Chapter 15
Monopolistic Competition

15.1 What Is Monopolistic Competition?

1) Monopolistic competition is identified by
   A) many firms producing a slightly differentiated product.
   B) many firms producing identical goods.
   C) one firm producing a unique good.
   D) a few firms producing a slightly differentiated product.
   E) large barriers to entry.

Answer: A

Topic: Monopolistic competition, definition
Skill: Level 1: Definition
Objective: Checkpoint 15.1
Author: WM

2) What does monopolistic competition have in common with perfect competition?
   A) a large number of firms and freedom of entry and exit
   B) a standardized product
   C) product differentiation
   D) the ability to earn an economic profit in the long run
   E) barriers to exit but no barriers to entry

Answer: A

Topic: Monopolistic competition, definition
Skill: Level 1: Definition
Objective: Checkpoint 15.1
Author: PH
3) What does monopolistic competition have in common with monopoly?
   A) a large number of firms
   B) a downward-sloping demand curve
   C) the ability to collude with respect to price
   D) mutual interdependence
   E) barriers to entry

   Answer: B

   Topic: Monopolistic competition, definition
   Skill: Level 1: Definition
   Objective: Checkpoint 15.1
   Author: PH

4) If a large number of firms are competing, the market could be
   A) perfect competition or monopolistic competition.
   B) perfect competition or monopoly.
   C) monopolistic competition or oligopoly.
   D) monopolistic competition or monopoly.
   E) oligopoly or monopoly.

   Answer: A

   Topic: Monopolistic competition, definition
   Skill: Level 1: Definition
   Objective: Checkpoint 15.1
   Author: SA

5) In both monopolistic competition and perfect competition,
   A) firms sell identical products.
   B) there is easy entry and exit.
   C) firms are price takers.
   D) firms face horizontal demand curves.
   E) the marginal revenue curve and the demand curve are the same.

   Answer: B

   Topic: Monopolistic competition, definition
   Skill: Level 1: Definition
   Objective: Checkpoint 15.1
   Author: SA
6) Which of the following is NOT a characteristic of monopolistic competition?
   A) few firms compete
   B) easy entry and exit
   C) small market share
   D) differentiated product
   E) no barriers to entry or exit

Answer: A

7) If substantial barriers to entry exist, then
   A) firms are free to enter the market.
   B) the remaining firms are perfectly competitive.
   C) the market is not monopolistic competition.
   D) firms take the market price as given.
   E) the market might be monopolistic competition.

Answer: C

8) A firm in monopolistic competition has ____ over its price and ____ over the market average price.
   A) power; power
   B) power; no power
   C) no power; power
   D) no power; no power
   E) power only in the long run; no power

Answer: B
9) Which of the following is a characteristic of monopolistic competition?
   A) one seller serving the entire market
   B) each firm sells an identical product
   C) firms do not compete on a product's quality, price, and marketing
   D) firms are free to enter and exit the market
   E) a small number of sellers are in the market

   Answer: D
   Topic: Monopolistic competition, definition
   Skill: Level 1: Definition
   Objective: Checkpoint 15.1
   Author: JC

10) The women's dress industry is monopolistically competitive because each firm has
   A) a large market share.
   B) a very small market share.
   C) no market share.
   D) no competition for their market share.
   E) struck a deal with the many other firms about what price will be charged.

   Answer: B
   Topic: Monopolistic competition, definition
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: JC

11) The market for personal trainers in Cleveland is monopolistically competitive. This fact means that each trainer does not pay attention to the
   A) market price for personal training services.
   B) demand for personal training services.
   C) cost of personal training services.
   D) actions of any one individual competitor.
   E) barrier to entry that protects the trainer's economic profit.

   Answer: D
   Topic: Monopolistic competition, definition
   Skill: Level 1: Definition
   Objective: Checkpoint 15.1
   Author: JC
12) It would be impossible for members of the fast-food industry to collude to fix prices because
   A) there are too many fast-food firms in the market.
   B) collusion is illegal.
   C) there are not enough fast-food firms in the market.
   D) the price of fast-food is too low.
   E) demanders would not buy from firms that collude.

   Answer: A

   Topic: Monopolistic competition, definition
   Skill: Level 1: Definition
   Objective: Checkpoint 15.1
   Author: JC

13) Because of the number of firms in monopolistic competition
   A) each firm has a large market share.
   B) it is possible for the firms to collude.
   C) no one firm can dominate the market.
   D) one firm has the ability to dictate market conditions.
   E) each firm must carefully monitor what its competitors do.

   Answer: C

   Topic: Monopolistic competition, definition
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: WM

14) The freedom of entry and exit in monopolistic competition means that firms
   A) enter the market when economic losses are being suffered.
   B) exit the market when economic profits are being earned.
   C) enter the market when normal profits are being earned.
   D) can enter a market to compete for economic profits and leave when economic losses are being incurred.
   E) find it easy to permanently earn an economic profit.

   Answer: D

   Topic: Monopolistic competition, definition
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: PH
15) An example of a firm in monopolistic competition is
A) your local water company.
B) the sole cable television company.
C) the many Chinese restaurants in San Francisco.
D) Kansas Power and Light, the sole provider of electricity in Kansas City.
E) Shiniq, a wheat farmer

Answer: C

Topic: Monopolistic competition, definition
Skill: Level 2: Using definitions
Objective: Checkpoint 15.1
Author: SA

16) Product differentiation involves making a product that is
A) slightly different from the products of competing firms.
B) no different than the products of competing firms.
C) very different from the products of competing firms.
D) completely different from the products of competing firms.
E) cheaper than the products of competing firms.

Answer: A

Topic: Product differentiation
Skill: Level 1: Definition
Objective: Checkpoint 15.1
Author: JC

17) Product differentiation means
A) firms sell products that are very dissimilar.
B) products sold by different firms are slightly different.
C) charging a higher price to consumers with high willingness to pay.
D) charging a lower price to consumers with low willingness to pay.
E) that a single firm sells many different types of products.

Answer: B

Topic: Product differentiation
Skill: Level 1: Definition
Objective: Checkpoint 15.1
Author: SA
18) The best example of a differentiated product is
   A) beets in the local supermarket.
   B) diamonds.
   C) airlines.
   D) running shoes.
   E) electricity.

Answer: D

Topic: Product differentiation
Skill: Level 2: Using definitions
Objective: Checkpoint 15.1
Author: WM

19) Which of the following markets is characterized by product differentiation?
   A) cauliflower
   B) peaches
   C) plums
   D) soda
   E) electricity

Answer: D

Topic: Product differentiation
Skill: Level 2: Using definitions
Objective: Checkpoint 15.1
Author: fC

20) Because of product differentiation, firms
   A) do not have to compete because their products are unique.
   B) cannot compete on price.
   C) can compete on the basis of quality.
   D) are unable to compete by using advertising.
   E) must compete on only price.

Answer: C

Topic: Product differentiation
Skill: Level 2: Using definitions
Objective: Checkpoint 15.1
Author: WM
21) Product differentiation allows a firm to compete with another firm on the basis of
   A) efficiency.
   B) elasticity.
   C) quality, price, and marketing.
   D) the level of output and the price.
   E) demand.

   Answer: C

   Topic: Product differentiation
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: PH

22) A high-quality manufacturer in monopolistic competition charges
   A) higher prices and advertises quality differences.
   B) lower prices and advertises price differences.
   C) lower prices and advertises quality differences.
   D) higher prices and advertises price differences.
   E) the same price as low-quality manufacturers but advertises quality differences.

   Answer: A

   Topic: Product differentiation
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: JC

23) Concentration ratios
   A) refer to the concentration of customers in a certain area.
   B) measure whether the market is dominated by a small number of firms.
   C) measure the concentration of a large number of firms in a certain area.
   D) have high values for perfect competition.
   E) measure how concentrated a firm’s sales are among certain types of goods.

   Answer: B

   Topic: Four-firm concentration ratio
   Skill: Level 1: Definition
   Objective: Checkpoint 15.1
   Author: SA
24) The four-firm concentration ratio is the percentage of the value of total revenue accounted for by the
   A) 4 largest firms in an industry.
   B) 4 smallest firms in an industry.
   C) 50 smallest firms in an industry.
   D) 50 largest firms in an industry.
   E) 4 middle-sized firms in an industry.
   Answer: A
   Topic: Four-firm concentration ratio
   Skill: Level 1: Definition
   Objective: Checkpoint 15.1
   Author: WM

25) The four-firm concentration ratio is the percentage of ____ accounted for by the four largest firms in an industry.
   A) profit
   B) supply
   C) total revenue
   D) total cost
   E) marginal cost
   Answer: C
   Topic: Four-firm concentration ratio
   Skill: Level 1: Definition
   Objective: Checkpoint 15.1
   Author: JC

26) If the four-firm concentration ratio of an industry is
   A) near 100, the industry is considered very competitive.
   B) less than 40, the industry is considered an oligopoly.
   C) over 40, the industry is considered monopolistic competition.
   D) less than 40, the industry is considered monopolistic competition.
   E) close to 0, the industry is considered a monopoly.
   Answer: D
   Topic: Four-firm concentration ratio
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: WM
27) Which of the following is correct?
   A) Monopoly has a four-firm concentration ratio of 100.
   B) Perfect competition has a four-firm concentration ratio near zero.
   C) Monopolistic competition has a four-firm concentration ratio of more than 40.
   D) Both answers A and B are correct.
   E) Both answers A and C are correct.

   Answer: D
   
   Topic: Four-firm concentration ratio
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: SA

28) An industry is considered monopolistic competition if the four-firm concentration ratio
   A) exceeds 60 percent.
   B) is less than 100 percent.
   C) is less than 40 percent.
   D) exceeds 33 percent.
   E) is between 90 percent and 100 percent.

   Answer: C
   
   Topic: Four-firm concentration ratio
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: PH

29) If the four-firm concentration ratio equals 0.1 percent for the Mexican tomato industry, then
   this industry is best characterized as
   A) a monopoly.
   B) monopolistic competition.
   C) an oligopoly.
   D) perfect competition.
   E) either a monopoly or monopolistic competition.

   Answer: D
   
   Topic: Four-firm concentration ratio
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: JC
30) If the four-firm concentration ratio for the market for diapers is 73 percent, then this
industry is best characterized as
   A) a monopoly.
   B) monopolistic competition.
   C) an oligopoly.
   D) perfect competition.
   E) either a monopoly or monopolistic competition.

Answer: C

31) The indices used to measure competition within a market and identify monopolistic
competition include the
   A) Consumer Price Index.
   B) Dow Jones Industrial Average.
   C) Gates-Buffet Index.
   D) Herfindahl-Hirschman Index.
   E) Competitive Market Index.

Answer: D

32) The Herfindahl-Hirschman Index measures market concentration in an industry by
summing the square of the percentage market shares for
   A) the 4 largest firms.
   B) the 50 smallest firms.
   C) the 4 smallest firms.
   D) the 50 largest firms.
   E) all firms in the market.

Answer: D
33) The Herfindahl–Hirschman Index is the ____ of the percentage market share of each firm summed over the largest 50 firms in a market.
   A) sum
   B) square
   C) square root
   D) cube
   E) negative
   Answer: B
   Topic: Herfindahl–Hirschman Index
   Skill: Level 1: Definition
   Objective: Checkpoint 15.1
   Author: JC

34) If the Herfindahl–Hirschman Index in the market for instant cameras equaled 10,000 in the 1990s, then at that time the instant camera industry was best characterized as
   A) a monopoly.
   B) monopolistic competition.
   C) an oligopoly.
   D) perfect competition.
   E) either a monopoly or monopolistic competition.
   Answer: A
   Topic: Herfindahl–Hirschman Index
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: JC

35) A market in which the Herfindahl–Hirschman Index lies between 1,000 and 1,800 is considered to be
   A) moderately competitive.
   B) totally competitive.
   C) an oligopoly.
   D) a duopoly.
   E) either a monopoly or monopolistic competition.
   Answer: A
   Topic: Herfindahl–Hirschman Index
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.1
   Author: JC
36) A market in which the Herfindahl–Hirschman Index exceeds 1,800 is considered to be
   A) competitive.
   B) not competitive.
   C) moderately competitive.
   D) purely competitive.
   E) either a monopoly or monopolistic competition.

Answer: B

Topic: Herfindahl–Hirschman Index
Skill: Level 2: Using definitions
Objective: Checkpoint 15.1
Author: JC

37) When the Herfindahl–Hirschman Index for an industry is
   A) very small, the industry is perfectly competitive.
   B) very large, the industry is perfectly competitive.
   C) 10,000, the industry is perfectly competitive.
   D) very small, the industry is a monopoly.
   E) above 5,000 the industry is considered not very competitive and when it is below 5,000
      the industry is considered very competitive.

Answer: A

Topic: Herfindahl–Hirschman Index
Skill: Level 2: Using definitions
Objective: Checkpoint 15.1
Author: WM

38) If there are four firms in an industry with market shares of 50 percent, 40 percent, 5 percent,
and 5 percent, the Herfindahl–Hirschman Index is
   A) 100.
   B) 4150.
   C) 25.
   D) 3450.
   E) undefined because there are not 50 firms in the industry.

Answer: B

Topic: Herfindahl–Hirschman Index
Skill: Level 3: Using models
Objective: Checkpoint 15.1
Author: SA
39) The U.S. Justice Department
   A) scrutinizes any merger of firms in a market in which the four-firm concentration exceeds 25 percent.
   B) uses only the Herfindahl–Hirschman Index when considering whether to challenge a merger.
   C) is likely to challenge a merger if the Herfindahl–Hirschman Index exceeds 1800.
   D) Answers A and B are correct.
   E) Answers B and C are correct.

   Answer: C
   Topic: Herfindahl–Hirschman Index
   Skill: Level 3: Using models
   Objective: Checkpoint 15.1
   Author: SA

15.2 Output and Price Decisions

1) For the monopolistically competitive firm, the demand curve
   A) is a horizontal line.
   B) has a positive slope.
   C) is vertical.
   D) has a negative slope.
   E) is the same as the marginal revenue curve.

   Answer: D
   Topic: Monopolistic competition
   Skill: Level 1: Definition
   Objective: Checkpoint 15.2
   Author: JC

2) The marginal revenue curve facing a monopolistically competitive firm
   A) lies on its demand curve.
   B) lies above its demand curve.
   C) lies below its demand curve.
   D) is equal to its price curve.
   E) is parallel to its demand curve.

   Answer: C
   Topic: Monopolistic competition
   Skill: Level 1: Definition
   Objective: Checkpoint 15.2
   Author: PH
3) When a firm maximizes its profit, which of the following is correct for firms in monopolistic competition and perfect competition?
   A) \( P = MC \) for both types of firms.
   B) \( P = MC = MR \) for firms in perfect competition and \( P > MC = MR \) for firms in monopolistic competition.
   C) \( MC = MR \) for firms in perfect competition and \( MR > MC \) for firms in monopolistic competition.
   D) \( P > MC = MR \) for firms in both perfect competition and monopolistic competition.
   E) \( P = ATC \) always for firms in both perfect competition and monopolistic competition.

Answer: B

Topic: Monopolistic competition
Skill: Level 3: Using models
Objective: Checkpoint 15.2
Author: SA

4) A firm in monopolistic competition makes its decisions on quantity and price by
   A) taking price as given from the market and producing where \( MR = MC \).
   B) taking both price and quantity as given from the market.
   C) producing where \( MR = MC \) and setting the price for this quantity from the demand curve.
   D) taking quantity as given from the market and setting the price for this quantity from the demand curve.
   E) producing where \( MR = MC \) and setting the price so that \( P = MR = MC \).

Answer: C

Topic: Monopolistic competition, output and price
Skill: Level 2: Using definitions
Objective: Checkpoint 15.2
Author: WM

5) To maximize profit, a firm in monopolistic competition will produce the quantity where marginal revenue
   A) is greater than marginal cost.
   B) equals zero.
   C) is less than marginal cost.
   D) equals marginal cost.
   E) equals average total cost.

Answer: D

Topic: Monopolistic competition, output and price
Skill: Level 2: Using definitions
Objective: Checkpoint 15.2
Author: JC
6) Kevin owns a personal training gymnasium in Orlando. The above figure shows the demand and cost curves for his firm, which competes in a monopolistically competitive market. Kevin will train how many clients per day?

A) 4
B) 6
C) 10
D) between 2 and 4
E) None of the above answers is correct.

Answer: A

Topic: Monopolistic competition, output and price
Skill: Level 3: Using models
Objective: Checkpoint 15.2
Author: JC
7) Kevin owns a personal training gymnasium in Orlando. The above figure shows the demand and cost curves for his firm, which competes in a monopolistically competitive market. What price will Kevin charge per session?

A) $100  
B) $60  
C) $40  
D) $20  
E) $80

Answer: B

Topic: Monopolistic competition, output and price  
Skill: Level 3: Using models  
Objective: Checkpoint 15.2  
Author: JC

8) Kevin owns a personal training gymnasium in Orlando. The above figure shows the demand and cost curves for his firm, which competes in a monopolistically competitive market. If Kevin trains 5 clients per day, he will _____ his profit and will _____.

A) maximize; earn normal profit  
B) not maximize; earn a normal profit anyway  
C) maximize; earn an economic profit  
D) not maximize; earn an economic profit anyway  
E) not maximize; incur an economic loss

Answer: D

Topic: Monopolistic competition, output and price  
Skill: Level 3: Using models  
Objective: Checkpoint 15.2  
Author: JC

9) The major difference between monopolistic competition and monopoly is

A) monopoly is a price setter and a firm in monopolistic competition is a price taker.  
B) only a monopoly can earn an economic profit in the long run.  
C) only a firm in monopolistic competition can earn an economic profit in the short run.  
D) how the quantity of output is determined.  
E) only firms in monopolistic competition are protected by barriers to entry.

Answer: B

Topic: Monopolistic competition, long run  
Skill: Level 2: Using definitions  
Objective: Checkpoint 15.2  
Author: WM
10) If a firm in monopolistic competition is earning an economic profit,
   A) it is in the long run.
   B) other firms can enter the market.
   C) it can do so because it is "monopolistic" and other firms will have a hard time
      competing with it.
   D) its average cost must exceed its marginal cost.
   E) The question errs because firms in monopolistic competition cannot earn an economic
      profit.
   Answer: B
   Topic: Monopolistic competition, long run
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.2
   Author: SA

11) In monopolistic competition there are ____ barriers to entry, so therefore in the long run,
    economic profit ____.
    A) no; is substantial
    B) no; equals zero
    C) many; equals zero
    D) many; is substantial
    E) many; might be earned depending on the degree of product differentiation
    Answer: B
    Topic: Monopolistic competition, long run
    Skill: Level 2: Using definitions
    Objective: Checkpoint 15.2
    Author: JC

12) In monopolistic competition, there are ____ barriers to entry and so firms in monopolistic
    competition ____ earn an economic profit in the long run.
    A) high; can
    B) high; cannot
    C) no; can
    D) no; cannot
    E) sometimes; can sometimes
    Answer: D
    Topic: Monopolistic competition, long run
    Skill: Level 2: Using definitions
    Objective: Checkpoint 15.2
    Author: WM
13) Entry and exit continue in monopolistic competition until the remaining firms are
   A) earning economic profits.
   B) incurring economic losses.
   C) earning less than normal profits.
   D) earning zero economic profits, that is, earning a normal profit.
   E) producing the normal amount of product differentiation.

   Answer: D

   Topic: Monopolistic competition, long run
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.2
   Author: PH

14) A firm in monopolistic competition is similar to a firm in perfect competition because they both
   A) can earn only a normal profit in the long run.
   B) can earn only a normal profit in the short run.
   C) maximize their profits by producing where \( P = MC = MR \).
   D) Both answers A and C are correct.
   E) Both answers B and C are correct.

   Answer: A

   Topic: Monopolistic competition, long run
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.2
   Author: SA

15) The primary reason why monopolistically competitive firms cannot earn an economic profit in the long run is because
   A) there are barriers to entry in this market structure.
   B) there is freedom of entry in this market structure.
   C) the antitrust laws prevent profit from increasing.
   D) recessions occur.
   E) they collude to earn a normal profit.

   Answer: B

   Topic: Monopolistic competition, long run
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.2
   Author: JC
16) Nike is a firm in monopolistic competition. If Nike is earning an economic profit from new cross-training shoe, over time the demand for these shoes
   A) increases as new firms enter the market.
   B) decreases as new firms enter the market.
   C) does not change as new firms enter the market.
   D) decreases as firms exit the market.
   E) increases as firms exit the market.

Answer: B

Topic: Monopolistic competition, long run
Skill: Level 2: Using definitions
Objective: Checkpoint 15.2
Author: JC

17) A firm in monopolistic competition is
   A) efficient because in the long run it earns only a normal profit.
   B) efficient because it produces at the minimum average total cost.
   C) inefficient because price exceeds marginal cost.
   D) efficient because of the ease of entry.
   E) efficient because it produces where \( MR = MC \).

Answer: C

Topic: Monopolistic competition, efficiency
Skill: Level 2: Using definitions
Objective: Checkpoint 15.2
Author: WM

18) One sign of inefficiency in monopolistic competition is that
   A) marginal revenue equals marginal cost.
   B) price exceeds marginal cost.
   C) price is less than marginal cost.
   D) price is less than marginal revenue.
   E) in the long run price equals average total cost.

Answer: B

Topic: Monopolistic competition, efficiency
Skill: Level 1: Definition
Objective: Checkpoint 15.2
Author: JC
19) One of the major benefits to society of monopolistic competition is
   A) high prices.
   B) restricted output.
   C) product differentiation.
   D) the excess capacity.
   E) the markup.
   Answer: C

Topic: Monopolistic competition, efficiency
Skill: Level 2: Using definitions
Objective: Checkpoint 15.2
Author: JC

20) In monopolistic competition, there is inefficiency because price is greater than marginal cost. What brings about this inefficiency?
   A) high concentration, as indicated by the large concentration ratio
   B) product differentiation
   C) freedom of entry and exit
   D) marginal cost rises as more output is produced
   E) the fact there are many firms in the market
   Answer: B

Topic: Monopolistic competition, efficiency
Skill: Level 2: Using definitions
Objective: Checkpoint 15.2
Author: PH

21) For a firm in monopolistic competition, the efficient scale is the amount of output at which ____ is a minimum.
   A) fixed cost
   B) average total cost
   C) average variable cost
   D) average fixed cost
   E) marginal cost
   Answer: B

Topic: Monopolistic competition, excess capacity
Skill: Level 1: Definition
Objective: Checkpoint 15.2
Author: JC
22) Excess capacity exists when a firm produces
   A) more than the profit-maximizing level of output.
   B) less than the quantity that minimizes average total cost.
   C) less than the quantity that minimizes marginal cost.
   D) more than the quantity that minimizes marginal cost.
   E) None of the above answers is correct.

   Answer: B
   Topic: Monopolistic competition, excess capacity
   Skill: Level 1: Definition
   Objective: Checkpoint 15.2
   Author: JC

23) Which of the following is correct?
   A) A firm in monopolistic competition does not have excess capacity in the long run.
   B) A firm in perfect competition operates at maximum average total cost in the long run.
   C) In the long run, a firm in monopolistic competition maximizes its profit at a point where price is equal to average total cost but the average total cost is not minimized.
   D) In the long run, a firm in monopolistic competition earns a normal profit and its price is equal to the minimum average total cost.
   E) In the long run, a firm in monopolistic competition can earn an economic profit because of product differentiation.

   Answer: C
   Topic: Monopolistic competition, excess capacity
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.2
   Author: SA

15.3 Product Development and Marketing

1) For a firm in monopolistic competition, innovation and product development are
   A) senseless because economic profit is always zero in the long run.
   B) necessary in order to have a chance of earning at least a short-run economic profit.
   C) inconsequential because each firm produces a different product.
   D) necessary to allow new firms to enter.
   E) uncommon because other firms already produce similar products.

   Answer: B
   Topic: Innovation and product development
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.3
   Author: WM
2) Firms in monopolistic competition will spend money on innovation
   A) so that other firms can make substitute products.
   B) in order to make the demand for their products more elastic.
   C) so that they can produce a good or service that at least temporarily does not have any close substitutes.
   D) because they have funds set aside for research.
   E) in order to signal quality.

   Answer: C
   Topic: Innovation and product development
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.3
   Author: SA

3) A firm is spending the profit-maximizing amount on product development when
   A) people perceive the firm’s product to be better than those of its competitors.
   B) the marginal cost of product development is equal to the marginal revenue from product development.
   C) the price of the good is higher than its marginal cost.
   D) the advertising costs are covered.
   E) the firm’s total revenue exceeds its total costs.

   Answer: B
   Topic: Innovation and product development
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.3
   Author: SA

4) To maintain their economic profits, firms in monopolistic competition must continually engage in
   A) product innovation and development.
   B) lowering their product’s price.
   C) raising their product’s price.
   D) realizing short-run losses.
   E) making the demand for their product more elastic.

   Answer: A
   Topic: Innovation and product development
   Skill: Level 2: Using definitions
   Objective: Checkpoint 15.3
   Author: PH
5) The shampoo industry is constantly coming out with new products. The reason is that when a firm introduces a new shampoo into the market, the demand for the shampoo becomes _____ temporarily and economic profit ___.

A) more elastic; decreases
B) less elastic; increases
C) more elastic; increases
D) less elastic; decreases
E) unit elastic; increases

Answer: B

Topic: Innovation and product development
Skill: Level 2: Using definitions
Objective: Checkpoint 15.3
Author: JC

6) When the marginal dollar of product development expenditure brings in a dollar of additional revenue, the firm is spending the ____ on product development.

A) profit-maximizing amount
B) profit-minimizing amount
C) loss-maximizing amount
D) inefficient amount
E) maximum amount it can

Answer: A

Topic: Innovation and product development
Skill: Level 2: Using definitions
Objective: Checkpoint 15.3
Author: JC

7) A firm in monopolistic competition

A) has no control over the price of the product it is selling.
B) might be selling a brand name product.
C) does not advertise nor market its product.
D) Both answers A and B are correct.
E) Answers A, B, and C are correct.

Answer: B

Topic: Selling costs
Skill: Level 1: Definition
Objective: Checkpoint 15.3
Author: SA
8) Firms in monopolistic competition compete with each other in three areas:
   A) quantity, barriers to entry, advertising.
   B) economies of scale, price, and marketing.
   C) concentration ratios, quality, and price.
   D) price, marketing, and quality.
   E) economies of scale, barriers to entry, and concentration ratios.

Answer: D

9) In the example of the Nike running shoe, we see that
   A) selling costs account for over half of a shoe's retail price.
   B) materials actually account for two-thirds of the retail price of the shoes.
   C) taxes account for one-quarter of the retail price of the shoes.
   D) production costs exceed selling costs by a wide margin.
   E) raw materials costs are by far the largest component of the total costs of producing the shoes.

Answer: A

15.4 Integrative Questions

1) In a market in which firms operate in monopolistic competition,
   A) the HHI for a single firm exceeds 2500.
   B) firms compete on price, quality and marketing.
   C) in the long run firms produce at their efficient scale.
   D) in the long run firms are not able to charge a markup.
   E) advertising is nonexistent.

Answer: B
2) Firms in monopolistic competition
   A) face a downward-sloping demand curve.
   B) cannot charge a markup because there are no dominant firms.
   C) definitely do not benefit from advertising.
   D) produce at the efficient scale in the long run.
   E) generally have low to nonexistent selling costs.

   Answer: A

   Topic: Integrative
   Skill: Level 2: Using definitions
   Objective: Integrative
   Author: CD

3) Advertising costs
   A) make the marginal revenue more elastic.
   B) shift the ATC curve upward.
   C) shift the marginal cost curve rightward.
   D) indirectly shift the marginal cost curve upward.
   E) affect the marginal cost but not the total cost.

   Answer: B

   Topic: Integrative
   Skill: Level 2: Using definitions
   Objective: Integrative
   Author: CD
4) The above figure definitely shows
   A) a long-run equilibrium for a monopolistically competitive firm.
   B) an industry with few firms.
   C) a long-run equilibrium for a perfectly competitive firm.
   D) a long-run equilibrium for a perfectly competitive market.
   E) a short-run equilibrium for a monopoly.

Answer: A

Topic: Integrative
Skill: Level 3: Using models
Objective: Integrative
Author: CD
5) The firm in the above figure has excess capacity of ____ meals per day.
   A) 0
   B) between 1 and 10
   C) between 11 and 20
   D) more than 21 and 30
   E) more than 31
   Answer: C

   Topic: Integrative
   Skill: Level 3: Using models
   Objective: Integrative
   Author: CD

6) The firm in the above figure has a markup of ____ per meal.
   A) $0
   B) $4
   C) $8
   D) $10
   E) more than $10
   Answer: B

   Topic: Integrative
   Skill: Level 3: Using models
   Objective: Integrative
   Author: CD

7) The firm in the above figure has an economic profit of ____.
   A) $0
   B) $80
   C) $160
   D) more than $161
   E) less than zero, that is, the firm has an economic loss
   Answer: A

   Topic: Integrative
   Skill: Level 3: Using models
   Objective: Integrative
   Author: CD
8) Which of the following characterize a firm in monopolistic competition in the long run?
   i) operating at the minimum efficient scale
   ii) markups of price over marginal cost
   iii) zero economic profit
   
   A) i and ii
   B) i and iii
   C) ii and iii
   D) i, ii, and iii
   E) only ii

   Answer: C
   
   Topic: Integrative
   Skill: Level 3: Using models
   Objective: Integrative
   Author: CD

9) Firms in which of the following industries can earn an economic profit in the long run?
   A) both monopolistic competition and monopoly
   B) perfect competition
   C) monopoly
   D) monopolistic competition
   E) monopolistic competition and perfect competition

   Answer: C
   
   Topic: Integrative
   Skill: Level 2: Using definitions
   Objective: Integrative
   Author: SA

10) If a firm has excess capacity, it
    A) produces less than its efficient scale.
    B) should advertise to maximize profits.
    C) should decrease its markup to increase its profit.
    D) is a perfectly competitive firm.
    E) must face a horizontal demand curve.

    Answer: A
    
    Topic: Integrative
    Skill: Level 3: Using models
    Objective: Integrative
    Author: CD
11) If a firm in the long run produces less than its efficient scale, it
   A) should raise its markup to increase its profit.
   B) should lower its markup to increase its profit.
   C) cannot be a perfectly competitive firm.
   D) should not advertise.
   E) must have its markup equal to zero.

   Answer: C

12) A firm’s markup is
   A) the difference between average total cost with and without advertising.
   B) the difference between demand and marginal revenue.
   C) a signal of product quality.
   D) the difference between price and marginal cost.
   E) the result of producing less than the efficient scale.

   Answer: D

13) Crest Toothpaste offers new whitening toothpaste one year, a new gel swirl design the next year, and an improved cleaning formula the year after. Crest Toothpaste does this because it is
   A) a monopoly trying to decrease its costs.
   B) a perfectly competitive firm trying to increase its price.
   C) a monopolistically competitive firm trying to maintain its economic profit.
   D) driving its competitors out of business.
   E) a perfectly competitive firm trying to increase its costs so it can increase its price.

   Answer: C