CHAPTER 9

THE FIRM AND MARKET STRUCTURES

1. (B) P = MC = ATC = MR.

Explanation

For a price-taker firm, long-run equilibrium is where P = MC = ATC. For price taking firms, P = MC. Competition eliminates economic profits in the long run so that P = ATC.

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

2. (C) the same product or service.

Explanation

Price discrimination is the practice of charging different consumers different prices for the same product or service. Examples include different prices for airline tickets based on whether a Saturday-night stay is involved and different prices for movie tickets based on age.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

3. (B) Increase Increase

Explanation

If firms in an industry are experiencing losses, some will exit. This will decrease industry supply and increase equilibrium market price. The remaining firms in the industry will increase production along their individual supply curves (short-run marginal cost curves) and increase production at the higher price. The combination of a higher price and greater quantity produced will cause total revenues to increase for the remaining firms.

For Further Reference:

(Study Session 3, Module 9.4, LOS 9.e)

CFA® Program Curriculum, Volume 2, page 82

Related Material

SchweserNotes - Book 1

4. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

5. (C) Marginal revenue = marginal cost < price.

Explanation

To maximize profit, monopolists will expand output until marginal revenue equals marginal cost. Price will be greater than marginal revenue because a monopolist faces a downward sloping demand curve.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

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6. (C) Marginal cost equals price.

Explanation

When a firm operates under conditions of perfect competition, marginal revenue always equals price. Under perfect competition, price is constant (a horizontal line) so marginal revenue is constant. Therefore a firm will increase output until marginal cost equals price.

(Study Session 3, Module 9.1, LOS 9.d)

Related Material

SchweserNotes - Book 1

7. (B) 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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

8. (C) **The quantity that the industry will supply at a given price will be reduced.**

Explanation

If all the firms in a competitive industry have adopted a technology for production, it is presumably the technology that minimizes their production costs. If that technology is outlawed, firms will have to revert to the second-best technology, which will increase their costs of production. This is represented by a shift to the left in the industry supply curve. At each price level, the quantity supplied will be less than before.

Just as a technological improvement will cause firms that adopt it early to earn economic profits that attract new entrants to the industry, prohibition of the cost-minimizing technology will cause economic losses and typically force some firms to exit the industry. Under perfect competition, profit is always maximized at the level of output where marginal cost equals the market price. The state of technology is one factor that determines the level of output at which this occurs.

(Study Session 3, Module 9.1, LOS 9.e)

Related Material

SchweserNotes - Book 1

9. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

10. (A) **Average cost pricing.**

Explanation

Under average cost pricing, regulators attempt to force monopolies to reduce prices to where a firm's average total cost curve intersects the market demand curve. This will increase output and decrease price, increase allocative efficiency, and ensure zero economic profit.

(Study Session 3, Module 9.4, LOS 9.b)

Related Material

SchweserNotes - Book 1

11. (B) **Price takers maximize profits at the point price = marginal revenue = marginal cost.**

Explanation

Because price takers face a horizontal demand curve, they must take price as given and thus maximize profits when P = MR = MC.

The other statements are false. Although firms engaged in pure competition (price takers) maximize profits at the quantity corresponding to the minimum point on the average total cost curve (ATC) (in the long run), this is not necessarily true for price searchers. Price searchers face a downward-sloping demand curve. They produce at the quantity MR = MC and take price from the demand curve. The demand curve may be above the ATC curve. The potential allocative inefficiency of a price searcher engaged in monopolistic competition includes the social cost of not producing where P = MC. This potential allocative inefficiency may be outweighed by the benefits of product diversity. Some price searchers, (monopolists, for example), can earn positive economic profits in the long run.

(Study Session 3, Module 9.2, LOS 9.d)

Related Material

SchweserNotes - Book 1

12. (C) **P = MR.**

Explanation

To maximize profit, all firms expand output until marginal revenue equals marginal cost. Price is determined from the demand curve, which is above the marginal revenue curve since a monopoly faces a downward sloping demand curve.

(Study Session 3, Module 9.4, LOS 9.b)

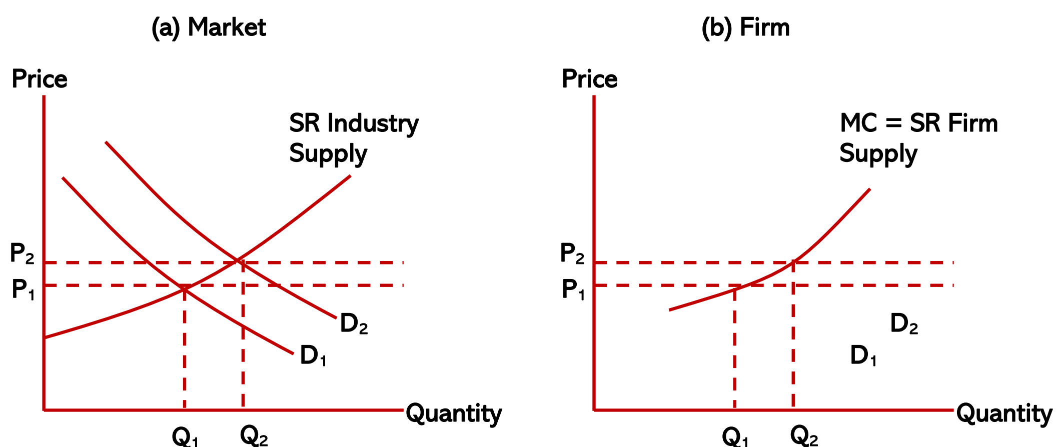
Related Material

SchweserNotes - Book 1

13. (C) **Increase; increase.**

Explanation

In the short run, an increase in market demand (a shift to the right) will increase both equilibrium price and quantity.



(Study Session 3, Module 9.1, LOS 9.e)

Related Material

SchweserNotes - Book 1

14. (C) **regardless of whether it is a price taker or a price searcher.**

Explanation

Any firm will maximize profits by producing the output where MR = MC.

(Study Session 3, Module 9.2, LOS 9.d)

Related Material

SchweserNotes - Book 1

15. (B) **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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

16. (C) **distinct groups of customers with different price elasticities of demand who cannot resell the product.**

Explanation

For a price searcher firm, price discrimination can increase profits if the firm has two or more identifiable customer groups with different price elasticities of demand, and if customers who buy the product at a lower price cannot resell it to other customers.

For Further Reference:

(Study Session 3, Module 9.1, LOS 9.d)

CFA® Program Curriculum, Volume 2, page 77

Related Material

SchweserNotes - Book 1

17. (B) **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.

(Study Session 3, Module 9.4, LOS 9.g)

Related Material

SchweserNotes - Book 1

18. (C) **The industry supply curve shifts to the right.**

Explanation

When individual firms implement technological change, their costs decline and their supply (cost) curve shifts to the right. At the lower costs, firms are willing to supply a given quantity at a reduced price. The lower cost structure for the individual firms shifts the industry supply curve to the right.

(Study Session 3, Module 9.1, LOS 9.e)

Related Material

SchweserNotes - Book 1

19. (A) **Marginal revenue < price.**

Explanation

For a price searcher, demand is downward sloping, marginal revenue is less than price since price must be reduced to sell additional units of output.

(Study Session 3, Module 9.2, LOS 9.b)

Related Material

SchweserNotes - Book 1

20. (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.

(Study Session 3, Module 9.2, LOS 9.h)

Related Material

SchweserNotes - Book 1

21. (A) **The average total cost attributable to advertising will increase as output increases.**

Explanation

The increase in average total cost attributable to advertising decreases as output increases because a fixed cost is being averaged over a larger quantity. Advertising expenses are relatively high for firms in monopolistic competition. This is not only because firms need to inform consumers about the unique features of their products, but also to create or increase a perception of differences between products that are actually quite similar. Many firms spend a significant portion of their advertising budget on brand name promotion.

(Study Session 3, Module 9.2, LOS 9.b)

Related Material

SchweserNotes - Book 1

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22. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

23. (B) **Some existing firms will exit the market.**

Explanation

Some of the existing firms will exit the market, leading to a decrease in industry supply and an increase in equilibrium price. Eventually, the remaining firms in the industry will increase output at the higher market price until economic profit equals zero.

(Study Session 3, Module 9.1, LOS 9.e)

Related Material

SchweserNotes - Book 1

24. (C) **is the innovation leader in product development.**

Explanation

The dominant firm model of oligopoly is based on the assumption that one firm has a significant cost advantage which allows it to set the price in the market and control a relatively large share of the industry's production and sales. It does not assume that the firm will be the innovation leader in product development. In fact, being more innovative is one of the factors that allow smaller competitors that work at a cost disadvantage to survive.

(Study Session 3, Module 9.3, LOS 9.d)

Related Material

SchweserNotes - Book 1

25. (C) **leads to a decrease in allocative efficiency.**

Explanation

Allocative efficiency occurs when the quantity produced maximizes the sum of consumer and producer surplus. That is, where marginal benefit equals marginal cost. Price discrimination reduces the allocative inefficiency that exists when prices are greater than marginal cost by increasing output toward the quantity where price equals marginal cost. Firms gain by selling to customers with inelastic demand while still providing goods to customers with more elastic demand. This may even cause production to take place at a level where it would not take place otherwise.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

26. (B) Few sellers.

Explanation

Few sellers are a characteristic, not a barrier, of a price-searcher market where there are high barriers to entry. Other barriers are patents or exclusive rights of production.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

27. (A) high barriers to entry.

Explanation:

Price discrimination is the practice of charging different consumers different prices for the same product or service. For price discrimination to work the seller must:

(1) have a downward sloping demand curve, (2) have at least two identifiable groups of customers with different price elasticities of demand, (3) must be able to prevent customers in the lower-price group from reselling the product to customers in the higher-price group.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

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28. (C) Market price is less than average total cost.

Explanation

A firm will experience economic losses when its selling price is less than average total cost.

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

29. (A) MC = ATC = MR = price.

Explanation

Under perfect competition, a firm will experience zero long term profits when P = MC = MR = ATC. It recovers all costs including opportunity costs and earns zero economic profit.

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

30. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

31. (C) **a higher-quality product at a premium price and a lower-quality alternative.**

Explanation

Price discrimination involves a single product, not two alternatives. As long as the company faces a downward-sloping demand curve, can identify at least two groups of customers with different price elasticities of demand, and can prevent reselling between groups, the company can profit from price discrimination.

For Further Reference:

(Study Session 3, Module 9.4, LOS 9.b)

CFA® Program Curriculum, Volume 2, page 69

CFA® Program Curriculum, Volume 2, page 77

Related Material

SchweserNotes - Book 1

32. (B) **Natural resources are spread among many firms.**

Explanation

All cases except wide distribution of a natural resource facilitate a monopoly. If natural resource ownership is concentrated in one firm a monopoly would result.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

33. (C) **Product differentiation under monopolistic competition offers benefits that tend to offset inefficiency from the reduction in output compared to perfect competition.**

Explanation

Economic profits are zero in the long run under monopolistic competition, but since average cost includes the costs of product differentiation and advertising (branding), there is disagreement over the efficiency of long-run output. Both advertising and product differentiation can create value as consumers prefer more choices and use the advertising and branding information to make purchase decisions. Whether there is an efficient amount of product differentiation or not, the benefits of product differentiation do tend to offset its costs. Whether the benefits of differentiated products totally offset the costs compared to a competitive market with a single (undifferentiated) product is open to debate.

(Study Session 3, Module 9.2, LOS 9.b)

Related Material

SchweserNotes - Book 1

34. (B) **Unlike an oligopolist, a monopolist will always be able to earn economic profit.**

Explanation

In some cases, a monopolist may be unable to sell for a profit. Price may be insufficient to cover the per-unit cost of the monopolist, even when operating at the MR = MC rate of output. The monopolist faces a downward-sloping demand curve.

For Further Reference:

Study Session 4, Module 9.4, LOS 9.a, 9.b, 9.d

CFA® Program Curriculum, Volume 2, page 63

CFA® Program Curriculum, Volume 2, page 69

CFA® Program Curriculum, Volume 2, page 77

Related Material

SchweserNotes - Book 1

35. (C) **sum of the individual supply curves for all firms in the industry.**

Explanation

The short-run supply curve for a firm is its marginal cost curve above the average variable cost curve. The short-run supply curve of the market is the sum of the supply curves for all firms in the industry.

(Study Session 3, Module 9.1, LOS 9.c)

Related Material

SchweserNotes - Book 1

36. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

37. (C) **The increase to average total costs associated with advertising increases as output increases.**

Explanation

Advertising expenses are high for firms in monopolistic competition. Not only because firms need to inform consumers about the unique features of a firm's products, but also to create or increase a perception of differences between products that are actually quite similar. Advertising costs increase average total costs, but the increase to average total cost attributable to advertising decreases

as output increases because more fixed advertising dollars are being averaged over a larger quantity. If advertising increases output (sales) significantly, it can actually decrease a firm's average total cost if there are economies of scale.

(Study Session 3, Module 9.2, LOS 9.b)

Related Material

SchweserNotes - Book 1

38. (C) face a demand curve with a negative slope.

Explanation

In order for effective price discrimination to occur, the seller must have a downward sloping demand curve. The seller must also have at least two identifiable groups of customers with price elasticities of demand for the product, and the seller must be able to prevent customers from reselling the product.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

39. (B) marginal cost (MC) curve above the average variable cost (AVC) curve.

Explanation

The short-run supply curve for a firm under perfect competition is the segment of its MC curve above the AVC curve.

(Study Session 3, Module 9.1, LOS 9.c)

Related Material

SchweserNotes - Book 1

40. (A) generate zero economic profit.

Explanation

A firm operating under conditions of perfect competition will generate zero economic profit in the long run. Firms may generate economic profits in the short run, but due to the lack of entry barriers, new competitors will enter the market and prices will adjust downward until economic profits become zero. Firms in the industry are price takers (i.e., each firm faces a perfectly elastic demand curve).

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

41. (B) Regulation shifts industry demand and increases prices.

Explanation

Regulation is not associated with a shift in industry demand.

(Study Session 3, Module 9.4, LOS 9.b)

Related Material

SchweserNotes - Book 1

42. (C) **price will equal minimum average total cost.**

Explanation

After some firms in an industry adopt a technological change, the existing firms that use the old technology will experience losses and either adopt the technology or exit the industry. Long-run equilibrium with price equal to minimum average total cost for the new technology will be established.

(Study Session 3, Module 9.1, LOS 9.e)

Related Material

SchweserNotes - Book 1

43. (C) **a greater amount.**

Explanation

The consumer surplus decreases by a greater amount than the producer surplus increases, with the difference representing a deadweight loss.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

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44. (C) **Perfect competition.**

Explanation

Firms' demand curves are perfectly elastic (horizontal) in a market characterized as perfect competition, so that marginal revenue is equal to price and a firm maximizes profit by producing the output quantity at which marginal cost equals price. In monopoly markets or under monopolistic competition, firm demand curves are downward sloping so that marginal revenue is less than price.

For Further Reference:

(Study Session 3, Module 9.4, LOS 9.f)

CFA® Program Curriculum, Volume 2, page 77

Related Material

SchweserNotes - Book 1

45. (B) **Relatively small economies of scale.**

Explanation

Oligopolies have large economies of scale and interdependence among competitors.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

46. (B) **less output, and the sum of the consumer surplus and the producer surplus will be reduced.**

Explanation

A monopolist, faced with the same demand curve that would exist under perfect competition, will decrease output to the point that marginal revenue equals marginal cost. This will have the effect of reducing the sum of the consumer surplus and the producer surplus, relative to what they would have been under perfect competition. However, the size of the producer surplus increases on an absolute basis at the expense of the consumer surplus.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

47. (A) **Marginal revenue is greater than marginal cost.**

Explanation

A firm will continue to expand output as long as it is possible to earn an economic profit. In other words, a firm will expand output as long as marginal revenue is greater than marginal cost.

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

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48. (C) **price discrimination.**

Explanation

The practice of charging different consumers different prices for the same product or service is called price discrimination.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

49. (B) **greater than marginal cost.**

Explanation

A purely competitive firm will tend to expand its output so long as the market price (marginal revenue) is greater than marginal cost. In the short term and long term, profit is maximized when P = MC.

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

50. (A) **Allocative Efficiency.**

Explanation

The other barriers to entry are government licensing and legal barriers such as utilities are given the exclusive right to supply electricity in certain areas.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

51. (C) **equals marginal costs (MC) and charging a price based on the demand curve.**

Explanation

Price searchers maximize profits by producing an amount of output where MR equals MC and charging a price based on the demand curve. In the short run, profits or losses occur depending upon where the individual firm's ATC curve is in relationship to the demand curve. In the long run, economic profits are zero due to the low barriers to entry. Important note for the test: regardless of whether a firm is a price taker, price searcher, monopoly, or oligopoly, all firms will seek to maximize profits and want to produce the output where marginal revenue equals marginal cost.

(Study Session 3, Module 9.2, LOS 9.b)

Related Material

SchweserNotes - Book 1

52. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

53. (C) **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.

(Study Session 3, Module 9.2, LOS 9.h)

Related Material

SchweserNotes - Book 1

54. (B) **MR = MC and the price of the product will be determined by the demand curve.**

Explanation

A monopolist will expand production until MR = MC. The demand curve lies above the intersection of the MR and MC curve and the price charged is the price on the demand curve for the output where MR = MC.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

55. (B) **revenue is greater than marginal cost.**

Explanation

All firms will continue to expand production until marginal revenue = marginal cost.

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

56. (B) **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.

(Study Session 3, Module 9.4, LOS 9.f)

Related Material

SchweserNotes - Book 1

57. (A) **slopes upward to the right.**

Explanation

The short-run supply curve for a purely competitive market slopes upward to the right. This reflects the fact that firms in the industry will produce more when the price rises.

(Study Session 3, Module 9.1, LOS 9.c)

Related Material

SchweserNotes - Book 1

58. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

59. (B) **Monopolistic competition is at least as efficient as perfect competition.**

Explanation

The efficiency of monopolistic competition is unclear. Consumers may make better purchasing decisions due to the information content of brand name promotion and advertising. However, there are those that argue that the increased cost of advertising and sales is not justified by the benefits of these activities and represent inefficient use of resources.

(Study Session 3, Module 9.2, LOS 9.b)

Related Material

SchweserNotes - Book 1

60. (C) **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.

(Study Session 3, Module 9.4, LOS 9.f)

Related Material

SchweserNotes - Book 1

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61. (B) **Market price is greater than marginal cost.**

Explanation

A perfectly competitive firm will tend to expand its output so long as the market price is greater than marginal cost since price and marginal revenue are equal. In the short term and long term, profit is maximized when marginal cost and marginal revenue are equal (i.e., MC = M R).

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

62. (C) **only one is correct.**

Explanation

With a price-fixing agreement, producers in an oligopoly market restrict output to increase price and joint profits just as a monopoly producer does. Such agreements decrease economic efficiency. When these agreements are violated, quantity produced increases, increasing economic efficiency. Therefore Statement 1 is accurate.

The efficiency of monopolistic competition is not clear. While increased opportunity cost is associated with the intensive marketing and advertising activities that are characteristic of monopolistic competition, consumers definitely benefit from these selling activities because they receive information that often

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enables them to make better purchasing decisions. Hence the advertising and marketing costs may be more than the efficient amount, but do not represent a deadweight loss. Therefore Statement 2 is inaccurate.

(Study Session 3, Module 9.3, LOS 9.d)

Related Material

SchweserNotes - Book 1

63. (B) 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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

64. (A) 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.

(Study Session 3, Module 9.2, LOS 9.h)

Related Material

SchweserNotes - Book 1

65. (C) only one of these statements is accurate.

Explanation

Statement 1 is incorrect because the sum of consumer and producer surpluses is maximized under perfect competition when marginal benefit and marginal cost are equal, or equivalently, where the marginal cost curve intersects the demand curve. Monopolies, however, produce a quantity that is less than the quantity where marginal cost equals marginal benefit, so the sum of producer and consumer surpluses is not maximized.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

66. (C) **sum of the quantities at each price along the marginal cost curves for all firms in a given industry.**

Explanation

The short-run market supply curve is the horizontal sum of the marginal cost curves for all firms in a given industry. It is the sum of all quantities from all firms at each price along each firm's marginal cost curve.

(Study Session 3, Module 9.1, LOS 9.c)

Related Material

SchweserNotes - Book 1

67. (C) **above the average variable cost (AVC) curve.**

Explanation

The short-run supply curve for a firm is its MC curve above the AVC curve. Price takers will produce where price (P) equals MC. At prices below the AVC curve the firm will not be able to remain in operation. Above the ATC curve the firm is making economic profits and will continue to expand production along the MC curve.

(Study Session 3, Module 9.1, LOS 9.c)

Related Material

SchweserNotes - Book 1

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68. (B) **producing at the output level where marginal revenue equals marginal cost and charging a price on the demand curve that corresponds to the output rate.**

Explanation

A monopolist will maximize profits by producing at the output level where marginal revenue equals marginal cost and charging a price on the demand curve that corresponds to the output rate.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

69 (B) **price.**

Explanation.

When a firm operates under conditions of perfect competition, marginal revenue always equals price. This is because, in perfect competition, price is constant (a horizontal line) so that marginal revenue is constant.

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

70. (C) **the market price is greater than the marginal cost.**

Explanation

A competitive firm faces a flat demand curve. This means the price is constant and the marginal revenue line is flat. A firm will continue to produce as long as MR > MC, so the competitive firm will produce as long as P > MC. It will stop when MC = MR = P.

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

71. (B) **new competitors will enter the industry.**

Explanation

Monopolistic competition describes a price searcher market with low barriers to entry. Because new competitors can enter the industry easily, economic profits cannot be sustained in the long run.

(Study Session 3, Module 9.2, LOS 9.b)

Related Material

SchweserNotes - Book 1

72. (C) **A monopolist will always be able to earn economic profit.**

Explanation

Monopolists maximize profit when MR = MC. If the ATC curve lies above the demand curve, monopolists will lose money.

(Study Session 3, Module 9.4, LOS 9.b)

Related Material

SchweserNotes - Book 1

73. (A) **less elastic because competitors will decrease their prices.**

Explanation

The kinked demand model of oligopoly behavior assumes that a firm's competitors will not match a price increase, but will match the price of a competitor that offers a lower price. The result is a demand curve that is more elastic above the current price, but less elastic below it.

(Study Session 3, Module 9.3, LOS 9.d)

Related Material

SchweserNotes - Book 1

74. (C) **Availability of substitutes.**

Explanation

The demand for products from firms competing in monopolistic competition is relatively elastic due to the availability of close substitutes. If a firm increases its product price, it will lose customers to firms selling slightly differentiated products at lower prices.

(Study Session 3, Module 9.2, LOS 9.b)

Related Material

SchweserNotes - Book 1

75. (B) Legal barriers to entry into the industry.

Explanation

An example of an industry with legal barriers is utility firms, which are granted exclusive rights to supply electricity in certain areas.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

76. (C) a small number of independent sellers.

Explanation

In monopolistic competition, there is a large, not small, number of independent sellers. (Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

77. (A) zero economic profits.

Explanation

Zero economic profits means the firm is earning a normal rate of return and a positive accounting profit. Since perfectly competitive industries have no barriers to entry, economic profits cannot be positive in the long run. If the industry produces economic profits in the short run, new competitors will enter until economic profits are reduced to zero.

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

SchweserNotes - Book 1

78. (B) A monopolist's optimal production quantity is at the point where marginal revenue equals marginal cost.

Explanation

All firms maximize profits where MR = MC. Because of a downward-sloping demand curve and high barriers to entry, monopolists can charge a price higher than MC. Like other price searchers, monopolists take price from the demand curve (at the quantity where MR = MC).

Both remaining statements are false. A monopoly structure is characterized by a well-defined product for which there are no good substitutes. Monopolists want to maximize profits, not price.

(Study Session 3, Module 9.4, LOS 9.b)

Related Material

SchweserNotes - Book 1

79. (A) **only one is correct.**

Explanation

Comment 1 is incorrect because an increase in industry demand will increase equilibrium price and output. At the higher price, firms will earn positive economic profits in the short run because the higher price will exceed average total cost. Over the long run, however, new firms will enter the market to exploit the positive economic profits, causing prices to decline until all firms are again earning zero economic profit.

(Study Session 3, Module 9.1, LOS 9.e)

Related Material

SchweserNotes - Book 1

80. (B) **increase their individual share of the joint profit.**

Explanation

Colluding restricts output and puts upward pressure on price, but cheating actually increases output and ultimately, if enough cheating occurs, puts downward pressure on the price. Colluders cheat to increase their share of the profits.

For Further Reference:

(Study Session 3, Module 9.3, LOS 9.d)

CFA® Program Curriculum, Volume 2, page 77

Related Material

SchweserNotes - Book 1

81. (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.

(Study Session 3, Module 9.2, LOS 9.h)

Related Material

SchweserNotes - Book 1

82. (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.

(Study Session 3, Module 9.4, LOS 9.g)

Related Material

SchweserNotes - Book 1

83. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

84. (B) **Price controls.**

Explanation

Often barriers to entry are government licensing and legal barriers.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

85. (C) **high barriers to entry.**

Explanation

Monopolistic competition has low barriers to entry.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

86. (B) **A monopolist, like any other profit-maximizing firm, will sell at the output level where marginal revenue equals marginal cost.**

Explanation

The demand curve for monopolists slopes downward to the right reflecting the fact that a higher price results in lower demand. Monopolists maximize profits by expanding output until marginal revenue equals marginal cost.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

87. (A) **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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

88. (B) **horizontal.**

Explanation

In a market of perfect competition an individual firm's demand schedule is perfectly elastic (horizontal).

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

89. (B) **the average total cost of production continually declines with increased output.**

Explanation

A monopoly situation in which the average total cost of production continually declines with increased output is called a natural monopoly.

(Study Session 3, Module 9.4, LOS 9.b)

Related Material

SchweserNotes - Book 1

90. (A) **a differentiated product.**

Explanation

In a perfectly competitive market all the firms produce a homogeneous product.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

91. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

92. (C) **Differentiated products.**

Explanation

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

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

93. (A) marginal revenue is greater than marginal cost.

Explanation

The optimum behavior of all firms is to produce until the point where MR = MC. So, the monopolist can increase total profit by increasing production as long as marginal revenue is greater than marginal costs.

(Study Session 3, Module 9.4, LOS 9.b)

Related Material

SchweserNotes - Book 1

94. (A) The ability to use price discrimination.

Explanation

High entry barriers due to economies of scale, government licensing, resource controls, and patents prevent new firms from entering the market to exploit positive economic profit opportunities.

(Study Session 3, Module 9.4, LOS 9.b)

Related Material

SchweserNotes - Book 1

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95. (C) Perfect competition.

Explanation

In a perfect competition price is equal to marginal cost and marginal revenue when a firm is producing at its profit maximizing quantity. In monopolies and markets characterized by monopolistic competition, price is greater than marginal cost and marginal revenue when producing at the profit maximizing quantity.

(Study Session 3, Module 9.4, LOS 9.f)

Related Material

SchweserNotes - Book 1

96. (C) the profit maximizing output level for monopolists occurs at lower levels of production than for purely competitive firms.

Explanation

All firms maximize profits at the point where marginal revenue equal marginal cost. For a monopolist, this occurs at a lower output level than for a purely competitive firm, because the monopolist has a marginal revenue curve that falls below the demand curve, while the purely competitive firm has a marginal revenue curve that lies along the demand curve.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1

97. (C) Utilities.

Explanation

With a natural monopoly average costs of production will be lowest when a single large firm produces the entire output demanded such as a utility.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

98. (B) result in a higher price, less consumer surplus, and more producer surplus.

Explanation

A firm in a monopoly position will reduce output to where MC = MR, which will increase price, decrease consumer surplus, and increase producer surplus. A marginal cost pricing strategy refers to regulation which requires a firm to set price equal to marginal cost.

For Further Reference:

(Study Session 3, Module 9.4, LOS 9.d)

CFA® Program Curriculum, Volume 2, page 77

Related Material

SchweserNotes - Book 1

J.K. SHAH® ONLINE

99. (A) zero economic profits.

Explanation

An industry with low barriers to entry will produce zero economic profits in the long run.

(Study Session 3, Module 9.2, LOS 9.b)

Related Material

SchweserNotes - Book 1

100. (C) only one is correct.

Explanation

Statement 1 is incorrect because the kinked demand curve model contends that each firm in oligopoly competition believes that an increase (not decrease) in its price will not be followed by the competition, but a decrease (not increase) in price will. Each firm believes that it faces a demand curve that is more elastic (flatter) above a given price, i.e., the kink, than it is below the given price.

(Study Session 3, Module 9.3, LOS 9.d)

Related Material

SchweserNotes - Book 1

101. (C) decrease, and Wudden Floss will sell nothing.

Explanation

Papyrus Company is an example of a price searcher engaged in monopolistic competition (low barriers to entry). Thus, the company faces a downward sloping demand curve and highly elastic demand. An increase in price will result in fewer

units sold. Wudden Floss is an example of a price taker operating in a purely competitive market. Thus, the firm faces a horizontal demand curve and perfectly elastic demand. An increase in price will result in no units sold. In a purely competitive market, the firm must take the market price.
(Study Session 3, Module 9.2, LOS 9.h)

Related Material

SchweserNotes - Book 1

102. (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.
(Study Session 3, Module 9.4, LOS 9.g)

Related Material

SchweserNotes - Book 1

103. (C) **the market demand curve intersects the average total cost curve.**

Explanation

When a regulatory agency requires a monopolist to use average cost pricing, the intent is to price the product where the average total cost curve intersects the market demand curve. There are problems in using this method, e.g., determining exactly what the average total cost really is.
(Study Session 3, Module 9.4, LOS 9.b)

Related Material

SchweserNotes - Book 1

104. (A) **marginal cost curve above average variable cost.**

Explanation

The supply curve for a firm under perfect competition is its marginal cost curve above average variable cost. As long as price exceeds AVC, the firm will produce up to the quantity where MC = Price, which is also MR in this case.

For Further Reference:

(Study Session 3, Module 9.1, LOS 9.c)
CFA® Program Curriculum, Volume 2, page 77

Related Material

SchweserNotes - Book 1

105. (B) **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.
(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

106. (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.

(Study Session 3, Module 9.2, LOS 9.h)

Related Material

SchweserNotes - Book 1

107. (B) 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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

108. (A) more elastic because competitors will not increase their prices.

Explanation

The kinked demand model of oligopoly behavior assumes that a firm's competitors will not match a price increase, but will match the price of a competitor that offers a lower price. The result is a demand curve that is more elastic above the current price, but less elastic below it.

(Study Session 3, Module 9.3, LOS 9.d)

Related Material

SchweserNotes - Book 1

109. (C) and quantity will increase.

Explanation

If the market demand for a product increases in a competitive market, then the equilibrium price and equilibrium quantity supplied will increase.

(Study Session 3, Module 9.1, LOS 9.e)

Related Material

SchweserNotes - Book 1

110. (C) 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.

For Further Reference:

(Study Session 3, Module 9.1, LOS 9.a)

CFA® Program Curriculum, Volume 2, page 63

Related Material

SchweserNotes - Book 1

111. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

112. (B) **If a monopolist produces the quantity of output for which marginal cost equals marginal revenue, it will earn an economic profit.**

Explanation

Monopolists expand output until marginal revenue equals marginal cost. However, to realize an economic profit, the demand curve must lie above the firm's average total cost curve at that quantity.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

Schweser Notes - Book 1

113. (B) **the short run but not in the long run.**

Explanation

In a market characterized by monopolistic competition, companies can earn positive economic profits in the short run if the price of their product is greater than the average total cost of producing it. In the long run, because barriers to entry are low, economic profits will attract new entrants. Additional producers will drive the price lower until price equals average total cost, economic profit is zero, and new competitors no longer have an incentive to enter the market.

(Study Session 3, Module 9.2, LOS 9.b)

Related Material

SchweserNotes - Book 1

114. (B) **MC curve.**

Explanation

The short-run supply curve for a firm in a perfectly competitive market is equal to the firm's MC curve. A price taker will maximize profits when it produces the output level where P = MC. As price rises, its point of intersection with the MC curve indicates optimal production.

(Study Session 3, Module 9.1, LOS 9.c)

Related Material

SchweserNotes - Book 1

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115. (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.

(Study Session 3, Module 9.1, LOS 9.a)

Related Material

SchweserNotes - Book 1

116. (C) **Two different costs of production.**

Explanation

Price discrimination works when the seller (discriminator) faces a downward-sloping demand curve and has at least two customer groups each having different price elasticities of demand for the product. It is also necessary that trading does not occur between customer groups so that the customers paying a lower price cannot resell the product to the customers paying a higher price.

(Study Session 3, Module 9.4, LOS 9.f)

Related Material

SchweserNotes - Book 1

117. (C) **the market price is equal to its marginal cost.**

Explanation

A perfectly competitive firm will tend to expand its output so long as the market price is greater than marginal cost. In the short term and long term, profit is maximized when P = MC.

(Study Session 3, Module 9.1, LOS 9.b)

Related Material

Schweser Notes - Book 1

118. (C) **Two different costs of production.**

Explanation

Price discrimination works when the seller (discriminator) faces a downward-sloping demand curve and has at least two customer groups each having different price elasticities for the product. It is also necessary that trading does not occur between customer groups so that the customers paying a lower price cannot resell the product to the customers paying a higher price.

(Study Session 3, Module 9.4, LOS 9.d)

Related Material

SchweserNotes - Book 1