1. When the market does not lead to an optimal allocation of resources, there must be
   a) Too much regulation.
   b) A market failure.
   c) Proper antitrust laws in place.
   d) A competitive market structure.

2. A natural monopoly is a desirable market structure because
   a) It allows the producer to earn greater profit than is possible under competition.
   b) It allows the producer to deliver a higher-quality product to the market.
   c) It allows the producer to deliver products to the market at the lowest possible cost.
   d) The jobs it creates pay higher wages than those in a competitive industry.

3. An unregulated natural monopoly can lead to all of the following except
   a) A suboptimal mix of output.
   b) Less output than society wants.
   c) Unfair monopoly profits.
   d) Low prices for consumers

4. If a natural monopoly is forced to set a price consistent with price efficiency, it will
   a) Set price above marginal cost.
   b) Earn a profit on every unit of output produced.
   c) Set price equal to the ATC of production.
   d) Incur a loss on every unit of output produced.

5. For a natural monopoly, price efficiency means
   a) Price is set above marginal cost.
   b) Price is set equal to average total cost.
   c) Economics profits are earned.
   d) Price is set equal to marginal cost.

6. A natural monopoly can purposely increase its cost of production by
   a) Using its own unregulated subsidiary to inflate its cost.
   b) Substituting cheaper inputs.
   c) Keeping marginal costs low.
   d) Using government subsidies to offset losses.
7. Regulations that offer imperfect answers
   a) Are options that should never be implemented.
   b) Reflect the realistic choices that society must make between imperfect markets and imperfect government intervention.
   c) Are not consistent with utility maximization in the real world.
   d) Will always have costs greater than their benefits.

8. In the real world, the choice is between
   a) Perfect markets and perfect government intervention.
   b) Perfect markets and imperfect government intervention.
   c) Imperfect markets and perfect government intervention.
   d) Imperfect markets and imperfect government intervention.

9. When regulation results in an inferior mix of output, there are
   a) Administrative costs.
   b) Compliance costs.
   c) Efficiency costs.
   d) Equity costs.

10. In cost-benefit analysis, regulatory intervention can be justified if the
    a) Marginal benefit of regulation exceeds its marginal cost
    b) Economic cost of regulation exceeds the value of the improvements in government intervention.
    c) Value of government failure exceeds the value of market failure.
    d) Intervention improves market outcomes, regardless of costs.

11. The long-run average total cost curve of a natural monopolist
    a) Is downward-sloping in the relevant range of production.
    b) Is U-shaped.
    c) Reflects diseconomies of scale.
    d) Is below the long-run marginal cost curve in the relevant range of production.

12. An industry in which one firm can achieve economies of scale over the entire range of market supply is a
    a) Contestable market.
    b) Kinked demand curve oligopoly.
    c) Natural monopoly.
    d) Perfectly competitive market.
13. What is meant by price efficiency?
   a) Price is greater than marginal cost.
   b) Price is equal to marginal cost.
   c) Price is equal to average total cost
   d) Price is greater than average total cost.

14. Hiring over 260,000 U.S. federal workers to oversee and operate regulatory agencies involves
   a) Zero costs since the market outcomes will be improved.
   b) Government failure in every case.
   c) Forgoing output that could be produced if the workers were employed elsewhere.
   d) Some opportunity costs only if market outcomes do not improve.

15. Prior to the deregulation of the railroad industry, there was little incentive to invest in new technology or equipment. This is an example of
   a) The failure of deregulation.
   b) The inefficiencies of regulation
   c) Market failure.
   d) The failure of laissez faire.

![Figure 27.1](image-url)
16. If regulation of the natural monopolist called for marginal cost pricing in Figure 27.1, the regulatory agency should set the price at
a) \( P_2 \).
b) \( P_0 \).

c) \( P_3 \).
d) \( P_4 \).

\[ \text{Figure 27.2} \]

17. The unregulated monopoly in Figure 27.2 will experience
a) Profit equal to \( P_C P_D DC \).
b) Losses equal to \( P_A 0q_{AA} \).
c) Profits equal to \( P_D 0q_{CD} \).
d) Losses equal to \( P_B P_D DB \).
18. Which of the following is true about this firm?
   a) It is a natural monopoly.
   b) Society can benefit from government regulation using marginal cost pricing without a subsidy.
   c) Marginal cost pricing will assure technical efficiency.
   d) Profit regulation will assure allocative efficiency.

19. According to the article "Financial Woes Heating Up," California utilities
   a) Control the production of electricity but not the distribution.
   b) Experienced rising wholesale prices for electricity while retail rates were subject to a price ceiling.
   c) Experienced excess capacity and falling retail prices.
   d) Were taken over by the state due to bankruptcies.
20. The “JetBlue Effect” has caused all of the following except
a) A decrease in fares.
b) An increase in daily passengers.
c) A decrease in jet fuel prices.
d) An improvement in service.

21. The value of an hour of leisure can best be estimated as
a) Zero since no income is earned.
b) The hourly wage that could have been earned.
c) Total recreational expenditures divided by hours of leisure.
d) The value of any productive work, although such a value is lower than what could have been earned.

22. As we work fewer hours and our leisure time increases, the opportunity cost of labor
a) Falls and the marginal utility of income falls.
b) Rises and marginal utility of income falls.
c) Falls and the marginal utility of income rises.
d) Rises and the marginal utility of income rises

23. Higher wage rates allow a person to reduce the hours worked without losing income. This is known as the
a) Substitution effect.
b) Income effect.
c) Law of diminishing marginal utility.
d) Law of diminishing marginal leisure.

24. If the wage rate increases, there will be a
a) Leftward shift of the labor supply curve.
b) Rightward shift of the labor supply curve.
c) Movement up the labor supply curve to the right.
d) Movement down the labor supply curve to the left.

25. Which of the following would not shift the market demand for labor, ceteris paribus?
a) The wage paid to labor.
b) The demand for final products.
c) The productivity of labor.
d) The number of employers.
26. If a chair can be sold for $20 and it takes a worker two hours to make a chair, the marginal revenue product of this worker is
   a) $5 per hour.
   b) $10 per hour.
   c) $20 per hour.
   d) $2 per hour.

27. The marginal revenue product of labor curve is the firm's
   a) MPP of labor curve divided by the wage rate.
   b) Marginal revenue curve.
   c) Demand curve for labor.
   d) Marginal physical product multiplied by the wage rate.

28. If the MPP of an additional unit of labor is 3 units per hour, product price is constant at $8 per unit, and the wage rate is $26 per hour, then
   a) The additional unit of labor should be employed.
   b) The additional unit of labor should not be employed because it costs more than it is worth.
   c) The employer should lower wages and accept less employment of labor.
   d) Product price must be reduced if profits are to be made.

<table>
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<tr>
<th>Number of workers (per hour)</th>
<th>Total output (per hour)</th>
<th>Marginal physical product (output per worker)</th>
<th>Total revenue (dollars per hour)</th>
<th>Marginal revenue product (dollars per worker)</th>
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**Table 30.1**

29. Assume that the product price is $4 per unit and that the hourly wage for workers is $12. Neither price nor wage changes with output. In Table 30.1, the marginal revenue product of the second worker hired is
   a) $4 per hour.
   b) $6 per hour.
   c) $24 per hour.
30. Table 30.2 shows how many hairstyling appointments a hair salon can schedule per week based on the number of stylists. In the spaces provided, compute the marginal physical (MPP) of the hair stylists, total revenue, and marginal revenue product of the stylists, assuming that a hair stylist charges $60 per appointment. In Table 30.2 suppose a hairstylist is paid $700 per week. How many hairstylists should a profit-maximizing salon hire?

a) 1.
b) 2.
c) 3.
d) 4.

31. If the number of employers for a particular type of labor increases, which of the following shifts should occur in the labor market for the particular type of labor?

a) Demand for labor should shift to the left.
b) Supply of labor should shift to the left.
c) Demand for labor should shift to the right.
d) Supply of labor should shift to the right.

32. If the number of available workers of a particular type increases, which of the following shifts should occur in the labor market for the particular type of labor?

a) Demand for labor should shift to the left.
b) Supply of labor should shift to the left.
c) Demand for labor should shift to the right.
d) Supply of labor should shift to the right.

33. If the demand for hair gel increases, the effect on the hair gel manufacturing job market will be to
a) Increase the demand for labor and increase equilibrium wages.
b) Reduce the supply of labor and increase equilibrium wages.
c) Decrease the demand for labor and reduce equilibrium wages.
d) Have no impact on equilibrium wages.

![Figure 30.2](image)

34. In Figure 30.2, the equilibrium wage rate is
a) $24 per hour.
b) $20 per hour.
c) $16 per hour.
d) $12 per hour.
35. The number of people employed in the competitive market depicted in Figure 30.2 at a wage of $20.00 per hour is
   a) 0.
   b) 160.
   c) 180.
   d) 192.

36. Cost efficiency refers to the
   a) Amount of output associated with an additional dollar spent on input.
   b) Effectiveness of labor in reducing production cost.
   c) MPP of labor divided by the product price.
   d) Ability to produce at a level of output where the wage rate is equal to or less than the MRP.

37. Assume that the product price is $4 per unit and the hourly wage for workers is $12. Neither price nor wage changes with output. In Table 30.3, the marginal revenue product of the second worker hired is
   a) $4 per hour.
   b) $6 per hour.
   c) $24 per hour.
   d) $40 per hour.

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Table 30.3
38. Assume that the product price is $4 per unit and the hourly wage for workers is $12. Neither price nor wage changes with output. In Table 30.3, the marginal revenue product of the second worker hired is
a) $76 per hour.
b) $16 per hour.
c) $4 per hour.
d) $12 per hour.

39. The opportunity wage is often a better measure of executive pay than
a) MPP because executives do not have MPP.
b) MRP because of the difficulty in quantifying executive output.
c) Derived demand because the elasticity of supply for an individual is greater than 1.0.
d) Opportunity costs of executive leisure.

40. When an individual's MRP is not measurable, his or her market wage is usually determined by
a) The individual's MPP.
b) His or her opportunity wage.
c) The selling price of his or her output.
d) The individual’s comparable worth.