Multiple Choice
Identify the letter of the choice that best completes the statement or answers the question.

1. Profit is
   a. all of the money a firm receives during one year
   b. the money paid out to a corporation's stockholders each year
   c. a firm's revenues minus its costs
   d. equal to a firm's payroll for managerial employees

2. In the long run, a firm can
   a. change quantities of fixed inputs but not variable inputs
   b. change quantities of variable inputs but not fixed inputs
   c. change quantities of all inputs
   d. change quantities of all inputs but one

3. As a firm's output rises, its total fixed cost will
   a. rise
   b. fall
   c. remain constant
   d. rise, then fall

4. | Quantity of Labor | Total Product |
<table>
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<th></th>
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<tbody>
<tr>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>300</td>
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<tr>
<td>3</td>
<td>600</td>
</tr>
<tr>
<td>4</td>
<td>800</td>
</tr>
<tr>
<td>5</td>
<td>900</td>
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   The above table illustrates the relationship between labor input and total product at a donut bakery (assume that the capital input is constant). At what level of labor input does diminishing returns set in?
   a. 1
   b. 2
   c. 3
   d. 4

5. | Output | Total Cost |
    |--------|-----------|
    | 0      | $100      |
    | 10     | $150      |
    | 25     | $200      |
    | 45     | $250      |
    | 60     | $300      |

   The above table shows the relationship between daily output and daily total cost for Rachel's Wig Factory. At 10 units of output, what is the average variable cost?
   a. $5
   b. $15
   c. $150
   d. $50
6. A firm may become a natural monopoly by
   a. buying its competitors
   b. enjoying extremely large economies of scale relative to market demand
   c. gaining a patent on its product
   d. using illegal tactics to drive competitors out of the market

7. Which of the following is true?
   a. Economic profit is always higher than accounting profit.
   b. Economic profit is always equal to accounting profit.
   c. Economic profit is always equal to or lower than accounting profit.
   d. Economic profit may be higher or lower than accounting profit.

8. The demand curve facing a firm shows
   a. the maximum price it may charge for a given output
   b. the maximum output it may sell at a given price
   c. the collection of price and output combinations from which the firm may choose
   d. all of the above

9. | Price | Quantity Demanded |
<table>
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<tbody>
<tr>
<td>$10</td>
<td>100</td>
</tr>
<tr>
<td>$9</td>
<td>110</td>
</tr>
<tr>
<td>$8</td>
<td>120</td>
</tr>
<tr>
<td>$7</td>
<td>130</td>
</tr>
<tr>
<td>$6</td>
<td>140</td>
</tr>
</tbody>
</table>

   The above table shows the relationship between price and quantity demanded for Ned's Pizzeria. From this info, when Ned's output increases from 110 to 120 pizzas his marginal revenue will be
   a. $960
   b. -$3
   c. $80
   d. $3

10. After college, Diane turns down an offer for a job that would pay $50,000 per year in order to open her own marketing firm. Her annual office rental is $12,000, secretarial support is $30,000, office supplies and utilities are $5,000, and advertising and other costs are $2,000. Diane's total costs are
   a. $49,000
   b. $50,000
   c. $99,000
   d. $87,000

11. The Lake City Movie Theater has marginal costs of zero, since it pays the same film rental fee and the same wage to its projectionist regardless of the number of customers watching the film. Hence, to maximize profit, the theater should sell every ticket for which
   a. it can receive a price higher than zero
   b. it can receive positive marginal revenue
   c. it can receive at least the same price charged by other theaters
   d. none of the above

12. In the short run, a firm should shut down if
   a. P>AFC
   b. P>AVC
   c. P<AVC
   d. it is earning economic losses
13. A firm in a perfectly competitive market faces a demand curve that is
   a. perfectly elastic
   b. relatively elastic
   c. perfectly inelastic
   d. relatively inelastic

14. In a perfectly competitive market, the number of sellers must be large enough that
   a. none of them ever earns a positive economic profit
   b. none of them can significantly alter the price of the product
   c. they each end up selling a slightly different product
   d. it is easy for a particular firm to leave the market

15. The perfectly competitive firm's goal is to
   a. maximize the price of its output
   b. minimize its total cost
   c. maximize its profits
   d. eliminate its competition

16. If the perfectly competitive firm pictured in the above graph is maximizing profit, it is currently earning profit of
   a. $0
   b. $125
   c. $5
   d. $10
17. The minimum price at which this firm will supply output is
a. $5
b. $6
c. $10
d. $14

18. In the long run, a perfectly competitive firm can earn _______ economic profit.
   a. positive
   b. negative
   c. zero
   d. positive or negative

19. A market that only allows only one firm to operate at lowest average cost is called a(n)
   a. natural monopoly
   b. scale industry
   c. increasing returns industry
   d. large scale industry

20. The concept of network externalities is most relevant to purchasers of
   a. computer software
   b. automobiles
   c. television sets
   d. radios
21. At its profit-maximizing output level, the monopolist pictured above earns economic profit of
a. $10
b. $500
c. $750
d. $1250

22. A monopolist that is suffering an economic loss will, in the long run,
a. exit the industry
b. shift its demand curve rightward
c. stay in the industry, since eventually the price will have to rise
d. encourage competitors to enter the industry in order to enliven it
23. The monopolist pictured above is currently operating in
   a. the short run  
   b. the long run  
   c. the short run or the long run  
   d. the very long run

24. Costly actions that a firm undertakes to gain monopoly status are called
   a. monopolization  
   b. rent-seeking activity  
   c. monopoly-profit seeking  
   d. collusion

25. A monopolistic competitor faces a negatively-sloped demand schedule because
   a. it behaves strategically  
   b. it sells a differentiated product  
   c. it has erected entry barriers  
   d. it conspires to reduce competition

26. Which of the following tactics would a monopolistic competitor use to make its demand schedule less elastic?
   a. a longer guarantee  
   b. special product features  
   c. more advertising  
   d. Each of the above would make the monopolistic competitor's demand less elastic.
The above graph depicts a pizzeria operating in a monopolistically competitive market. In the long run, what will be happening to the number of firms in this market?

a. It will increase.
b. It will decrease.
c. It will remain the same.
d. It is impossible to predict from the given information.

Which of the following markets most closely matches the description of oligopoly?

a. automobile production
b. restaurants
c. electric utilities
d. farming

The level of output at which a firm minimizes LRATC is called

a. diminishing returns
b. the efficiency point
c. minimum efficient scale
d. economic output

A group of firms that sets a common price to maximize total profits is a(n)

a. duopoly
b. group monopoly
c. cartel.
d. Nash cartel
Problem

31. Suppose that a perfectly competitive firm has the following total variable costs (TVC):

<table>
<thead>
<tr>
<th>Quantity</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>TVC:</td>
<td>$0</td>
<td>$7</td>
<td>$13</td>
<td>$18</td>
<td>$22</td>
<td>$27</td>
<td>$34</td>
<td>$42</td>
</tr>
</tbody>
</table>

It also has a total fixed cost (TFC) of $2. If the market price is $6:

a. Find the firm’s profit maximizing quantity using the marginal revenue and marginal cost approach.

b. Check your results by resolving the problem using the total revenue and total cost approach. Is the firm making a profit, suffering a loss, or breaking even?