cost per worker is the same for any level of output.)
   a. $1,250
   b. $1,325
   c. $1,400
   d. $1,575

17. Refer to Figure 3. Consumer surplus in this market after trade is
   a. A.
   b. C + B.
   c. A + B + D.
   d. B + C + D.

18. Refer to Figure 3. Producer surplus in this market before trade is
   a. C.
   b. B + C.
   c. A + B + D.
   d. B + C + D.

19. Refer to Figure 3. Producer surplus plus consumer surplus in this market after trade is
   a. A + B.
   b. A + B + C.
   c. B + C + D.
   d. A + B + C + D.
20. Suppose that at quantity $Q_1$ average variable costs are decreasing, then
   a. Total fixed costs must be zero at $Q_1$.
   b. Marginal costs must be above average variable costs at $Q_1$.
   c. Marginal costs must be below average variable costs at $Q_1$.
   d. Marginal costs must equal average variable costs at $Q_1$.

21. The Tragedy of the Commons for sheep grazing on common land can be eliminated by the government doing each of the following except
   a. assigning land property rights.
   b. auctioning off sheep-grazing permits.
   c. taxing sheep flocks.
   d. subsidizing sheep flocks.

22. When a country allows trade and becomes an exporter of a good, which of the following is not a consequence?
   a. The price paid by domestic consumers of the good increases.
   b. The price received by domestic producers of the good increases.
   c. The losses of domestic consumers of the good exceed the gains of domestic producers of the good.
   d. The gains of domestic producers of the good exceed the losses of domestic consumers of the good.

23. When a country allows trade and becomes an importer of a good,
   a. consumer surplus and producer surplus both increase.
   b. consumer surplus and producer surplus both decrease.
   c. consumer surplus increases and producer surplus decreases.
   d. consumer surplus decreases and producer surplus increases.

24. If the price in a perfectly competitive market that is expected to persist over the long run lies above average variable cost and below average total cost of a firm then
   a. the firm should shut down in the short run but operate in the long run.
   b. the firm should operate in the short run but exit in the long run.
   c. the firm should operate both in the short run and the long run.
   d. the firm should shut down in the short run and exit in the long run.

25. Suppose the government lowers the tax on shoes from $5 to $2 a pair and that the supply and demand curves are neither perfectly horizontal nor vertical. Sellers pay the tax in both cases.
   a. Total surplus rises.
   b. The price paid by consumers falls.
   c. The price received by suppliers (after paying tax) rises.
   d. All of the above.
26. Suppose that policymakers are considering placing a $2 per unit tax on either of two markets. In Market A, the tax will have a significant effect on the price consumers pay, but it will not affect equilibrium quantity very much. In Market B, the same tax will have only a small effect on the price consumers pay, but it will have a large effect on the equilibrium quantity. Other factors are held constant. In which market will the tax have a larger deadweight loss?
   a. Market A
   b. Market B
   c. The deadweight loss will be the same in both markets.
   d. There is not enough information to answer the question.

27. Most lighthouses are operated by the government because
   a. of the free-rider problem.
   b. lighthouses are no longer valued by society.
   c. most lighthouses are only tourist attractions in state and national parks.
   d. shipping companies would not be able to afford maintenance fees for lighthouses.

28. The complete description of a competitive firm's supply curve is as follows: The competitive firm's short-run supply curve is that portion of the
   a. average variable cost curve that lies above marginal cost.
   b. average total cost curve that lies above marginal cost.
   c. marginal cost curve that lies above average variable cost.
   d. marginal cost curve that lies above average total cost.

29. When the social cost curve is below the private cost or supply curve then we can conclude
   a. there is a negative externality in the market.
   b. total surplus is maximized with no taxes and no subsidies.
   c. there is a positive externality in the market.
   d. a tax would increase total surplus.

30. When a good is rival in consumption,
   a. one person's use of the good diminishes another person's ability to use it.
   b. people can be prevented from using the good.
   c. no more than one person can use the good at the same time.
   d. everyone will be excluded from obtaining the good.

31. Which of the following is not considered a public good?
   a. national defense
   b. basic research
   c. tennis courts at a private club.
   d. fighting poverty
32. Refer to Figure 4. Without trade, the equilibrium price of carnations is
   a. $8 and the equilibrium quantity is 300.
   b. $6 and the equilibrium quantity is 200.
   c. $6 and the equilibrium quantity is 400.
   d. $4 and the equilibrium quantity is 500.

33. Refer to Figure 4. With trade and without a tariff,
   a. the domestic price is equal to the world price.
   b. carnations are sold at $8 in this market.
   c. there is a shortage of 400 carnations in this market.
   d. this country imports 200 carnations.

34. Refer to Figure 4. The imposition of a tariff on carnations
   a. increases the number of carnations imported by 100.
   b. increases the number of carnations imported by 200.
   c. decreases the number of carnations imported by 200.
   d. decreases the number of carnations imported by 100.
Table 2

<table>
<thead>
<tr>
<th>Output</th>
<th>Total Cost</th>
</tr>
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<tbody>
<tr>
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<tr>
<td>10</td>
<td>60</td>
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<td>30</td>
<td>130</td>
</tr>
<tr>
<td>40</td>
<td>180</td>
</tr>
<tr>
<td>50</td>
<td>240</td>
</tr>
</tbody>
</table>

35. Refer to Table 2. What is the total fixed cost for this firm?
   a. $20  
   b. $30  
   c. $40  
   d. $50  

36. Refer to Table 2. What is average variable cost when output is 50 units?
   a. $3.60  
   b. $4.00  
   c. $4.40  
   d. $4.80  

37. In a competitive market, the actions of any single buyer or seller will
   a. have a negligible impact on the market price.  
   b. have little effect on overall production but will ultimately change final product price.  
   c. cause a noticeable change in overall production and a change in final product price.  
   d. adversely affect the profitability of more than one firm in the market.  

38. Which of the following statements is not correct?
   a. Government policies may improve the market's allocation of resources when negative  
      externalities are present.  
   b. Government policies may improve the market's allocation of resources when positive  
      externalities are present.  
   c. A positive externality is an example of a market failure.  
   d. Without government intervention, the market will tend to undersupply products that  
      produce negative externalities compared to the social optimum.
39. A firm will shut down in the short run if the total revenue that it would get from producing and selling its output is less than its
   a. opportunity costs.
   b. fixed costs.
   c. variable costs.
   d. total costs.

40. The portion of a competitive firm's marginal cost curve above average variable cost is regarded as its supply curve because
   a. the position of the marginal cost curve determines the price for which the firm should sell its product.
   b. among the various cost curves, that part of the marginal cost curve is the only one that slopes upward.
   c. the marginal cost curve determines the quantity of output the firm is willing to supply at any given price.
   d. the firm is aware that marginal revenue must exceed marginal cost in order for profit to be maximized.