

Quiz #5 -- March 31, 2022

You have until the end of class to complete the quiz. Answer the questions on the answer sheet. Pick the alternative that best completes the statement or answers the question. Be sure to write and bubble in your name and PantherID on the answer sheet. You may keep the test booklet.

1. Suppose a firm's marginal cost is $MC = 80 + 2Q$ and its marginal revenue is $MR = 200 - Q$. Which of the following statements is (are) TRUE?

- I. The profit-maximizing price is \$180.
- II. If $Q = 20$, $MR > MC$, so the firm should expand output to increase profits.
- III. If $Q = 50$, $MR < MC$, so the firm should reduce output to increase profits.

A) III B) I C) I, II, and III D) II and III

2. A firm should _____ output whenever MR exceeds MC because _____.

- A) expand; revenues will rise by more than costs, increasing the firm's profit
- B) not change; selling more output will increase marginal revenue by less than marginal cost
- C) reduce; total revenues exceed total costs
- D) reduce; revenues will rise by more than costs, increasing the firm's profit

3. Which of the following characteristics relate(s) to perfect competition?

- I. An industry is dominated by several large firms.
- II. Consumers cannot distinguish one firm's product from another.
- III. It is difficult for new firms to enter the industry.

A) II and III B) II C) I and II D) III

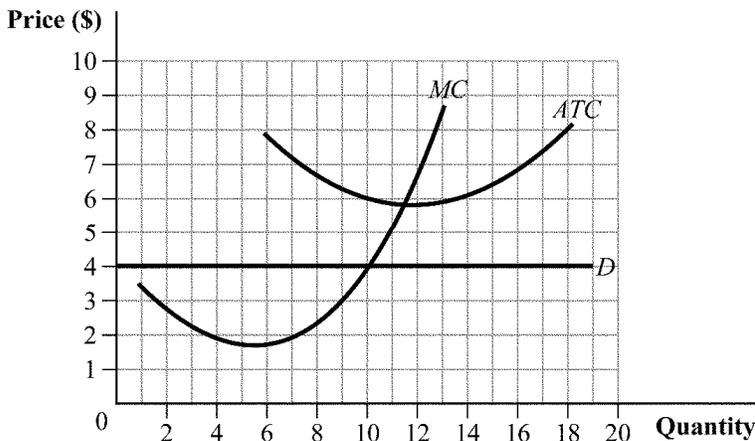
4. Suppose a firm's inverse demand curve is given by $P = 160 - 4Q$. Which of the following statements is (are) TRUE?

- I. The firm's marginal revenue curve is given by $MR = 160 - 8Q$.
- II. The firm's marginal revenue cannot be negative.
- III. The firm's marginal revenue curve is given by $MR = 40 - 0.50Q$.
- IV. When $Q = 10$, $MR = \$80$.

- A) II and III B) I and IV C) I and II D) III

Use the following to answer question 5.

Figure 8.9



5. (Figure 8.9) At the profit-maximizing output level, this firm earns profit of:

- A) \$48. B) -\$60. C) -\$20. D) \$60.

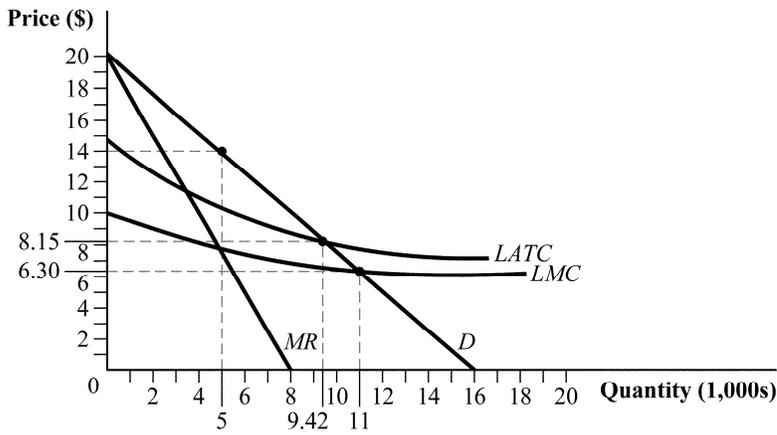
6. In Louisiana, it was a crime to sell burial caskets without a funeral director's license. This law was a source of _____ for licensed funeral directors and an example of _____.

- A) product differentiation; scale economies
- B) market power; a natural monopoly
- C) market power; a government-sanctioned barrier to entry
- D) scale economies; a natural monopoly

7. Suppose the market for sprouts is in long-run equilibrium. In the short run, what will happen if an *E. coli* outbreak reduces the demand for sprouts?
- A) Existing firms will expand output to make up for the decrease in demand.
 - B) The market price of sprouts will fall, causing each firm to produce fewer sprouts.
 - C) The marginal cost curve will shift downward for each producer, leaving prices unchanged.
 - D) The marginal cost curve will shift upward for each producer, causing prices to rise and profits to fall.

Use the following to answer question 8.

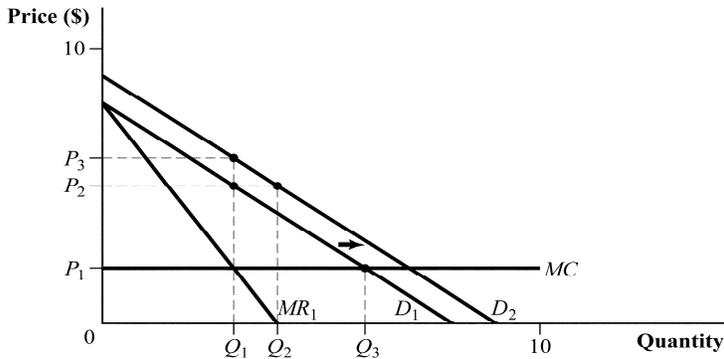
Figure 9.10



8. (Figure 9.10) If the government regulates the price of this natural monopolist to achieve a perfectly competitive output level, consumer surplus will change from _____ to _____.
- A) \$5,000; \$11,000
 - B) \$17,000; \$54,600
 - C) \$3,000; \$2,500
 - D) \$15,000; \$75,350

Use the following to answer question 9.

Figure 9.5



9. (Figure 9.5) What happens to the firm's profit-maximizing price and quantity following the increase in demand from D_1 to D_2 ?
- A) The firm will reduce output from Q_3 to Q_2 and raise price from P_2 to P_3 .
 - B) The firm will raise the price from P_2 to less than P_3 and increase output from Q_1 to less than Q_2 .
 - C) The firm will increase the price to P_3 and sell Q_1 units of output.
 - D) The firm will sell Q_2 units of output at a price of P_2 .
10. A street vendor's annual license fee was recently increased by the city. The street vendor's:
- A) total variable cost curve will rotate upward.
 - B) marginal cost curve will shift out, along with her average variable cost curve.
 - C) marginal and average variable cost curves will not be affected.
 - D) marginal cost curve will shift in, along with her average variable cost curve.

Answer Key - S22-5

1. C
2. A
3. B
4. B
5. C
6. C
7. B
8. D
9. B
10. C