1. Inputs that can be increased or decreased in the short run are called
   a) Fixed inputs
   b) Variable inputs
   c) Economic inputs
   d) Accounting inputs
   e) Normal inputs

   Exhibit 0102
<table>
<thead>
<tr>
<th>Labor (Pairs of shoes)</th>
<th>Total Product (Pairs of shoes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>75</td>
</tr>
<tr>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>5</td>
<td>75</td>
</tr>
</tbody>
</table>

2. Given the information in Exhibit 0102, what is the marginal physical product of the third unit of labor?
   a) 45 pairs of shoes
   b) 25 pairs of shoes
   c) 15 pairs of shoes
   d) $45
   e) $25

3. Given the information in Exhibit 0102, when do diminishing marginal returns set in?
   a) Before the first unit of labor
   b) Between the first and second units of labor
   c) Between the second and third units of labor
   d) Between the third and fourth units of labor
   e) Between the fourth and fifth units of labor

4. Given the information in Exhibit 0102, what is the average physical product of the fourth unit of labor?
   a) 40 pairs of shoes
   b) 20 pairs of shoes
   c) 80 pairs of shoes
   d) $20
   e) $80

5. With increasing marginal returns, total product is
   a) increasing at a constant rate
   b) increasing at an increasing rate
   c) increasing at a decreasing rate
   d) decreasing at an increasing rate
   e) decreasing at a decreasing rate

6. When diminishing marginal returns set in, the slope of the total product curve is
   a) Positive and increasing
   b) Positive and decreasing
   c) Negative and increasing
   d) Negative and decreasing
   e) Constant
7. Which of the best explains why marginal cost eventually increases as output increases?
   a) Economies of scale occur
   b) Average cost increases
   c) Total cost increases
   d) Marginal physical product decreases
   e) Fixed cost is constant

8. As output rises, marginal physical product eventually diminishes and
   a) marginal cost increases
   b) average cost falls
   c) total cost falls
   d) fixed cost is increasing
   d) average physical product is negative

9. Which of the following is true of the MC curve?
   a) It intersects the ATC curve at its minimum, but it does not intersect the AVC curve at its minimum
   b) It intersects the AVC curve at its minimum, but it does not intersect the ATC curve at its minimum
   c) It intersects both the ATC and the AVC curves at their minimums
   d) It intersects both the ATC and the AFC curves at their minimum
   e) It intersects both the AVC and the AFC curves at their minimums

10. The marginal cost curve (. MC) intersects the average variable cost curve (AVC)
    a) Only when the AVC is rising
    b) at the AVC's maximum point
    c) at the AVC's minimum point
    d) only when the AVC is sloping downward
    e) then the AVC intersects the fixed cost curve

11. Economies of scale occur when
    a) long-run average cost falls as new firms enter the industry
    b) short-run average cost falls as new firms enter the industry
    c) long-run average cost falls as one firm expands plant size
    d) short-run average cost falls as one firm expands plant size
    e) long-run average cost rises as one firm expands plant size

12. Which of the following could not occur in a perfectly competitive market?
    a) Firms experience constant returns to scale
    b) Firms face barriers to entry
    c) Economic profit is zero
    d) Each firm chooses the quantity it wants to sell
    e) Each firm knows the prices of outputs and inputs

13. The price charged by a perfectly competitive firm is determined by
    a) each individual firm
    b) a group of firms acting together as a cartel
    c) market demand and market supply
    d) the firm's total costs alone
    e) the firm's average variable cost

14. Firms in perfect competition are price takers because
    a) each firm is too small compared to the market to be able to affect price
    b) one firm determines price and all other firms accept this price
    c) firms take the price that government determines
    d) firms must accept any price consumers offer them
    e) firms earn high profits by “taking” consumers
15. Firms in perfect competition have no control over
   a) how much to produce
   b) where to operate on their average total cost curves
   c) what price to charge
   d) how many inputs to use
   e) all of the above

16. A perfectly competitive firm's demand curve is
   a) almost vertical at the market quantity
   b) perfectly inelastic
   c) perfectly elastic
   d) horizontal at the price the firm wishes to charge
   e) downward sloping

17. In perfect competition, if one raises its price,
   a) others will follow
   b) that firm will increase its revenues
   c) that firm will lose revenues because other firms will not follow
   d) all consumers will be adversely affected
   e) the market demand curve will shift

18. Marginal revenue is defined as
   a) total revenue divided by quantity
   b) total revenue minus total cost
   c) the change in total revenue divided by the change in quantity
   d) the change in total revenue divided by quantity
   e) the change in total revenue

19. The slope of the total revenue curve for a perfectly competitive firm equals
   a) marginal revenue, which is less than price
   b) marginal revenue, which is greater than price
   c) marginal revenue, which is equal to price
   d) average revenue, which is less than price
   e) average revenue, which is greater than price

20. If price is less than its minimum average variable cost, a firm that continues to produce in the short run
   a) cannot cover any of its variable costs
   b) incurs a loss greater than its fixed costs
   c) can cover all of its variable costs and some of its fixed costs
   d) can cover both its fixed costs and its variable costs