1. Price controls such as price ceilings and price floors:
   a. are desirable because they make markets more efficient as well as equitable.
   b. cause surpluses and shortages to persist since price cannot adjust to the market equilibrium price.
   c. are imposed because they can make the poor in the economy better off without causing any negative effects.
   d. can be enacted to restore a market to equilibrium.

2. Ceteris paribus, an effective (binding) price floor for a good leads to:
   a. black markets for the good.
   b. equilibrium in the market for the good.
   c. shortages of the good.
   d. surpluses of the good.

3. The efficient level of an activity is at the point where:
   a. marginal benefit is maximized.
   b. marginal cost is minimized.
   c. marginal benefit exceeds marginal cost by the greatest amount.
   d. marginal benefit is equal to marginal cost.

4. Marginal cost is:
   a. the cost of producing all units of a good or service.
   b. the cost of producing one more unit of a good or service.
   c. measured by the demand curve.
   d. measured by the marginal benefit curve.

5. A buyer gains consumer surplus when the market price:
   a. exceeds the minimum price the seller is willing to accept.
   b. is less than the minimum price the seller is willing to accept.
   c. exceeds the maximum price the buyer is willing to pay.
   d. is less than the maximum price the buyer is willing to pay.

6. All of the following are sources of inefficiency except:
   a. public goods.
   b. the invisible hand.
   c. external costs.
   d. price ceilings.
Use Figure 1 below to answer the next two questions.

7. Refer to Figure 1. The marginal benefit of the 200\textsuperscript{th} unit is:
   a. $0.
   b. $10.
   c. $20.
   d. $30.

8. Refer to Figure 1. Consumer surplus when price is $20 is:
   a. $200.
   b. $500.
   c. $1,000.
   d. $2,000.

9. Which of the following is the most correct statement about tax burdens?
   a. A tax burden falls most heavily on the side of the market that is closer to unit elastic.
   b. A tax burden falls most heavily on the side of the market that is elastic.
   c. A tax burden is distributed independently of relative elasticities of supply and demand.
   d. A tax burden falls most heavily on the side of the market that is inelastic.

10. An increase in the supply of lettuce, ceteris paribus, leads to a ____ in the equilibrium price of lettuce, and consumer surplus to the lettuce buyers will _____.
    a. increase; increase
    b. increase; decrease
    c. decrease; decrease
    d. decrease; increase
Use Figure 2 below to answer the next two questions.

Figure 2

11. Refer to Figure 2. Under free market conditions, producer surplus will be:
a. $15. b. $25. c. $50. d. $100.

12. Refer to Figure 2. An effective (binding) price ceiling could be set at:
a. $10, which would create a shortage of 10 units.
b. $10, which would create a shortage of 5 units.
c. $20, which would create a surplus of 10 units.
d. $20, which would create a surplus of 5 units.

13. Goods that generate positive externalities tend to be __________, while goods that generate negative externalities tend to be __________ by private markets.
a. underproduced; overproduced
b. overproduced; efficiently produced
c. efficiently produced; underproduced
d. overproduced; underproduced

14. When dealing with externalities, the market equilibrium can be moved closer to the social optimum by:
a. taxing activities that have negative externalities and subsidizing activities that have positive externalities.
b. taxing activities that have both positive and negative externalities.
c. subsidizing activities that have both positive and negative externalities.
d. subsidizing activities that have negative externalities and taxing activities that have positive externalities.

15. The best example of a public good is:
a. congested highways.
b. toll roads.
c. basic research.
d. a piece of sculpture displayed in a museum that charges admission.
16. The Coase theorem suggests that:
   a. the government should be actively involved in solving the problem of externalities.
   b. private parties may be able to solve the problem of externalities on their own.
   c. high transaction or bargaining costs are necessary in solving the problem of externalities.
   d. demand creates its own supply.

Use Figure 3 below to answer the next four questions.

17. Refer to Figure 3. Consumer surplus after the tax is:
   a. $162.  b. $100.  c. $81.  d. $64.

18. Refer to Figure 3. The portion of the price that sellers keep after the tax is:
   a. $2.  b. $9.  c. $10.  d. $11.

19. Refer to Figure 3. The total tax revenue collected by government due to the $2 per unit tax is:
   a. $2.  b. $18.  c. $36.  d. $40.

20. Refer to Figure 3. The deadweight loss due to the $2 per unit tax is:
   a. $2.  b. $4.  c. $18.  d. $36.

21. The 'free-rider problem' refers to the situation where:
   a. government must subsidize public transportation to ensure that those who cannot afford transportation can ride for free.
   b. some people receive welfare benefits to which they are not entitled.
   c. the benefits associated with public goods cannot be denied to consumers who are unwilling to pay for them so the good is underproduced.
   d. the benefits associated with private goods cannot be denied to consumers who are unwilling to pay for them.
22. Goods that are rival and non-excludable are called:
   a. externalities.
   b. private goods.
   c. public goods.
   d. common resources.

23. Why do elephants face the threat of extinction while cows do not?
   a. There is a high demand for products that come only from cows.
   b. Cows are owned by ranchers, while most elephants are owned by no one.
   c. There are still lots of cows that roam free, while most elephants are in zoos.
   d. Cows are a valuable source of income for many people and elephants have no market value.

24. Stella left her $30,000 per year job as an office manager to paint houses and be her own boss. In her first year, Stella received $50,000 in payments from customers and paid $15,000 for paint and supplies. Stella’s economic profit in her first year is:
   a. $5,000.
   b. $15,000.
   c. $20,000.
   d. $35,000.

Use the table below to answer the next three questions.

<table>
<thead>
<tr>
<th>(L) Number of Workers</th>
<th>(Q = TP) Output per Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
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<tr>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>5</td>
<td>23</td>
</tr>
</tbody>
</table>

25. When 2 workers are hired, average product is ______.
   a. 4        b. 5        c. 7        d. 8

26. If the marginal product of the 3rd worker is 7, then the total number of units of output produced when 3 workers are hired is ______.
   a. 7         b. 15        c. 21        d. impossible to determine from the information given.

27. Diminishing marginal returns sets in with the addition of the ______ worker.
   a. 3rd        b. 4th       c. 5th       d. 6th
28. Which of the following represents a **long-run** decision for the firm?
   a. Rehiring workers who were previously laid off
   b. Determining what price to charge for a given level of output
   c. Deciding how much output to supply to the market at the current market price
   d. Building another wing on the plant in order to add a new assembly line

29. If long-run average cost increases as output increases, then:
   a. firms enjoy economies of scale.
   b. firms experience diseconomies of scale.
   c. doubling inputs will more than double output.
   d. constant returns to scale are present.

**Use the table below to answer the next three questions.**

<table>
<thead>
<tr>
<th>Output (Q = TP)</th>
<th>TVC</th>
<th>TC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$0</td>
<td>$100</td>
</tr>
<tr>
<td>1</td>
<td>40</td>
<td>140</td>
</tr>
<tr>
<td>2</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>95</td>
<td></td>
</tr>
</tbody>
</table>

30. This firm has total fixed costs of ___.
   a. $0  b. $100  c. $40  d. $140

31. The marginal cost of the 3rd unit of output is ___.
   a. $95  b. $30  c. $31.67  d. $25

32. Average total cost when 2 units of output are produced is ___.
   a. $100  b. $82.50  c. $32.50  d. $25

33. If a firm is a price taker, then it:
   a. sells its product at the price set by the government.
   b. sells its product at the price dictated by the largest firm in the industry.
   c. can sell all it can produce at whatever price it chooses.
   d. sells its product at the price determined by the market.

34. In perfect competition, the demand curve is _____ for the individual firm, while the demand curve is _____ for the market.
   a. horizontal; downward-sloping
   b. vertical; horizontal
   c. downward-sloping; downward-sloping
   d. downward-sloping; horizontal
35. The profit-maximizing "rule" is for firms to produce the amount of output where:
   a. ATC = AVC.
   b. MR = MC.
   c. MR = ATC.
   d. MR = P.

Refer to graph below to answer the next three questions.

36. This profit-maximizing/loss-minimizing firm will produce _______ units of output and have total revenue of _______
   a. 60; $840
   b. 60; $1200
   c. 40; $560
   d. 40; $240

37. This firm's total fixed cost (TFC) is:
   a. $608.
   b. $840.
   c. $240.
   d. $360.

38. This firm is:
   a. incurring a short-run economic loss of $360.
   b. earning a short-run economic profit of $360.
   c. incurring a short-run economic loss of $600.
   d. earning a short-run economic profit of $600.
39. Which of the following is **not** a characteristic of firms in a perfectly competitive industry?  
   a. Identical products  
   b. Normal profit in the long run  
   c. Many sellers  
   d. Numerous barriers to entry  

40. A firm should **definitely** shut down production to minimize its losses in the short run if:  
   a. \(P > ATC\).  
   b. \(P > MC\).  
   c. \(P < ATC\).  
   d. \(P < AVC\).
Answer Key:

1. B
2. D
3. D
4. B
5. D
6. B
7. B
8. B
9. D
10. D
11. C
12. A
13. A
14. A
15. C
16. B
17. C
18. B
19. C
20. A
21. C
22. D
23. B
24. A
25. A
26. B
27. B
28. D
29. B
30. B
31. B
32. B
33. D
34. A
35. B
36. B
37. C
38. B
39. D
40. D