

Reading 12**FIRMS AND MARKET STRUCTURES**

1. (A) **decrease its plant size.**

Explanation

If a firm is experiencing diseconomies of scale, it should decrease its plant size to the efficient scale, which is the size that minimizes long-run average total cost. Plant size can be adjusted in the long run but not in the short run.

(Module 12.1, LOS 12.a)

2. (C) **monopolistic competition.**

Explanation

These conditions characterize monopolistic competition. By contrast, monopolies and oligopolies have high barriers to entry and involve either a single seller (monopoly) or a small number of interdependent sellers (oligopoly).

(Module 12.2, LOS 12.b)

3. (C) **output increases at a decreasing rate.**

Explanation

The law of diminishing returns states that for a given production process, as more and more resources (such as labour) are added holding the quantities of other resources fixed, output increases at a decreasing rate. This occurs because, at some point, adding more workers results in inefficiencies.

(Module 12.1, LOS 12.a)

4. (A) **elastic due to the availability of many close substitutes.**

Explanation

The demand for products from monopolistic competitors is elastic due to the availability of many close substitutes. If a firm increases its product price, it will lose customers to firms selling substitute products.

(Module 12.2, LOS 12.c)

5. (C) **marginal revenue equals marginal cost.**

Explanation

A firm operating as a price taker will produce the quantity where $MC = MR$. It will maximize profit and not revenue. In the long run, it will make zero economic profit.

(Module 12.2, LOS 12.b)

6. (B) **equal to average total cost, such that economic profits are zero.**

Explanation

In the short run, a firm in a monopolistically competitive market structure can earn a positive economic profit because the price charged exceeds average total cost. However, competitors see this opportunity and are able to enter the market because the barriers to entry are low. Over the long run, the demand curve for each individual firm falls such that price is driven down to the level of average total cost, thereby reducing economic profits down to zero.

(Module 12.2, LOS 12.c)

7. (C) **rise at an increasing rate.**

Explanation

The law of diminishing returns states that as more variable resources are a production process combined with a fixed input, output will eventually increase at a decreasing rate. In the short run, as the quantity produced rises, costs rise at an increasing rate.

(Module 12.1, LOS 12.a)

8. (A) **a large number of sellers.**

Explanation

Oligopolies consist of a small number of sellers. They tend to be characterized by barriers to entry such as significant economies of scale.

(Module 12.2, LOS 12.b)

9. (C) **the costs to enter the market are low.**

Explanation

In a monopolistically competitive market structure, the products are differentiated (not homogeneous), firms compete more on feature differences and quality than on price, and the barriers to entry (the costs of entering and exiting the market) are low.

(Module 12.2, LOS 12.c)

10. (C) **diminishing returns to labor.**

Explanation

The law of diminishing returns states that at some point, as more and more of a resource (e.g., labor) is devoted to a production process, holding the quantity of other inputs constant, the output increases, but at a decreasing rate.

(Module 12.1, LOS 12.a)

11. (C) calculate the Herfindahl-Hirschman Index.**Explanation**

The Herfindahl-Hirschman Index is more sensitive to mergers than the n-firm concentration ratio. Although barriers to entry for an industry are important in assessing market structure, they are not necessarily related to the impact of a merger.

(Module 12.3, LOS 12.e)

12. (C) more of a resource is devoted to production, holding the quantity of other inputs constant, the output will increase, but at a decreasing rate.**Explanation**

At low levels of output, increasing marginal returns will exist corresponding to the downward sloping portion of the marginal cost curve. As marginal costs begin to increase diminishing marginal returns will occur.

(Module 12.1, LOS 12.a)

13. (B) Differentiated products.**Explanation**

Differentiated products are a key characteristic of monopolistic competition. Although producers have downward sloping demand curves, they are typically elastic.

(Module 12.2, LOS 12.b)

14. (B) \$20.**Explanation**

The limiting outcomes in an oligopoly situation mean that price will fall somewhere between where all participants would maximize profits (\$25) and the price that would result from perfect competition (\$18). So, the most likely price out of the options given will be \$20.

(Module 12.2, LOS 12.d)

15. (A) monopolistic competition.**Explanation**

Monopolistic competition is used to describe markets where there are a large number of competitors producing differentiated products. In perfect competition all firms produce identical products. In an oligopoly there is a small number of firms.

(Module 12.2, LOS 12.b)

16. (A) Extensive advertising to differentiate products.**Explanation**

The only item listed in the question that monopolistic competition and perfect competition do not have in common is the use of advertising to differentiate their products. Extensive advertising is a key feature of monopolistic competition.

(Module 12.2, LOS 12.b)

17. (A) A single seller.

Explanation

There are many sellers or producers who sell differentiated products that permit firms to attract customers without reducing price; and there are low barriers to entry.

(Module 12.2, LOS 12.b)

18. (A) Oligopoly.

Explanation

Interdependence of firms is a characteristic of an oligopoly market. Optimal pricing for a firm in an oligopoly market depends on expectations of how its competitors will respond.

(Module 12.2, LOS 12.d)

19. (C) Sellers make economic profits.

Explanation

The only item listed that is NOT a condition of a perfectly competitive market is that sellers make economic profits. In fact, sellers do not make economic profit after taking into account their opportunity costs.

(Module 12.2, LOS 12.b)

20. (A) diseconomies of scale.

Explanation

Diseconomies of scale occur along the upward sloping segment of the long-run average total cost curve where costs rise as output increases. The flat portion at the bottom of the long-run average total costs curve represents constant returns to scale.

(Module 12.1, LOS 12.a)

21. (A) Each producer offers a differentiated product.

Explanation

Differentiated products are a feature of monopolistic competition markets. Interdependence is a characteristic of oligopoly markets. Horizontal demand curves facing producers are a feature of perfect competition.

(Module 12.2, LOS 12.b)

22. (C) Interdependence among firms.

Explanation

An oligopolistic industry exhibits a high degree of interdependence among firms. One firm's pricing decisions or advertising activities will affect the other firms' demand curves. These industries typically consist of a small number of sellers and have significant barriers to entry.

(Module 12.2, LOS 12.d)

23. (A) **focus on average market price rather than individual competitor prices.**

Explanation

In a monopolistically competitive market structure, there will be a large number of independent sellers who will each have small market shares (so no one company has a lot of power over pricing), collusion or price-fixing will not be possible because of the sheer volume of companies, and each company will focus more on average market price than on the prices individual competitors are charging.

(Module 12.2, LOS 12.c)

24. (B) **Oligopoly.**

Explanation

An oligopoly market structure is characterized by a small number of firms producing similar or differentiated products, with a high degree of interdependence among competitors. Each firm's optimal price and output are strongly affected by the pricing and output decisions of its competitors.

(Module 12.2, LOS 12.b)

25. (B) **decrease, even if accounting profits remain positive.**

Explanation

Accounting profit is equal to net income, or revenues less expenses on a company's income statement. Economic profit is accounting profit, less implicit (or opportunity) costs. In the short run, a firm in a monopolistically competitive market structure can have both accounting and economic profits. But in the long run, economic profit will decrease to zero as competitors take advantage of favourable market conditions and low barriers to entry.

(Module 12.2, LOS 12.c)

26. (A) **face perfectly elastic demand curves.**

Explanation

The only item listed in the question that monopolistic competition and pure competition do not have in common is a perfectly elastic demand curve. Under pure competition, producers face a perfectly elastic demand curve, whereas price searchers face downward sloping demand curves.

(Module 12.2, LOS 12.b)

27. (C) **increasing the total sales of the firm and reducing the average sales per salesperson.**

Explanation

The law of diminishing returns states that as more of a resource is added to a production process, holding other resource use constant, increases in output

will eventually decrease. Therefore, as more salespeople are added they will generate more sales at a decreasing rate. Total sales will increase and the average sales per salesperson will decrease.

(Module 12.1, LOS 12.a)

- 28. (C) a small number of independent sellers.**

Explanation

In monopolistic competition, there is a large, not small, number of independent sellers.

(Module 12.2, LOS 12.b)

- 29. (C) Relatively small economies of scale.**

Explanation

Oligopolies have large economies of scale and interdependence among competitors.

(Module 12.2, LOS 12.b)

- 30. (A) Monopoly.**

Explanation

A monopoly is characterized by one seller, a specific and well-defined product for which there is no good substitutes, and high barriers to entry.

(Module 12.2, LOS 12.b)

- 31. (C) do not explicitly include the effects of potential competition.**

Explanation

Because potential competition from new entrants is not considered in the calculation of industry concentration measures, market power (pricing power) may be low even though the market shares of the top firms in the industry are quite large.

(Module 12.3, LOS 12.e)

- 32. (A) Each firm produces a differentiated product.**

Explanation

Other characteristics of monopolistic competition (also known as competitive price searcher markets) are: a large number of independent sellers, low barriers to entry, and an elastic downward sloping demand curve.

(Module 12.2, LOS 12.b)

33. (A) Perfect competition.**Explanation**

Under perfect competition each firm is selling all of its output at the market price. Therefore, any firm that sells its output at less than the market price will decrease its total revenue. Under monopolistic competition or oligopoly, firms are price searchers. Decreasing the price will increase the quantity a firm sells and may increase or decrease total revenue.

(Module 12.2, LOS 12.b)

34. (A) The firm should continue to produce and sell its product in the short run but not in the long run, unless the price increases.**Explanation**

Because the price exceeds the average variable cost, each item sold covers part of the firm's fixed cost, so in the short run the firm should continue to produce and sell its product. If the firm shuts down temporarily, the costs incurred (fixed costs) will not be recovered partially. In the long run, however, the firm should shut down unless the price is greater than average total cost. Since the firm is a price taker, reducing the firm's output will have no effect on the price since each firm is small relative to the market.

(Module 12.1, LOS 12.a)

35. (A) Monopolistic competition.**Explanation**

Monopolistic competition is another name for competitive price-searcher markets. There are a large number of independent sellers, each produces a differentiated product, each market has a low barrier to entry, and each producer faces a downward sloping demand curve.

(Module 12.2, LOS 12.b)

36. (C) As the quantity produced rises, costs begin to rise at an increasing rate.**Explanation**

At production levels that are consistent with decreasing marginal returns, costs will increase at an increasing rate as production rises.

(Module 12.1, LOS 12.a)

37. (C) the same quantity with an equivalent market share at an equilibrium price above the price in a perfectly competitive market.**Explanation**

In a Cournot duopoly model, two firms with identical marginal cost curves in the long run will sell the same quantity with equivalent market shares at an equilibrium price above the price in a perfectly competitive market (but below the price in a monopoly market structure).

(Module 12.2, LOS 12.d)

- 38. (B) Firms that bring new and innovative products to the market face relatively more elastic demand curves than their competitors.**

Explanation

Firms under monopolistic competition face less elastic demand curves when they introduce new and innovative products. This enables them to increase price and earn economic profits. However, close substitutes and imitations will eventually erode the economic profit from a new product. So, firms must constantly seek innovative product features that make their products relatively more desirable than their competitors.

(Module 12.2, LOS 12.c)

- 39. (B) identify the market structure of an industry.**

Explanation

Concentration measures are used to identify the market structure of an industry (perfect competition, monopolistic competition, oligopoly, or monopoly). Concentration measures do not directly indicate an industry's barriers to entry or elasticity of demand.

(Module 12.3, LOS 12.e)

- 40. (B) sequential rather than simultaneous pricing by market participants.**

Explanation

The Stackelberg model assumes pricing decisions are made sequentially, where the leader firm chooses the price first, and with the other firm choosing its price based on the leader's price. The Cournot model assumes competitors' prices will not change. Both Cournot and Stackelberg models are rule-based (strategic game) models.

(Module 12.2, LOS 12.d)

- 41. (A) monopolistic competitors have low barriers to entry and monopolists do not.**

Explanation

Another name for monopolistic competition is a competitive price searcher market. Monopolistic competition refers to a large number of independent sellers, each produces a differentiated product, each market has a low barrier to entry, and each producer faces a downward sloping demand curve.

(Module 12.2, LOS 12.b)

42. (C) occur when long-run unit costs fall as output increases.

Explanation

Economies of scale occur when the percentage increase in output is greater than the percentage increase in the cost of all inputs. Economies of scale occur over the range where the long-run average cost curve slopes downward.

(Module 12.1, LOS 12.a)

43. (B) The demand curve for an individual firm is a vertical line.

Explanation

Under perfect competition individual firms have no control over price resulting in a demand schedule that is perfectly elastic or horizontal.

(Module 12.2, LOS 12.b)

44. (C) identical products.

Explanation

In an oligopoly, a small number of producers sell products that can be similar or differentiated. An oligopoly typically features significant barriers to entry including economies of scale. Pricing and output decisions by each firm directly influence the decisions of competing firms.

(Module 12.2, LOS 12.b)

45. (C) barriers to entry are high under monopoly, but low under monopolistic competition.

Explanation

Monopolistic competition is characterized by the low barriers to enter its competitive markets. In contrast, a monopoly exists only where there are high barriers to market entry.

(Module 12.2, LOS 12.b)

46. (C) purely competitive market.

Explanation

The firm being described is a price taker firm in a purely competitive market. These firms must sell their product at the going market price, there are no barriers to entry, and there are a large number of firms that produce a homogeneous product.

(Module 12.2, LOS 12.b)

47. (B) perfect competition.

Explanation

In a perfectly competitive economic market, there are many independent firms, each seller is small relative to the total market, and there are no barriers to entry or exit.

(Module 12.2, LOS 12.b)

48. (C) Barriers to entry are not a significant factor.

Explanation

Under perfect competition there are no significant barriers to entry into the market. An industry that can be characterized as perfect competition typically consists of a large number of firms, each of which can sell its entire output at the market price, and none of which are large enough to affect the market price.

(Module 12.2, LOS 12.b)

49. (C) price is greater than marginal cost.

Explanation

In monopolistic competition, price is greater than marginal cost (i.e., firms can realize a markup). In perfect competition, $P = MC$. Firms in monopolistic competition are price searchers, i.e., each firm faces a downward sloping demand curve. Regardless of the market structure, all firms produce the quantity at which marginal revenue equals marginal cost.

(Module 12.2, LOS 12.b)

