

BPE MIC1 Microeconomics 1 – Fall Semester 2011

**Midterm Exam - 31.10.2011, 9:30-10:30**

**Test A**

**Guidelines and Rules:**

1. The test setup has 4 pages. It is your responsibility to check that you have all the pages.
2. The time limit is 60 minutes.
3. The exam is worth 30 points.
4. You are NOT allowed to use any books or notes.
5. Any violation of academic honesty will be penalized to the fullest extent possible.
6. At most one exam-taker is allowed to be outside the room at one time.
7. Write the answers of the multi-choice questions in the spaces corresponding to the respective questions in the setup sheet.
8. When ready, **submit** the filled setup sheet with **your name** written on the first page.

This exam will count for 30% of your final grade from the course. Good luck!

**Completion**

*Complete each statement.*

1. Economists say that a cost is a \_\_\_\_\_ cost when it has already been committed and cannot be recovered.
2. A market in which buyers and sellers have a negligible impact on the market price are called \_\_\_\_\_ markets.
3. The comparison among producers of goods based on their productivity shows who has \_\_\_\_\_ advantage.
4. \_\_\_\_\_ statements are descriptive. They make a claim how the world is.
5. The \_\_\_\_\_ elasticity of demand measures how the quantity demanded of one good changes as the price of another good changes.

**True/False**

*Indicate whether the statement is true or false.*

- \_\_\_\_\_ 6. The demand for bread is likely to be more elastic than the demand for solid-gold bread plates.
- \_\_\_\_\_ 7. Monopolists are price takers.
- \_\_\_\_\_ 8. For a firm operating in a perfectly competitive industry, marginal revenue and average revenue are equal.
- \_\_\_\_\_ 9. If a person chooses self-sufficiency, then she can only consume what she produces.
- \_\_\_\_\_ 10. Profit equals marginal revenue minus marginal cost.

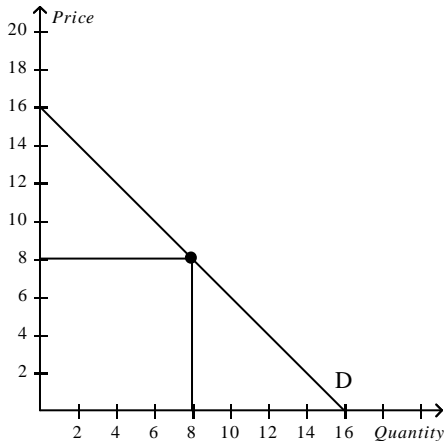
### Multiple Choice

Identify the choice that best completes the statement or answers the question.

- \_\_\_\_\_ 11. A firm has a fixed cost of \$700 in its first year of operation. When the firm produces 99 units of output, its total costs are \$4,000. The marginal cost of producing the 100th unit of output is \$200. What is the total cost of producing 100 units?
- a. \$42  
b. \$900  
c. \$4,900  
d. \$4,200
- \_\_\_\_\_ 12. When a factory is operating in the short run,
- a. total cost and variable cost are usually the same.  
b. it cannot alter variable costs.  
c. it cannot adjust the quantity of fixed inputs.  
d. average fixed cost rises as output increases.
- \_\_\_\_\_ 13. 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. elastic, since the price elasticity of supply is equal to 1.1.  
b. elastic, since the price elasticity of supply is equal to 0.91.  
c. inelastic, since the price elasticity of supply is equal to .91.  
d. inelastic, since the price elasticity of supply is equal to 1.1.
- \_\_\_\_\_ 14. Mark spends his weekly income on gin and cocktail olives. The price of gin has risen from \$7 to \$9 per bottle, the price of cocktail olives has fallen from \$6 to \$5 per jar, and Mark's income has stayed fixed at \$46 per week. If you illustrate gin on the vertical axis and cocktail olives on the horizontal axis, then the budget constraint
- a. is flatter after the price changes.  
b. is the same after the price changes.  
c. is steeper after the price changes.  
d. shifts in a parallel fashion to the old budget constraint after the price changes.
- \_\_\_\_\_ 15. The producer that requires a smaller quantity of inputs to produce a certain amount of a good, relative to the quantities of inputs required by other producers to produce the same amount of that good,
- a. has a low opportunity cost of producing that good, relative to the opportunity costs of other producers.  
b. has an absolute advantage in the production of that good.  
c. has a comparative advantage in the production of that good.  
d. should be the only producer of that good.
- \_\_\_\_\_ 16. The principle of comparative advantage does not provide answers to certain questions. One of those questions is
- a. Do opportunity costs play a role in people's decisions to specialize in certain activities?  
b. Is it possible for specialization and trade to benefit more than one party to a trade?  
c. What determines the price at which trade takes place?  
d. Is it possible for specialization and trade to increase total output of traded goods?
- \_\_\_\_\_ 17. When a firm is experiencing diseconomies of scale,
- a. long-run marginal cost is minimized.  
b. long-run average total cost is minimized.  
c. long-run average total cost is greater than long-run marginal cost.  
d. long-run average total cost is less than long-run marginal cost.
- \_\_\_\_\_ 18. Assume that a college student spends her income on books and pizza. The price of a pizza is \$8, and the price of a book is \$15. If she has \$100 of income, she could choose to consume
- a. 4 pizzas and 5 books.  
b. 8 pizzas and 4 books.  
c. 4 pizzas and 3 books.  
d. 9 pizzas and 3 books.

19. There are very few, if any, good substitutes for motor oil. Therefore,
- the demand for motor oil would tend to respond strongly to changes in prices of other goods.
  - the demand for motor oil would tend to be elastic.
  - the supply of motor oil would tend to respond strongly to changes in people's tastes for large cars relative to their tastes for small cars.
  - the demand for motor oil would tend to be inelastic.

20. **Figure 5-7**  
The following graph shows the linear demand curve for a particular good.



**Refer to Figure 5-7.** For prices above \$8, demand is price

- elastic, and total revenue will rise as price rises.
  - inelastic, and total revenue will rise as price rises.
  - inelastic, and total revenue will fall as price rises.
  - elastic, and total revenue will fall as price rises.
21. **Table 14-8**

The following table presents cost and revenue information for Soper's Port Vineyard.

| COSTS             |            |               | REVENUES          |       |               |                  |
|-------------------|------------|---------------|-------------------|-------|---------------|------------------|
| Quantity Produced | Total Cost | Marginal Cost | Quantity Demanded | Price | Total Revenue | Marginal Revenue |
| 0                 | \$100      | --            | 0                 | \$120 |               | --               |
| 1                 | \$150      |               | 1                 | \$120 |               |                  |
| 2                 | \$202      |               | 2                 | \$120 |               |                  |
| 3                 | \$257      |               | 3                 | \$120 |               |                  |
| 4                 | \$317      |               | 4                 | \$120 |               |                  |
| 5                 | \$385      |               | 5                 | \$120 |               |                  |
| 6                 | \$465      |               | 6                 | \$120 |               |                  |
| 7                 | \$562      |               | 7                 | \$120 |               |                  |
| 8                 | \$682      |               | 8                 | \$120 |               |                  |

**Refer to Table 14-8.** What is the marginal cost of the 1st unit?

- \$50
  - \$150
  - \$75
  - \$80
22. **Refer to Table 14-8.** What is Soper's Port Vineyard's economic profit at their profit maximizing point?
- \$278
  - \$375
  - \$243
  - \$78

- \_\_\_\_\_ 23. Suppose the price of Twinkies decreases from \$1.45 to \$1.25 and, as a result, the quantity of Twinkies demanded increases from 2,000 to 2,200. Using the midpoint method, the price elasticity of demand for Twinkies in the given price range is
- a. 1.55.
  - b. 2.00.
  - c. 0.64.
  - d. 1.00.
- \_\_\_\_\_ 24. **Refer to Table 14-8.** What is the marginal cost of the 8th unit?
- a. \$0
  - b. \$120
  - c. \$100
  - d. \$140
- \_\_\_\_\_ 25. **Refer to Table 14-8.** In order to maximize profits, how many units should Soper's Port Vineyard's produce?
- a. 8
  - b. 6
  - c. 7
  - d. 5
- \_\_\_\_\_ 26. Assume for the United States that the opportunity cost of each airplane is 100 cars. Then which of these pairs of points could be on the United States' production possibilities frontier?
- a. (200 airplanes, 10,000 cars) and (150 airplanes, 20,000 cars)
  - b. (300 airplanes, 15,000 cars) and (200 airplanes, 25,000 cars)
  - c. (200 airplanes, 5,000 cars) and (150 airplanes, 4,000 cars)
  - d. (300 airplanes, 25,000 cars) and (200 airplanes, 40,000 cars)
- \_\_\_\_\_ 27. If the price elasticity of demand for a good is 0.25, then a 20 percent decrease in price results in a
- a. 5 percent increase in the quantity demanded.
  - b. 80 percent increase in the quantity demanded.
  - c. 4 percent increase in the quantity demanded.
  - d. 0.0125 percent increase in the quantity demanded.
- \_\_\_\_\_ 28. Years ago, thousands of country music fans risked their lives by rushing to buy tickets for a Willie Nelson concert at Carnegie Hall. This behavior indicates
- a. the ticket price was above the equilibrium price.
  - b. the ticket price was at the equilibrium price.
  - c. nothing about the equilibrium price.
  - d. the ticket price was below the equilibrium price.
- \_\_\_\_\_ 29. Karen, Tara, and Chelsea each buy ice cream and paperback novels to enjoy on hot summer days. Ice cream costs \$5 per gallon, and paperback novels cost \$8 each. Karen has a budget of \$80, Tara has a budget of \$60, and Chelsea has a budget of \$40 to spend on ice cream and paperback novels. Who can afford to purchase 8 gallons of ice cream and 5 paperback novels?
- a. Karen, Tara, and Chelsea
  - b. none of the women
  - c. Tara and Chelsea but not Karen
  - d. Karen only
- \_\_\_\_\_ 30. A key determinant of the price elasticity of supply is the
- a. length of the time period.
  - b. extent to which buyers alter their quantities demanded in response to changes in their incomes.
  - c. number of close substitutes for the good in question.
  - d. definition of the market.

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## Test A

## Answer Section

## COMPLETION

1. ANS: sunk  
PTS: 1
2. ANS: competitive  
PTS: 1
3. ANS: comparative  
PTS: 1
4. ANS: positive  
PTS: 1
5. ANS: cross-price  
PTS: 1

## TRUE/FALSE

6. ANS: F                   PTS: 1                   DIF: 2                   REF: 5-1  
TOP: Price elasticity of demand                   MSC: Interpretive
7. ANS: F                   PTS: 1                   DIF: 2                   REF: 4-1  
TOP: Monopoly                   MSC: Interpretive
8. ANS: T                   PTS: 1                   DIF: 2                   REF: 14-1  
TOP: Average revenue | Marginal revenue                   MSC: Interpretive
9. ANS: T                   PTS: 1                   DIF: 1                   REF: 3-1  
TOP: Self-sufficiency                   MSC: Definitional
10. ANS: F                   PTS: 1                   DIF: 1                   REF: 13-1  
TOP: Profit                   MSC: Definitional

## MULTIPLE CHOICE

11. ANS: D                   PTS: 1                   DIF: 2                   REF: 13-3  
TOP: Marginal cost                   MSC: Analytical
12. ANS: C                   PTS: 1                   DIF: 2                   REF: 13-4  
TOP: Short run                   MSC: Interpretive
13. ANS: A                   PTS: 1                   DIF: 2                   REF: 5-2  
TOP: Midpoint method | Price elasticity of supply                   MSC: Analytical
14. ANS: A                   PTS: 1                   DIF: 2                   REF: 21-1  
TOP: Budget constraint                   MSC: Applicative
15. ANS: B                   PTS: 1                   DIF: 2                   REF: 3-2  
TOP: Absolute advantage                   MSC: Interpretive
16. ANS: C                   PTS: 1                   DIF: 2                   REF: 3-2  
TOP: Comparative advantage                   MSC: Interpretive

17. ANS: D                   PTS: 1                   DIF: 3                   REF: 13-4  
TOP: Diseconomies of scale                   MSC: Interpretive
18. ANS: C                   PTS: 1                   DIF: 2                   REF: 21-1  
TOP: Budget constraint                   MSC: Applicative
19. ANS: D                   PTS: 1                   DIF: 2                   REF: 5-1  
TOP: Price elasticity of demand                   MSC: Interpretive
20. ANS: D                   PTS: 1                   DIF: 2                   REF: 5-1  
TOP: Total revenue | Price elasticity of demand                   MSC: Applicative
21. ANS: A                   PTS: 1                   DIF: 2                   REF: 14-2  
TOP: Marginal cost                   MSC: Applicative
22. ANS: A                   PTS: 1                   DIF: 2                   REF: 14-2  
TOP: Economic profit                   MSC: Applicative
23. ANS: C                   PTS: 1                   DIF: 2                   REF: 5-1  
TOP: Midpoint method | Price elasticity of demand                   MSC: Applicative
24. ANS: B                   PTS: 1                   DIF: 2                   REF: 14-2  
TOP: Marginal cost                   MSC: Applicative
25. ANS: A                   PTS: 1                   DIF: 2                   REF: 14-2  
TOP: Economic profit                   MSC: Applicative
26. ANS: B                   PTS: 1                   DIF: 3                   REF: 3-2  
TOP: Production possibilities frontier | Opportunity cost                   MSC: Analytical
27. ANS: A                   PTS: 1                   DIF: 2                   REF: 5-1  
TOP: Price elasticity of demand                   MSC: Applicative
28. ANS: D                   PTS: 1                   DIF: 2                   REF: 4-4  
TOP: Shortage                   MSC: Applicative
29. ANS: D                   PTS: 1                   DIF: 1                   REF: 21-1  
TOP: Budget constraint                   MSC: Applicative
30. ANS: A                   PTS: 1                   DIF: 2                   REF: 5-2  
TOP: Price elasticity of supply                   MSC: Interpretive