## Quiz \#5 -- November 3, 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. Why is the type of product sold in an industry an important characteristic?
A) A firm that can differentiate its product from that of rivals may be able to charge a higher price for a superior product.
B) Service industries cannot differentiate their products, which makes it easy for new firms to enter the industry.
C) A firm that sells intangible goods is usually considered a monopoly.
D) Expensive products are usually sold by perfectly competitive firms.

Use the following to answer question 2.

## Figure 9.2


2. (Figure 9.2) The marginal revenue from expanding output from $Q_{1}$ to $Q_{2}$ is represented by area:
A) $A+D-B$.
B) $B+C$.
C) $B-D$.
D) $C$.

Use the following to answer question 3.

## Figure 9.9


3. (Figure 9.9) Which of the following statements is (are) TRUE?
I. Consumer surplus under perfect competition is given by area $A+B+C$.
II. Producer surplus under monopoly is given by area $B+D$.
III. The deadweight loss from market power is area $C$.
A) I and II
B) I
C) III
D) I, II, and III
4. 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) The market price of sprouts will fall, causing each firm to produce fewer sprouts.
B) The marginal cost curve will shift downward for each producer, leaving prices unchanged.
C) Existing firms will expand output to make up for the decrease in demand.
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 5.
Figure 9.4

5. (Figure 9.4) Which of the following statements is (are) TRUE?
I. If the firm is producing 5 units of output, it should expand output to increase profits because $P>M C$.
II. At a price of $\$ 16$, the firm's profits would rise if it raised its price.
III. The profit-maximizing quantity is 600 units.
IV. The profit-maximizing price is $\$ 13$.
A) I and III
B) III
C) IV
D) II
6. A firm should $\qquad$ output whenever $M R$ exceeds $M C$ because $\qquad$ .
A) expand; revenues will rise by more than costs, increasing the firm's profit
B) reduce; total revenues exceed total costs
C) reduce; revenues will rise by more than costs, increasing the firm's profit
D) not change; selling more output will increase marginal revenue by less than marginal cost
7. Many years ago the Aluminum Company of America owned almost all sources of the ore (bauxite) needed to produce aluminum. This is an example of market power arising from:
A) switching costs.
C) control of a key input.
B) network effects.
D) extreme economies of scale.

Use the following to answer question 8 .
Figure 8.16

8. (Figure 8.16) Which panel shows a representative firm (operating in a perfectly competitive industry) in a long-run equilibrium?
A) panel a
B) panel b
C) panel c
D) paneld
9. The perfectly competitive firm's short-run supply curve is:
A) its average total cost curve, which lies above marginal revenue.
B) its average variable cost curve, which lies above marginal revenue.
C) the portion of its marginal cost curve that lies above average total cost.
D) the portion of its marginal cost curve that lies above average variable cost.

Use the following to answer question 10.

## Figure 8.5


10. (Figure 8.5) The graph shows a firm's marginal cost curve. This firm operates in a perfectly competitive industry with market demand and supply curves given by $Q^{d}=100-8 P$ and $Q^{S}=-20+2 P$, where $Q$ is measured in millions of units. Based on the figure, how many units of output will the firm produce at the equilibrium price?
A) 1,200
B) 1,100
C) 400
D) 800

## Answer Key - F22-5

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