

NOTE: The actual no. of questions on the actual MT will be 30, each for 0.67 grade points.

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) The term "variable input" refers to: 1) _____
 - A) inputs to production that vary in price.
 - B) inputs to production that vary in quality.
 - C) inputs to production that change in direct proportion to the amount of output produced.
 - D) inputs to production, the quantity of which can be increased or decreased at any point in time.

- 2) A production method that relies on large quantities of labor and smaller quantities of capital equipment is referred to as a: 2) _____
 - A) capital-intensive method of production.
 - B) technology-intensive method of production.
 - C) variable-input-intensive method of production.
 - D) labor-intensive method of production.

- 3) The term "fixed input" refers to: 3) _____
 - A) inputs to production that do not vary in price.
 - B) inputs to production, the quantity of which cannot be varied in the short run.
 - C) inputs to production that yield a constant or "fixed" marginal product.
 - D) inputs to production that do not vary with respect to quality.

- 4) Which of the following is true in the short run, but not in the long run? 4) _____
 - A) The firm's decisions are planning decisions.
 - B) The firm is "stuck" with the existing amount of capital.
 - C) The firm makes decisions by attempting to predict future demand and technological developments.
 - D) The firm is free to vary all of its inputs.

- 5) Assume a factory that currently employs 25 workers and owns a factory with 10,000 square feet of floor space is considering doubling the size of its factory. Economists would classify this as: 5) _____
 - A) a long-run decision.
 - B) a short-run decision.
 - C) neither a short-run nor a long-run decision.
 - D) both a short-run and a long-run decision.

- 6) Economies of scale are illustrated by: 6) _____
 - A) an upward-sloping long-run average cost curve.
 - B) a downward-sloping short-run average total cost curve.
 - C) a flat long-run average cost curve.
 - D) a downward sloping long-run average cost curve.

- 7) Which of the following is true of the relationship between the marginal cost function and the average total cost function? 7) _____
 - A) If MC is less than ATC, then ATC is increasing.
 - B) If MC is greater than ATC, then ATC is falling.
 - C) The MC curve intersects the ATC curve at minimum ATC.
 - D) The ATC curve intersects the MC curve at minimum MC.

- 8) If a firm experiences constant returns to the variable input in the short run, 8) _____
- A) marginal product will be greater than average variable product, but the two will become more equal as output increases.
 - B) marginal product will be greater than average variable product, and the difference between the two will become larger as output increases.
 - C) marginal product will be less than average variable product, but the two will become more equal as output increases.
 - D) marginal product and average variable product will be equal over the range of output in question.

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 9) Use the following information on a hypothetical short-run production function to answer questions a-c. 9) _____

<i>Units of Labor/Day</i>	5	6	7	8	9
<i>Units of Output/Day</i>	120	140	155	165	168

The price of labor is \$20 per day. Ten units of capital are used each day, regardless of output level. The price of capital is \$50 per unit.

- a. Calculate the marginal and average variable product of each unit of labor input.
 - b. Calculate total, average total, average variable, and marginal costs.
 - c. Can you tell where diminishing marginal returns sets in?
- 10) Complete the table below, which represents the production costs for a typical firm. (Round numbers to the nearest tenth.) 10) _____

<u>TP</u>	<u>TFC</u>	<u>TVC</u>	<u>TC</u>	<u>AFC</u>	<u>AVC</u>	<u>ATC</u>	<u>MC</u>
0	\$20	\$ 0	\$__	---	---	---	---
1	___	27.5	___	\$__	\$__	\$__	\$27.5
2	___	46.8	___	___	23.4	___	___
3	___	63.3	___	___	___	___	___
4	___	82.5	___	5.0	___	___	___
5	___	106.7	126.7	___	___	___	___
6	___	139.7	___	___	___	___	___
7	___	181	___	___	___	28.7	___

At what level of output do diminishing returns set in? How do you know?

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 11) The condition $P = MC$ implies that 11) _____
- A) an individual who values the product at more than P will receive consumer surplus.
 - B) the amount of consumer surplus is infinite.
 - C) an individual who values the product at less than P will receive consumer surplus.
 - D) there is no consumer surplus for any consumer.

Refer to the information provided in the Figure 12.4 below to answer the questions that follow.

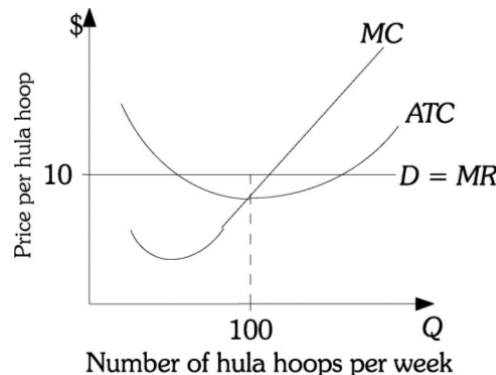


Figure 12.4

- 12) Refer to Figure 12.4. Hula hoops are produced in a perfectly competitive market. This hula hoop firm is currently producing and selling 100 hula hoops per week. Which of the following is TRUE? 12) _____
- A) Hula hoop production is at the efficient level because ATC is minimized.
 - B) Fewer resources should be devoted to hula hoop production because ATC is less than price.
 - C) Society would be better off if more hula hoops were produced because at the current level of production price is greater than marginal cost.
 - D) Society would be better off if fewer hula hoops were produced because if this firm reduced its production, its profits would increase.
- 13) Imperfect competition occurs 13) _____
- A) whenever firms are losing money.
 - B) when firms are not profit maximizers.
 - C) when the consumption of the good involves an external benefit.
 - D) when firms have some control over price and competition.
- 14) If a perfectly competitive industry was to become monopolized, which of the following would occur? 14) _____
- A) Price would increase and output would decrease.
 - B) Both price and output would remain unchanged.
 - C) Both price and output would decrease.
 - D) Price would decrease and output would increase.
- 15) Assume that an industry is currently a monopoly. If the government breaks this monopoly up into a large number of small perfectly competitive firms, which of the following will occur? 15) _____
- A) Both price and industry output will decrease.
 - B) Price will fall and industry output will increase.
 - C) Both price and industry output will increase.
 - D) Price will increase and industry output will decrease.
- 16) Suppose you know that the breakfast cereal industry is characterized by significant "barriers to entry." Which of the following is a correct inference? 16) _____
- A) The government must be artificially restricting entry into the breakfast cereal industry.
 - B) The breakfast cereal industry could be an unregulated, perfectly competitive industry.
 - C) The breakfast cereal industry is producing a type of public good.
 - D) Economic profits in the breakfast cereal industry are likely to persist, *ceteris paribus*.

- 17) The equilibrium condition $P = MC$ holds 17) _____
A) only if all markets are perfectly competitive.
B) only for goods produced by the public sector.
C) as long as all firms maximize profits.
D) only if all markets are imperfectly competitive.
- 18) In an imperfectly competitive industry 18) _____
A) a single firm will charge whatever price it wants to charge.
B) the government will always regulate the output price.
C) a single firm has no control over the price of its output.
D) a single firm has some control over the price of its output.
- 19) Market power refers to a firm's ability to 19) _____
A) monopolize a market completely.
B) sell any amount of output it desires at the market-determined price.
C) raise price without losing all demand for its product.
D) charge any price it likes.
- 20) A coffee manufacturer raises the price of its coffee by 10%, and the quantity demanded of its coffee falls by only 6%. This firm has 20) _____
A) no monopoly power in the output market.
B) some output power.
C) some market power.
D) not been able to prevent its competitors from competing with it on price.
- 21) Although patents are a _____, they also provide _____. 21) _____
A) barrier to entry; an incentive for invention and innovation
B) collusive agreement; for free entry of new firms
C) barrier to entry; for free entry of new firms
D) collusive agreement; an incentive for invention and innovation
- 22) An important distinction between perfect competition and monopoly is that in 22) _____
A) monopoly, the market demand curve faces the firm.
B) perfect competition, there is no distinction between the firm and the industry.
C) monopoly, the firm produces less than the total quantity supplied.
D) perfect competition, the firm is the industry.

Refer to the information provided in Figure 13.5 below to answer the questions that follow.

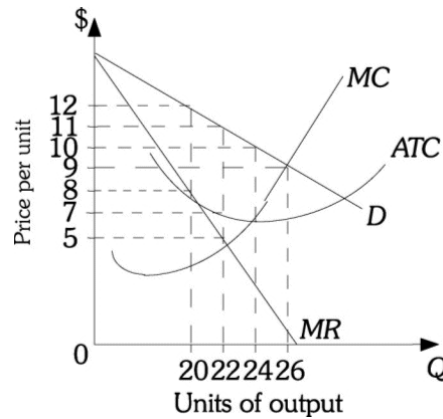


Figure 13.5

- 23) Refer to Figure 13.5. The profit-maximizing level of output for this monopolist is _____ units of output. 23) _____
 A) 20 B) 22 C) 24 D) 26
- 24) When a profit maximizing monopolist earns positive economic profits, price 24) _____
 A) equals marginal revenue. B) is lower than marginal cost.
 C) is higher than marginal cost. D) equals marginal cost.
- 25) A monopolist is currently maximizing profits. In addition, if $P > ATC > MC$, then the monopolist 25) _____
 A) just breaks even.
 B) earns positive economic profits.
 C) is covering total fixed costs but not total variable costs.
 D) is covering total variable costs but not total fixed costs.
- 26) A monopolist suffers a loss if its _____ schedule is everywhere above its _____ schedule. 26) _____
 A) MC; AVC B) Demand; ATC C) ATC; MC D) ATC; Demand

Refer to the information provided in Figure 13.6 below to answer the question that follows.

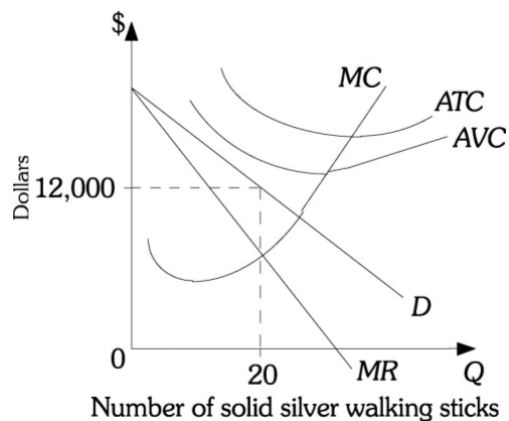


Figure 13.6

- 27) Refer to Figure 13.6. The Silver Exchange has a monopoly over the sale of solid silver walking sticks. The Silver Exchange has hired you as an economic consultant. You should advise this monopolist to
- A) shut down in the short run and exit the industry in the long run.
 - B) shut down in the short run but expand capacity in the long run.
 - C) produce in the short run but exit the industry in the long run.
 - D) produce in the short run and expand capacity in the long run.

27) _____

Refer to the information provided in Figure 13.8 below to answer the questions that follow.

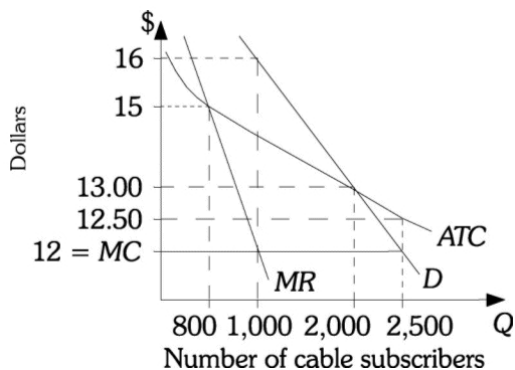


Figure 13.8

- 28) Refer to Figure 13.8. If the government regulates Armstrong Cable so they can earn only a normal return, the price would be set at
- A) \$12.00.
 - B) \$12.50.
 - C) \$13.00.
 - D) \$16.00.
- 29) Perfect price discrimination
- A) is charging different prices to different buyers.
 - B) can eliminate the deadweight loss to society of a monopoly.
 - C) is an attempt by monopolists to capture consumer surplus as profit.
 - D) do all of the above.

28) _____

29) _____

- 30) An industry that realizes such large economies of scale in producing its product that single-firm production of that good or service is most efficient is called a(n) _____ monopoly. 30) _____
A) patent B) fixed cost
C) economies of scale D) natural
- 31) The feature that distinguishes monopolistic competition from perfect competition is that monopolistically competitive firms are 31) _____
A) price takers. B) large relative to the market.
C) able to block the entry of other firms. D) able to differentiate their products.
- 32) Products may be homogeneous or differentiated in the _____ market structure. 32) _____
A) monopolistically competitive B) monopolistic
C) oligopolistic D) perfectly competitive
- 33) Oligopoly is difficult to analyze because 33) _____
A) price is NOT a decision variable for oligopolistic firms.
B) of the complex interdependence that usually exists among oligopolistic firms.
C) there is no price competition among oligopolistic firms.
D) there is price competition among oligopolistic firms but no competition on product quality.
- 34) The four largest firms account for approximately 90% of the cigarette sales. The cigarette industry would be best classified as a(n) 34) _____
A) oligopoly. B) monopolistically competitive industry.
C) monopoly. D) perfectly competitive industry.
- 35) The market structure in which the behavior of any given firm depends on the behavior of the other firms in the industry is 35) _____
A) monopolistic competition. B) perfect competition.
C) monopoly. D) oligopoly.
- 36) The major distinguishing characteristic of oligopoly is that 36) _____
A) firms are interdependent.
B) firms can influence the price of their product.
C) entry into the industry is easy.
D) firms produce differentiated products.
- 37) A price-and-quantity-fixing agreement is known as 37) _____
A) game theory. B) price leadership.
C) price concentration. D) collusion.