

2007 NATIONAL ECONOMICS CHALLENGE
NCEE/Goldman Sachs Foundation

Round I – Microeconomics
Regional Competition, David Ricardo Division

Please select the one best answer.

1. Used car dealers often include warranties with the cars they sell. Which problem do warranties help reduce?
 - A. moral hazard
 - B. principal-agent
 - C. adverse selection
 - D. zero-sum outcomes
 - E. negative externalities

2. Suppose that a pizza vendor at a basketball game can sell 3,000 slices of pizza per night at a price of \$3 per slice. If the vendor raises the price to \$4 per slice, the number of slices sold falls to 2,000. Based on this information, the price elasticity of demand using the midpoint formula is?
 - A. -.60
 - B. -.75
 - C. -1.0
 - D. -1.25
 - E. -1.4

3. Which of the following prohibited any person from being a director of two or more competing corporations?
 - A. Clayton Act
 - B. Sherman Act
 - C. Cellar-Kefauver Act
 - D. Robinson-Patman Act.
 - E. Federal Trade Commission Act

4. Which of the following markets is the best example of the efficient market hypothesis?
 - A. labor
 - B. water
 - C. stocks
 - D. insurance
 - E. hybrid cars

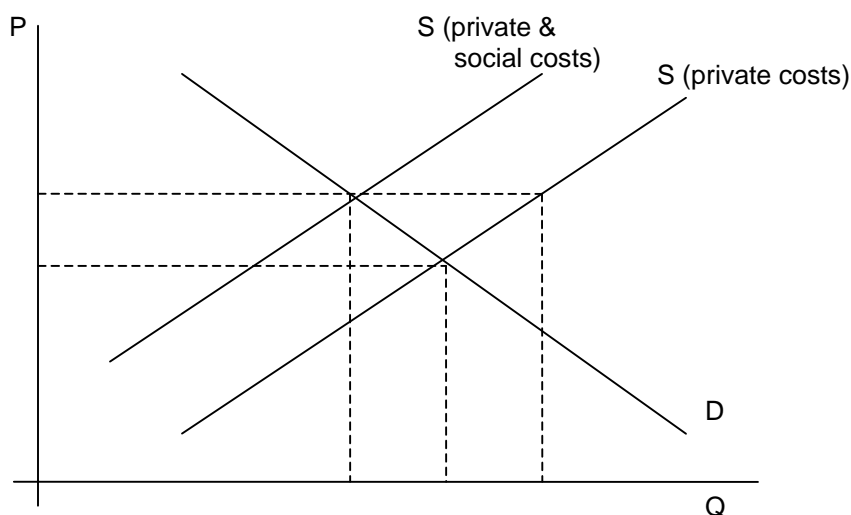
5. A perfectly competitive firm is currently producing at a point where the price of the last unit produced exceeds its marginal cost. In order to maximize profits in the short-run, this firm should
 - A. increase production.
 - B. decrease production.
 - C. shut down.
 - D. increase the product price.
 - E. decrease the product price.

6. Stephanie works for Microsoft and earns \$170,000 per year. She considers starting her own business. If she starts this business, she will earn an income of \$120,000 per year. What is the opportunity cost for Stephanie of starting her own business?
- \$0.
 - \$50,000.
 - \$90,000
 - \$120,000.
 - \$170,000.
7. Jane and Ingrid live together in a small two bedroom apartment. Jane values watching loud TV in the middle of the night at \$200. Ingrid values peace and quiet in the middle of the night at \$500. Which of the following is true assuming that Jane has the right to watch loud TV in the middle of the night and that there are no transaction costs?
- It is efficient for Jane to pay Ingrid \$400 and continue watching loud TV in the middle of the night.
 - It is efficient for Jane to pay Ingrid \$100 and stop watching loud TV in the middle of the night.
 - It is efficient for Ingrid to pay Jane between \$100 and \$150 so that Jane stops watching loud TV in the middle of the night.
 - It is efficient for Ingrid to pay Jane between \$200 and \$500 so that Jane stops watching loud TV in the middle of the night.
 - There is no efficient solution to this situation.
8. Suppose a state government imposed a new excise tax of \$0.15 on each candy bar sold with the intention of reducing the consumption of junk food. What type of tax is this called?
- Pigovian tax
 - Utilitarian tax
 - Ricardian tax
 - Herfindahl tax
 - Ad-valorem tax
9. The table below shows the willingness to pay for 27" LCD Televisions. If the market price of 27" LCD televisions is \$1000, the total consumer surplus will be:

Buyer	Willingness to Pay
Roger	\$1,500
Michelle	\$1,200
Ken	\$1,000
Tomoko	\$750
Kim	\$500

- \$700.
- \$750.
- \$1,450.
- \$2,250.
- \$3,700.

10. Consider the following market for Good J.



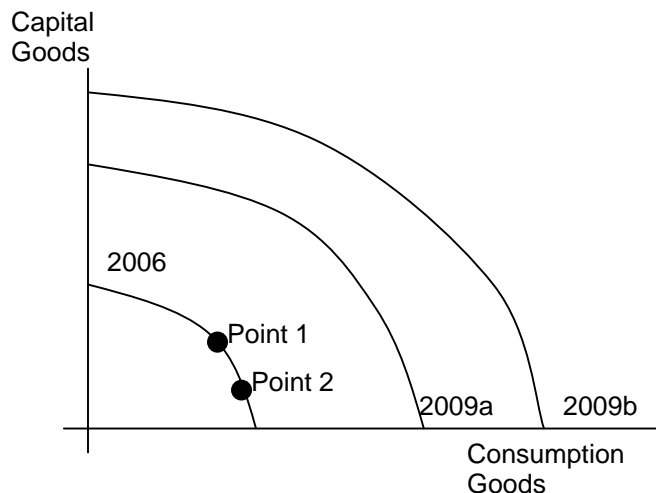
If the market for Good J is left alone from government intervention, which is true?

- A. the equilibrium price will result in a surplus
 - B. the equilibrium price will result in a shortage
 - C. the equilibrium quantity will be lower than optimal
 - D. the equilibrium quantity will be efficient
 - E. the equilibrium quantity will be greater than optimal
11. The table below shows the total output produced by different combinations of labor in the market for bagels. Which of the following is true based on this information?

Labor Units	Output	Product Price
0	0	\$3.00
1	8	\$3.00
2	15	\$3.00
3	21	\$3.00
4	26	\$3.00

- A. Production is taking place in a perfectly competitive market and the marginal revenue product of the fourth unit of labor is \$76.
- B. Production is taking place in a perfectly competitive market and the marginal revenue product of the fourth unit of labor is \$52.
- C. Production is taking place in a perfectly competitive market and the marginal revenue product of the fourth unit of labor is \$15.
- D. Production is taking place in an imperfectly competitive market and the marginal revenue product of the fourth unit of labor is \$76.
- E. Production is taking place in an imperfectly competitive market and the marginal revenue product of the fourth unit of labor is \$15.

12. In the following graph, each curve represents a PPF (or PPC), labeled by year. Two alternative PPFs for year 2009 are given, and one PPF is present for year 2006.



- Which best describes the relationship between points 1 and 2 and the production possibilities curves in the figure?
- Point 1 is associated with the PPF 2009a; Point 2 is associated with PPF 2009b.
 - Point 1 is associated with the PPF 2009b; Point 2 is associated with PPF 2009a.
 - Subtracting Point 1 from Point 2 would be associated with PPF 2009a.
 - Multiplying Point 1 and Point 2 would be associated with PPF 2009b.
 - Adding Point 1 and Point 2 would be associated with PPF 2009a.
13. What is the profit/loss of a monopolistically competitive firm that in the short run produces 300 units of output and exhibits, at that output level, an average total cost of \$7, marginal revenue and marginal cost of \$3 and a selling price of \$9?
- \$900
 - \$600
 - \$900
 - \$600
 - \$0
14. Suppose that a manufacturer of leather coats can produce 1000 coats a month at a total cost of \$50,000 or 1600 coats a month at a total cost of \$81,600. The coat manufacturer will experience _____ if it decides to produce 1600 coats instead of 1000 coats a month.
- economies of scale
 - diseconomies of scale
 - constant returns to scale
 - economies of scope
 - diseconomies of scope

15. Why will an oligopolist never, in theory, sell at a price on the inelastic portion of its demand curve?
- A. The average fixed cost will be greater than the price.
 - B. The average variable cost will be greater than the price.
 - C. The marginal revenue of the last unit sold will be zero.
 - D. The marginal revenue of the last unit sold will be negative.
 - E. Unlike market demand, there is no such thing as an inelastic region of a firm's demand curve.