Multiple Choice Questions

1. Which of the following is not a basic characteristic of pure competition?
   A. considerable nonprice competition
   B. no barriers to the entry or exodus of firms
   C. a standardized or homogeneous product
   D. a large number of buyers and sellers

2. Assume for a competitive firm that \( MC = AVC \) at $12, \( MC = ATC \) at $20, and \( MC = MR \) at $16. This firm will:
   A. realize a profit of $4 per unit of output.
   B. maximize its profit by producing in the short run.
   C. minimize its losses by producing in the short run.
   D. shut down in the short run.

3. Refer to the above diagram, which pertains to a purely competitive firm. Curve \( C \) represents:
   A. total revenue and marginal revenue.
   B. marginal revenue only.
   C. total revenue and average revenue.
   D. average revenue and marginal revenue.

4. If a firm in a purely competitive industry is confronted with an equilibrium price of $5, its marginal revenue:
   A. may be either greater or less than $5.
   B. will also be $5.
   C. will be less than $5.
   D. will be greater than $5.
Answer the next question(s) on the basis of the following data confronting a firm:

<table>
<thead>
<tr>
<th>Output</th>
<th>Marginal revenue</th>
<th>Marginal cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1</td>
<td>$16</td>
<td>$10</td>
</tr>
<tr>
<td>2</td>
<td>$16</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>$16</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>$16</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>$16</td>
<td>21</td>
</tr>
</tbody>
</table>

5. Refer to the above data. At the profit-maximizing output the firm's total cost is:
A. $48.
B. $32.
C. $80.
D. $64.

Answer the next question(s) on the basis of the following cost data for a firm that is selling in a purely competitive market.

<table>
<thead>
<tr>
<th>Total output</th>
<th>Average fixed cost</th>
<th>Average variable cost</th>
<th>Average total cost</th>
<th>Marginal cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$150.00</td>
<td>$25.00</td>
<td>$175.00</td>
<td>$25.00</td>
</tr>
<tr>
<td>2</td>
<td>75.00</td>
<td>23.00</td>
<td>98.00</td>
<td>21.00</td>
</tr>
<tr>
<td>3</td>
<td>50.00</td>
<td>20.00</td>
<td>70.00</td>
<td>14.00</td>
</tr>
<tr>
<td>4</td>
<td>37.50</td>
<td>21.00</td>
<td>58.50</td>
<td>24.00</td>
</tr>
<tr>
<td>5</td>
<td>30.00</td>
<td>23.00</td>
<td>53.00</td>
<td>31.00</td>
</tr>
<tr>
<td>6</td>
<td>25.00</td>
<td>25.00</td>
<td>50.00</td>
<td>35.00</td>
</tr>
<tr>
<td>7</td>
<td>21.43</td>
<td>28.00</td>
<td>49.43</td>
<td>46.01</td>
</tr>
<tr>
<td>8</td>
<td>18.75</td>
<td>33.00</td>
<td>51.76</td>
<td>68.07</td>
</tr>
<tr>
<td>9</td>
<td>16.67</td>
<td>39.00</td>
<td>55.67</td>
<td>86.95</td>
</tr>
<tr>
<td>10</td>
<td>15.00</td>
<td>48.00</td>
<td>63.00</td>
<td>128.97</td>
</tr>
</tbody>
</table>

6. Refer to the above data. The marginal cost column reflects:
A. the law of diminishing returns.
B. the law of diminishing marginal utility.
C. diseconomies of scale.
D. economies of scale.

In answering the next question(s), assume a graph in which dollars are measured on the vertical axis and output on the horizontal axis.
7. Refer to the above information. For a purely competitive firm, marginal revenue:
A. graphs as a straight, upsloping line.
B. is a straight line, parallel to the vertical axis.
C. is a straight line, parallel to the horizontal axis.
D. graphs as a straight, downsloping line.

8. Refer to the above diagram. If this competitive firm produces output Q, it will:
A. suffer an economic loss.
B. earn a normal profit.
C. earn an economic profit.
D. achieve productive efficiency, but not allocative efficiency.
9. Refer to the above short-run data. Total fixed cost for this firm is:
A. about $67.
B. $300.
C. $200.
D. $100.

Answer the next question(s) on the basis of the following cost data for a purely competitive seller:

<table>
<thead>
<tr>
<th>Total Product</th>
<th>Total Fixed Cost</th>
<th>Total Variable Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$50</td>
<td>$0</td>
<td>$50</td>
</tr>
<tr>
<td>1</td>
<td>50</td>
<td>70</td>
<td>120</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
<td>120</td>
<td>170</td>
</tr>
<tr>
<td>3</td>
<td>50</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>4</td>
<td>50</td>
<td>220</td>
<td>270</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td>6</td>
<td>50</td>
<td>390</td>
<td>440</td>
</tr>
</tbody>
</table>

10. Refer to the above data. The marginal cost of the fifth unit of output is:
A. $80.
B. $90.
C. $50.
D. $20.

11. If a purely competitive firm is producing at the MR = MC output level and earning an economic profit, then:
A. the selling price for this firm is above the market equilibrium price.
B. new firms will enter this market.
C. some existing firms in this market will leave.
D. there must be price fixing by the industry's firms.

12. The short-run shut-down point for a purely competitive firm occurs:
A. at any point where price is less than the minimum AVC.
B. between the two break-even points.
C. at any point where total revenue is less than total cost.
D. at any point where the firm is not making an economic profit.

13. Refer to the above diagram. At output level Q:
A. neither productive nor allocative efficiency are achieved.
B. both productive and allocative efficiency are achieved.
C. allocative efficiency is achieved, but productive efficiency is not.
D. productive efficiency is achieved, but allocative efficiency is not.
14. In the short run a purely competitive seller will shut down if:
A. it cannot produce at an economic profit.
B. price is less than average variable cost at all outputs.
C. price is less than average fixed cost at all outputs.
D. there is no point at which marginal revenue and marginal cost are equal.

15. The loss of a purely competitive firm which shuts down in the short run:
A. is equal to its total variable costs.
B. is zero.
C. is equal to its total fixed costs.
D. cannot be determined.

16. Which of the following statements is correct?
A. The demand curve for a purely competitive firm is perfectly elastic, but the demand curve for a purely competitive industry is downsloping.
B. The demand curve for a purely competitive firm is downsloping, but the demand curve for a purely competitive industry is perfectly elastic.
C. The demand curves are downsloping for both a purely competitive firm and a purely competitive industry.
D. The demand curves are perfectly elastic for both a purely competitive firm and a purely competitive industry.

17. Refer to the above diagram. The firm will shut down at any price less than:
A. $P_1$.
B. $P_2$.
C. $P_3$.
D. $P_4$. 
18. A purely competitive firm:
A. must earn a normal profit in the short run.
B. cannot earn economic profit in the long run.
C. may realize either economic profit or losses in the long run.
D. cannot earn economic profit in the short run.

19. A purely competitive seller should produce (rather than shut down) in the short run:
A. only if total revenue exceeds total cost.
B. only if total cost exceeds total revenue.
C. if total revenue exceeds total cost or if total cost exceeds total revenue by some amount less than total fixed cost.
D. if total cost exceeds total revenue by some amount greater than total fixed cost.

20. The above diagram portrays:
A. a competitive firm that should shut down in the short run.
B. the equilibrium position of a competitive firm in the long run.
C. a competitive firm that is realizing an economic profit.
D. the loss-minimizing position of a competitive firm in the short run.

21. Refer to the above data. At 6 units of output, total fixed cost is ____ and total cost is ____:
A. $25; $50.
B. $50; $300.
C. $100, $200.
D. $150; $300.

22. The MR = MC rule applies:
A. in the short run, but not in the long run.
B. in both the short run and the long run.
C. in the long run, but not in the short run.
D. only to a purely competitive firm.
23. Refer to the above diagram for a purely competitive producer. If product price is $P_3$:
A. the firm will maximize profit at point $d$.
B. the firm will earn an economic profit.
C. economic profits will be zero.
D. new firms will enter this industry.

24. If a purely competitive firm is producing at some level less than the profit-maximizing output, then:
A. price is necessarily greater than average total cost.
B. fixed costs are large relative to variable costs.
C. price exceeds marginal revenue.
D. marginal revenue exceeds marginal cost.
25. Refer to the above diagram. At the profit-maximizing output, the firm will realize:
A. a loss equal to $BCFG$.
B. a loss equal to $ACFH$.
C. an economic profit of $ACFH$.
D. an economic profit of $ABGH$.

26. Refer to the above data. Given the $75 product price, at its optimal output the firm will:
A. realize a $25 economic profit.
B. realize a $30 economic profit.
C. incur a $25 loss.
D. realize a $30 loss.

27. Refer to the above data. At 5 units of output average fixed cost, average variable cost, and average total cost are:
A. $10, $60, and $70 respectively.
B. $50, $40, and $90 respectively.
C. $10, $70, and $80 respectively.
D. $5, $25, and $30 respectively.

28. Which of the following is characteristic of a purely competitive seller's demand curve?
A. Price and marginal revenue are equal at all levels of output.
B. Average revenue is less than price.
C. Its elasticity coefficient is 1 at all levels of output.
D. It is the same as the market demand curve.

The following table applies to a purely competitive industry composed of 100 identical firms.

<table>
<thead>
<tr>
<th>Quantity Demanded</th>
<th>Price</th>
<th>Quantity Supplied</th>
</tr>
</thead>
<tbody>
<tr>
<td>400,000</td>
<td>$5</td>
<td>800,000</td>
</tr>
<tr>
<td>500,000</td>
<td>4</td>
<td>700,000</td>
</tr>
<tr>
<td>600,000</td>
<td>3</td>
<td>600,000</td>
</tr>
<tr>
<td>700,000</td>
<td>2</td>
<td>500,000</td>
</tr>
<tr>
<td>800,000</td>
<td>1</td>
<td>400,000</td>
</tr>
</tbody>
</table>

29. Refer to the above table. If each of the 100 firms in the industry is maximizing its profit, each must have a marginal cost of:
A. $5.
B. $4.
C. $3.
D. $2.
30. The above data are for:
A. the long run.
B. the short run.
C. both the short run and the long run.
D. the intermediate market period only.

**Pre-Test Chapter 21 ed17 Key**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>C</td>
<td>17. A</td>
<td>27. A</td>
</tr>
</tbody>
</table>