Chapter 8 Production Technology and Costs 8.1

Economic Costs and Economic Profit

1) Accountants include ______________ costs as part of a firm’s costs, while economists include costs.
   A) explicit; no explicit
   B) implicit; no implicit
   C) explicit and implicit; implicit
   D) explicit; explicit and implicit

   Answer: D

2) In the short run, _______ factors of production are fixed, while in the long run, _______ of them are.
   A) Some; none
   B) All; none
   C) None; at least some
   D) All; at least some

   Answer: A

3) Which of the following is a long-run adjustment?
   A) A firm lays off two workers.
   B) Two firms exit the asbestos removal industry.
   C) A manufacturer increases its purchase of raw materials.
   D) A farmer buys twice her usual amount of herbicide.

   Answer: B

4) In the short run:
   A) firms have the ability to enter or exit the industry.
   B) firms are able to alter some, but not all, of their factors of production.
   C) firms are unable to adjust their output choices.
   D) None of the above are correct.

   Answer: B
5) Diminishing marginal returns implies that:
   A) marginal costs are decreasing.
   B) marginal costs are increasing.
   C) marginal costs are constant.
   D) marginal costs may be increasing or decreasing.
   Answer: B

6) A firm experiences diminishing marginal returns because:
   A) all factors of production are variable.
   B) people "learn by doing."
   C) all factors of production are fixed.
   D) at least one factor of production is fixed.
   Answer: D

   \[
   \begin{array}{c|c}
   \text{number of workers} & \text{units of output} \\
   \hline
   0 & 0 \\
   1 & 10 \\
   2 & 30 \\
   3 & 44 \\
   4 & 55 \\
   \end{array}
   \]
   Table 8.1

   7) Refer to Table 8.1, which gives a firm’s production function. Assume that all non-labor inputs are fixed. Diminishing marginal returns set in with the addition of the:
   A) third worker.
   B) fourth worker.
   C) fifth worker.
   D) sixth worker.
   Answer: A
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<thead>
<tr>
<th>Number of workers</th>
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<tr>
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Table 8.2

8) Refer to Table 8.2, which gives a firm’s production function. Assume that all non-labor inputs are fixed. The marginal product is maximized when the firm hires:

A) 2 workers.
B) 3 workers.
C) 4 workers.
D) 5 workers.

Answer: B

9) Which of the following is true?

A) \( ATC = AVC - AFC \).
B) \( TVC/Q = TC/Q + TFC/Q \)
C) \( \Delta TC/\Delta Q = \Delta AVC/\Delta Q \)
D) \( \Delta TVC/\Delta Q = MC \)

Answer: D
10) Refer to Figure 8.1, which shows a family of average cost curves. The average total cost curve is represented by:
   A) curve 1.
   B) curve 2.
   C) curve 3.
   D) The vertical sum of curve 1 and curve 2.

Answer: A

11) Refer to Figure 8.1, which shows a family of average cost curves. The average fixed cost curve is represented by:
   A) curve 1.
   B) curve 2.
   C) curve 3.
   D) The vertical sum of curve 1 and curve 2.

Answer: C
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<tr>
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</tbody>
</table>

Table 8.5

12) Refer to Table 8.5. The total fixed cost of producing two units is:

A) $0.
B) $8.
C) $11.
D) $15.

Answer: D
13) Figure 8.2 presents a firm's marginal, average total, average fixed, and average variable cost curves. The firm faces fixed costs of:

A) $130.
B) $20.
C) $110.
D) $4000.

Answer: D

14) The minimum efficient scale is:

A) the quantity after which it makes no sense for a firm to produce.
B) the minimum quantity where a firm would be able to produce profitably.
C) the output level beyond which the firm will not experience scale economies.
D) the output level beyond which the firm will experience scale economies.

Answer: C
Chapter 9 Perfect Competition

15) Which of the following is a characteristic of a perfectly competitive market?
   A) a large number of firms in a market  
   B) selling a standardized product  
   C) no barriers to entry  
   D) all of the above

   Answer: D

16) Which of the following is the best example of a perfectly competitive firm?
   A) DeBeers Diamond Company  
   B) your local cable T.V. company  
   C) Tino's Italian Eatery, a local restaurant  
   D) Jones's wheat farm in eastern Washington

   Answer: D

17) If a firm in a perfectly competitive market suffers an economic loss,
   A) price is less than its marginal cost.
   B) price is less than its marginal revenue.
   C) price is less than its average total cost.
   D) none of the above

   Answer: C

18) Jerry's Quarry sells building stone in a perfectly competitive market. At its current level of building stone production, Jerry's Quarry has marginal costs equal to $45, and AVC is rising. If the market price of building stone is $50, Jerry's Quarry should:
   A) decrease its level of building stone production.
   B) continue producing its current level of production.
   C) increase its production of building stone.
   D) shut down and produce no building stone.

   Answer: C
19) Figure 9.1 shows the cost structure of a firm in a perfectly competitive market. If the market price is $40, the firm's profit maximizing output level is:

A) 500.  
B) 650.  
C) 900.  
D) 1,200.  
Answer: C

20) Figure 9.1 shows the cost structure of a firm in a perfectly competitive market. If the firm's fixed cost increases by 3,000 due to a new government regulation,

A) the marginal cost curve shifts upward.  
B) the average variable cost curve shifts upward.  
C) the average total cost curve shifts upward.  
D) none of the above  
Answer: C

21) A firm will not shut down in the short run as long as at the point where MR = MC:

A) P>AVC.  
B) P>ATC.  
C) P>MC.  
D) P>AFC.  
Answer: A
22) Figure 9.4 shows the cost structure of a firm in a perfectly competitive market. If the market price is $3 and the firm produces the output where MR-MC, its profit is:

A) -$300.
B) -$600.
C) -$900.
D) -$1,200.

Answer: D
23) A firm's marginal cost curve above the average variable cost curve is also:
   A) the firm's demand for production curve.
   B) the firm's producer surplus curve.
   C) the firm's short-run supply curve.
   D) the market supply curve.
   Answer: C

24) If a perfectly competitive firm charges a price that is equal to its average total cost:
   A) the firm is earning an economic profit equal to zero.
   B) the firm is earning an economic profit greater than zero.
   C) the firm is earning an economic profit less than zero.
   D) it is not possible to determine anything about the firm's profits.
   Answer: A

25) Costs increase with output in an increasing-cost industry because:
   A) input prices increase as the industry competes for scarce resources.
   B) firms may be forced to use less productive inputs.
   C) the firms become monopolies.
   D) Both A and B are correct.
   Answer: D

26) If the market demand decreases for a good sold in a perfectly competitive market, firms in the market:
   A) will be able to charge a higher price for their product.
   B) will receive a lower price for their product.
   C) will not be able to change their price.
   D) will not be affected by the change in demand.
   Answer: B

27) In long-run equilibrium for a competitive firm economic profits:
   A) will be positive.
   B) will be negative
   C) will be zero.
   D) may be positive, negative, or zero.
   Answer: C
28) A constant cost industry is one in which:
   A) input prices do not change as output changes in the long-run.
   B) supply is highly inelastic.
   C) short-run supply is horizontal.
   D) all of the above.
Answer: A

Chapter 10 Monopoly and Price Discrimination

29) Which of the following is not a characteristic of a monopoly?
   A) There is only one seller.
   B) A monopolist is a price-taker.
   C) There exist barriers to entry.
   D) A monopolist's sales revenue is constrained by the market demand.
Answer: B

30) Which of the following is not a barrier to entry for monopoly?
   A) a patent
   B) government licensing
   C) large economies of scale
   D) a large number of existing firms in a market
Answer: D

31) Which of the following is an example of a barrier to entry?
   A) A firm is open for business only at certain hours of the day, and has its doors locked at other times.
   B) The government grants licenses to taxicab drivers, without which it is illegal to operate a taxicab.
   C) A newspaper sells advertising space to businesses.
   D) Lack of a website.
Answer: B
32) A monopoly may arise due to:
   A) a patent
   B) net work externalities.
   C) large economies of scale
   D) all of the above.

Answer: D

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity</th>
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Table 10.1

33) Refer to Table 10.1, which shows the relationship between the price that Gladys charges for a product and the quantity of that product that Gladys sells. The total revenue that Gladys receives from selling four units of output is:
   A) $4.
   B) $6.
   C) $10.
   D) $24.

Answer: D
34) Figure 10.1 shows a monopolist's demand curve. If the monopolist increases output from two to three units, what is its marginal revenue?

A) $3.
B) $12.
C) $15.
D) $5.

Answer: A
35) The firm in figure 10.3 will produce:

A) Q1.
B) Q2.
C) Q3
D) Q4.

Answer: B
36) Suppose that Figure 10.4 shows a monopolist's demand curve, marginal revenue, and its costs. The monopolist would maximize its profit by producing a quantity of:

A) 30 units.
B) 50 units.
C) 60 units.
D) There is no sufficient information.

Answer: A

37) Refer to Figure 10.4. If the market was a monopoly, the consumer surplus would be:

A) $625.
B) $300.
C) $225.
D) $450.

Answer: C

38) Refer to Figure 10.4. The deadweight loss associated with the monopoly would be represented by the area:

A) abe.
B) ace.
C) ade.
D) efg.

Answer: C
39) The merits of a patent system is:
   A) the patent system gives firms strong incentives to take the risk of substantial research and development costs.
   B) the patent system may precipitate the development of new products.
   C) granting monopoly power through a patent may be beneficial from society’s perspective.
   D) all of the above.
   Answer: D

40) Price discrimination is when a firm charges:
   A) the same price to all consumers.
   B) different prices for different goods to different consumers.
   C) different prices for the same goods to different consumers.
   D) None of the above are correct.
   Answer: C

41) The government allows firms to engage in price discrimination unless the practice:
   A) allows the firm to earn positive economic profits.
   B) reduces consumer surplus.
   C) drives rival firms out of business.
   D) increases prices to consumers.
   Answer: C

42) Suppose that a price discriminating monopolist is able to divide its market into two groups. If the firm sells its product for $50 to the group whose customers have the most elastic demand, what price are they likely to charge to the group whose customers have the least elastic demand?
   A) $50
   B) more than $50
   C) less than $50
   D) The answer depends on the marginal revenue for that group.
   Answer: B
Chapter 11 Market Entry and Monopolistic Competition

43) When a second firm enters a monopolist’s market:
   A) market price will drop.
   B) market sales will rise.
   C) the first firm’s profits will increase.
   D) All of the above will occur.

Answer: A

44) When the government eliminates artificial barriers to entry:
   A) more firms will enter the market.
   B) prices to consumers will likely decrease.
   C) competition in the market will increase.
   D) All of the above will occur.

Answer: D

45) Which of the following is not a characteristic of a monopolistically competitive market?
   A) There are many firms.
   B) Firms sell products that are similar but not identical.
   C) Firms must take the market price as given.
   D) There are no artificial barriers to entry.

Answer: C

46) Which of the following is a characteristic of a monopolistically competitive market?
   I) There are many sellers.
   II) Firms sell slightly differentiated products.
   III) Each firm faces a downward-sloping demand curve.

   A) I only
   B) I and II only
   C) II and III only
   D) I, II, and III

Answer: D
47) The word "monopolistic" in the label "monopolistic competition" refers to the fact that:
   A) there is only one firm producing in the market.
   B) firms have no control over the price they charge.
   C) each firm produces a unique version of the product.
   D) none of the above

   Answer: C

![Figure 11.6](image)

48) The monopolistically competitive firm in figure 11.6 will produce where:
   A) MC = MR.
   B) MC = D
   C) MR = D
   D) all of the above.

   Answer: A

49) Where the monopolistically competitive firm in figure 11.6 produces it will:
   A) make a positive economic profit.
   B) suffer a loss.
   C) make a zero economic profit.
   D) make a negative economic profit.

   Answer: C
50) A benefit to consumers of monopolistically competitive markets is that:
   A) consumers only have to choose from one product.
   B) consumers have a variety of products from which to choose.
   C) goods are sold at the lowest possible average cost of production.
   D) price is equal to marginal cost in equilibrium.
   Answer: B

51) As compared to a perfectly competitive firm, a monopolistically competitive firm will:
   A) have more control over price.
   B) have less control over price.
   C) face more barriers to entry.
   D) face many more competitors.
   Answer: A

52) In which of the following ways is a monopolistically competitive firm like a monopoly firm?
   A) Firms face a horizontal demand curve.
   B) Firms earn economic profits greater than zero in the long run.
   C) Firms face a downward sloping demand curve.
   D) Firms face competition from many other firms.
   Answer: C

53) Since people generally know that celebrities are paid to endorse products, celebrity endorsements signal to consumers that:
   A) the product is likely to be popular.
   B) the celebrity loves the product.
   C) only rich people can afford the product.
   D) all of the above.
   Answer: A

54) Among his many endorsement contracts professional golfer Tiger Wood endorses Buick automobiles. Buick reportedly recently extended his contract for another 5 years at $8 million per year. If Buick makes $4,000 profit per car they must expect to sell at least:
   A) $40 million worth of extra cars per year due to Woods' endorsement of them.
   B) $8 million worth of extra cars per year due to Woods' endorsement of them.
   C) 10,000 extra cars per year due to Woods' endorsement of them.
   D) 2,000 extra cars per year due to Woods' endorsement of them.
   Answer: D
55) Studies of real world markets suggest that prices and the number of firms of comparable size in a market are:
   A) positively related.
   B) negatively or inversely related.
   C) not related.
   D) sometimes negatively or inversely related, but usually positively related.
   Answer: B

56) Nike has used Michael Jordan to create the impression that Air Jordan basketball shoes are superior to any other basketball shoe. Nike is attempting to:
   A) differentiate Air Jordan basketball shoes from other types of basketball shoe.
   B) lower the marginal cost of producing Air Jordan basketball shoes.
   C) sell fewer Air Jordan basketball shoes so they can raise the price.
   D) convince consumers that Air Jordan basketball shoes are identical to other basketball shoes.
   Answer: A

**Chapter 12 Oligopoly and Strategic Behavior 12.1 What is an Oligopoly?**

57) When there are just a few firms in the industry, the industry structure is most likely to be:
   A) a perfectly competitive industry.
   B) an oligopoly market.
   C) a monopoly market.
   D) a natural monopoly market.
   Answer: B
<table>
<thead>
<tr>
<th>Firm Market Share (%)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
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</tr>
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</table>

Table 12.1

58) The four-firm concentration ratio for the market depicted in Table 12.1 is:
   A) 82%
   D) 40%
   E) 10%
   F) 92%

Answer: D

59) A group of firms that coordinate their pricing decisions is called:
   A) a monopoly.
   B) a duopoly.
   C) a cartel.
   D) monopolistic competition.

Answer C

60) In general, the quantity of output in an oligopoly market is:
   A) lower than in perfect competition.
   B) higher than in perfect competition.
   C) the same as in perfect competition.
   D) The answer depends on the shape of the average cost curve.

Answer: A
61) Figure 12.2 shows demand, marginal revenue, and costs of a duopolist. If the two duopolists have the same costs and split the market equally, each profit maximizing duopolist will earn a profit of ____ .

A) $30,000
B) $15,000
C) $10,000
D) $0

Answer: C

62) A dominant strategy is one that:

A) maximizes profits.
B) is optimal under some conditions.
C) never yields a negative payoff.
D) is the best choice under all conditions.

Answer: D

63) A low price guarantee on car stereos leads to:

A) higher prices for consumers.
B) instability in oligopoly.
C) cheating on cartel agreements.
D) competition among oligopolists.

Answer: A
64) A firm announces that it will refund the difference between its price and any price of a competitor that is lower. This is an example of:
   
   A) predatory pricing.  
   B) tying contracting.  
   C) marginal cost pricing.  
   D) guaranteed price matching.  
   Answer: D

65) Which one of the following is not a retaliation strategy that firms would apply to one that cheated on a price-fixing scheme by selling at a price below the agreed-upon fixed price?

   A) All other firms sell at the same low price as the cheating firm.  
   B) All other firms sell at a price that ensures zero economic profit for all firms.  
   C) Each period, all other firms sell at the price picked by the cheater in the previous period.  
   D) All other firms would reduce their output.  
   Answer: D

66) Empirical studies have shown:

   A) little evidence for the kinked demand model.  
   B) evidence for the kinked demand model in the rest of the world but not in the United States.  
   C) overwhelming evidence for the kinked demand model.  
   D) evidence for the kinked demand model in the United States but nowhere else.  
   Answer A
67) At quantities less than $Q_1$ in figure 12.4:
   
   A) competitors match price increases.
   B) competitors do not match price increases.
   C) demand is inelastic.
   D) the firm does not have competitors.

   Answer: B
68) Consider Figure 12.5. The dominant strategy in the prisoners’ dilemma is:

A) to confess for both players.
B) not to confess for both players.
C) to confess for player A but not to confess for player B.
D) to confess for player B but not to confess for player A.

Answer: A

69) Limit pricing occurs when a firm sets price:

A) equal to marginal cost.
B) equal to average cost.
C) at different amounts for different groups of consumers.
D) so low that other firms are prevented from entering the market.

Answer: D
Figure 12.8 depicts an advertising game between two stores. The outcome of the game will be that:

A) both stores choose to advertise.
B) both stores choose not to advertise.
C) Store A advertises but Store B does not advertise.
D) Store B advertises but Store A does not advertise.

Answer: A