

## Test 7 - Monopoly

Name \_\_\_\_\_

Group \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) Suppose that a firm can produce its output at either of two plants. If profits are maximized, which of the following statements is true? 1) \_\_\_\_\_
- A) The marginal cost at the first plant must equal marginal revenue.
  - B) The marginal cost at the two plants must be equal.
  - C) The marginal cost at the second plant must equal marginal revenue.
  - D) all of the above.
  - E) none of the above.
- 2) At the profit-maximizing level of output, demand is 2) \_\_\_\_\_
- A) inelastic, but not completely inelastic.
  - B) unit elastic.
  - C) elastic, but not infinitely elastic.
  - D) completely inelastic.
  - E) infinitely elastic.
- 3) The marginal cost of a monopolist is constant and is \$10. The marginal revenue curve is given as follows: 3) \_\_\_\_\_  
 $MR = 100 - 2Q$   
The profit maximizing price is
- A) \$50.                      B) \$60.                      C) \$65.                      D) \$70.                      E) \$55.
- 4) What is the value of the Lerner index under perfect competition? 4) \_\_\_\_\_
- A) infinity    B) two times the price  
C) 1    D) 0
- 5) The Lerner index measures 5) \_\_\_\_\_
- A) an industry's potential market power.
  - B) a firm's potential profitability.
  - C) a firm's potential monopoly power.
  - D) the amount of monopoly power a firm chooses to exercise when maximizing profits.

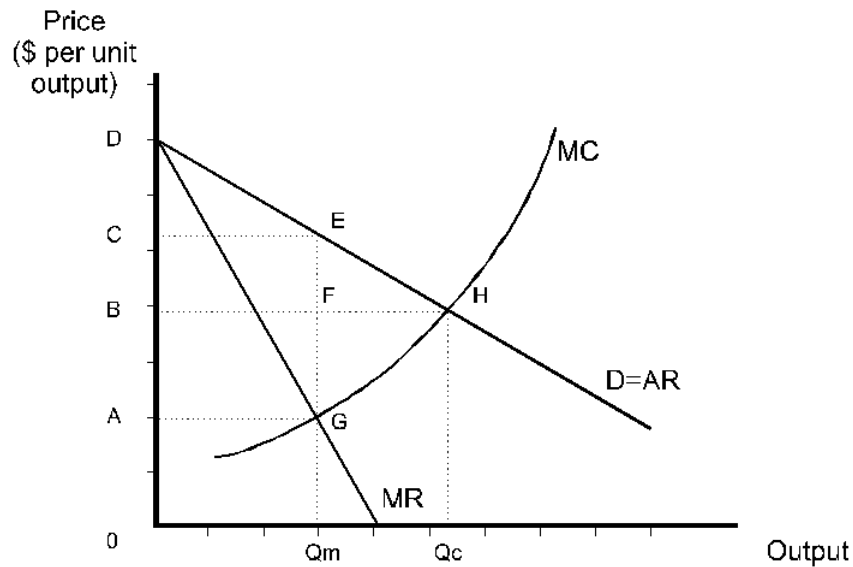


Figure 10.2

- 6) Refer to Figure 10.2. In moving from the competitive level of output and price to the monopoly level of output and price, the monopolist is able to add to producer surplus: 6) \_\_\_\_\_
- A) the area BCEF.
  - B) the area BCEH.
  - C) the area BCEH less the area GFH.
  - D) the area BCEF less the area GFH.
  - E) none of the above.
- 7) Refer to Figure 10.2. At output  $Q_m$ , and assuming that the monopoly has set her price to maximize profit, the consumer surplus is: 7) \_\_\_\_\_
- A) CDE.
  - B) ADEG.
  - C) BDEF.
  - D)  $0DEQ_m$ .
  - E) none of the above.
- 8) Refer to Figure 10.2. In moving from the competitive level of output and price to the monopoly level of output and price, the deadweight loss is the area: 8) \_\_\_\_\_
- A)  $Q_mEHQ_c$ .
  - B) GFH.
  - C) FEH.
  - D) GEH.
  - E) none of the above.

- 9) When a drug company develops a new drug it is granted a \_\_\_\_\_ making it illegal for other firms to enter the market until the \_\_\_\_\_ expires. 9) \_\_\_\_\_
- A) patent; patent  
B) franchise; franchise  
C) government license; government license  
D) copyright; copyright
- 10) If a monopolist's profits were taxed away and redistributed to its consumers, 10) \_\_\_\_\_
- A) inefficiency would remain because output would be lower than under competitive conditions.  
B) efficiency would be obtained because output would be increased to the competitive level.  
C) inefficiency would remain, but not because output would be lower than under competitive conditions.  
D) efficiency would be obtained because output would be increased and profits removed.
- 11) Which of the following is NOT associated with a high degree of monopoly power? 11) \_\_\_\_\_
- A) A small number of firms in the market.  
B) A relatively inelastic demand curve for the firm.  
C) Significant barriers to entry.  
D) Significant price competition among firms in the market.
- 12) Which of the following statements about natural monopolies is true? 12) \_\_\_\_\_
- A) Natural monopolies are in the markets for natural resources (like crude oil and coal).  
B) For natural monopolies, average cost is always increasing.  
C) Natural monopolies cannot be regulated.  
D) For natural monopolies, marginal cost is always below average cost.
- 13) If the regulatory agency sets a price where  $AR = AC$  for a natural monopoly, output will be 13) \_\_\_\_\_
- A) greater than the competitive level.  
B) greater than the monopoly profit maximizing level and less than the competitive level.  
C) equal to the competitive level.  
D) equal to the monopoly profit maximizing level.
- 14) With respect to monopolies, deadweight loss refers to the 14) \_\_\_\_\_
- A) socially unproductive amounts of money spent to obtain or acquire a monopoly.  
B) net loss in consumer and producer surplus due to a monopolist's pricing strategy/policy.  
C) lost consumer surplus from monopolistic pricing.  
D) none of the above.

- 15) Which of the following is true when the government imposes a price ceiling on a monopolist? 15) \_\_\_\_\_
- A) Marginal revenue becomes horizontal.
  - B) Marginal revenue is linear.
  - C) Marginal revenue is kinked—horizontal and then downward sloping.
  - D) Marginal revenue is kinked—downward sloping and then horizontal.

**Scenario 1:**

Barbara is a producer in a monopoly industry. Her demand curve, total revenue curve, marginal revenue curve and total cost curve are given as follows:

$$Q = 160 - 4P \quad TR = 40Q - 0.25Q^2 \quad MR = 40 - 0.5Q \quad TC = 4Q \quad MC = 4$$

- 16) Refer to Scenario 1. How much output will Barbara produce? 16) \_\_\_\_\_
- A) 0
  - B) 72
  - C) 22
  - D) 56
  - E) none of the above

**Scenario 2:**

A monopolist faces the following demand curve, marginal revenue curve, total cost curve and marginal cost curve for its product:

$$Q = 200 - 2P \\ MR = 100 - Q \\ TC = 5Q \\ MC = 5$$

- 17) Refer to Scenario 2. What is the profit maximizing level of output? 17) \_\_\_\_\_
- A) 100
  - B) 95
  - C) 0
  - D) 90
  - E) none of the above
- 18) Refer to Scenario 2. Suppose that a tax of \$5 for each unit produced is imposed by state government. What is the profit maximizing price? 18) \_\_\_\_\_
- A) \$90.00.                      B) \$10.00.                      C) \$55.00.                      D) \$52.50.

- 19) Refer to Scenario 2. Suppose that a tax of \$5 for each unit produced is imposed by state government. What is the profit maximizing level of output? 19) \_\_\_\_\_
- A) 100
  - B) 0
  - C) 90
  - D) 95
  - E) none of the above

**Scenario 3:**

The demand curve and marginal revenue curve for red herrings are given as follows:

$$Q = 250 - 5P$$

$$MR = 50 - 0.4Q$$

- 20) Refer to Scenario 3. Compared to a competitive red herring industry, the monopolistic red herring industry 20) \_\_\_\_\_
- A) produces less output at a lower price.
  - B) not enough information to relate the monopolistic red herring industry to a competitive industry.
  - C) produces more output at a higher price.
  - D) produces more output at a lower price.
  - E) produces less output at a higher price.
- 21) Refer to Scenario 3. Suppose that a tax of \$5 per unit of output is imposed on red herring producers. The price of red herring will 21) \_\_\_\_\_
- A) increase by \$5.
  - B) increase by more than \$5.
  - C) decrease.
  - D) increase by less than \$5.
  - E) not change.

**Scenario 8:**

Adriana is a monopolist producing green calculators. The average and marginal cost curves and average and marginal revenue curves for her product are given as follows:

$$AC = Q + (10,000/Q) \quad MC = 2Q \quad AR = 30 - (Q/2) \quad MR = 30 - Q$$

- 22) Refer to Scenario 8. The deadweight loss from monopoly is 22) \_\_\_\_\_
- A) 25
  - B) 5
  - C) 0
  - D) 10
  - E) none of the above

**Scenario 9:**

Maui Macadamia Inc. has a monopoly in the macadamia nut industry. The demand curve, marginal revenue and marginal cost curve for macadamia nuts are given as follows:

$$P = 360 - 4Q \quad MR = 360 - 8Q \quad MC = 4Q$$

- 23) Refer to Scenario 9. What level of output maximizes the sum of consumer surplus and producer surplus? 23) \_\_\_\_\_
- A) 45
  - B) 30
  - C) 0
  - D) 60
  - E) none of the above
- 24) Refer to Scenario 9. At the profit maximizing level of output, what is the level of producer surplus? 24) \_\_\_\_\_
- A) 0
  - B) 9,600
  - C) 1,800
  - D) 5,400
  - E) 7,200
- 25) Refer to Scenario 9. At the profit maximizing level of output, what is the deadweight loss? 25) \_\_\_\_\_
- A) 900
  - B) 1,800
  - C) 450
  - D) 0
  - E) none of the above

## Answer Key

Testname: TEST 7 - MONOPOLY

- 1) D
- 2) C
- 3) E
- 4) D
- 5) D
- 6) D
- 7) A
- 8) D
- 9) A
- 10) A
- 11) D
- 12) D
- 13) B
- 14) B
- 15) C
- 16) B
- 17) B
- 18) C
- 19) C
- 20) E
- 21) D
- 22) B
- 23) A
- 24) D
- 25) A