Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Exam 3 Study Guide

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. In a competitive market, the actions of any single buyer or seller will
a. have a negligible impact on the market price.
b. have little effect on overall production but will ultimately change final product price.
c. cause a noticeable change in overall production and a change in final product price.
d. adversely affect the profitability of more than one firm in the market.

Table 14-1

Quantity	Price
1	13
2	13
3	13
4	13
5	13
6	13
7	13
8	13
9	13

____ 2. **Refer to Table 14-1**. The price and quantity relationship in the table is most likely that faced by a firm in a
a. monopoly.
b. concentrated market.
c. competitive market.
d. strategic market.

____ 3. When buyers in a competitive market take the selling price as given, they are said to be
a. market entrants.
b. monopolists.
c. free riders.
d. price takers.

____ 4. Of the following characteristics of competitive markets, which are necessary for firms to be price takers?
(i) There are many sellers.
(ii) Firms can freely enter or exit the market.
(iii) Goods offered for sale are largely the same.

a. (i) and (ii) only
b. (i) and (iii) only
c. (ii) only
d. All are necessary.

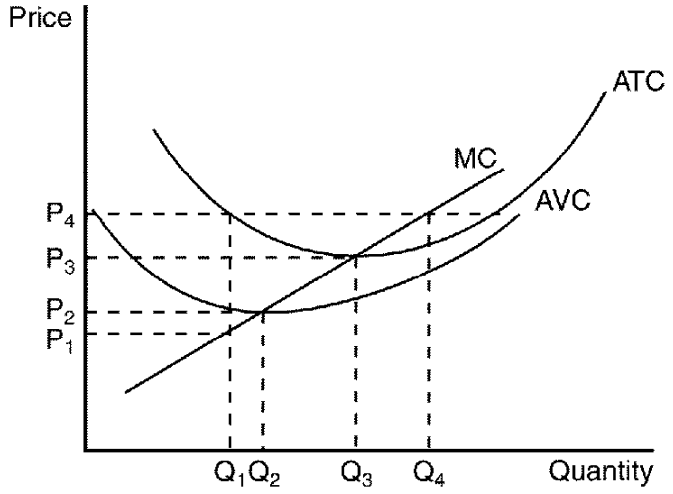
____ 5. Suppose a firm in a competitive market received $1,000 in total revenue and had a marginal revenue of $10 for the last unit produced and sold. What is the average revenue per unit, and how many units were sold?
   a. $5 and 50
   b. $5 and 100
   c. $10 and 50
   d. $10 and 100

____ 6. Total profit for a firm is calculated as
   a. (marginal revenue) minus (average cost).
   b. (average revenue) minus (average cost).
   c. (marginal revenue) minus (marginal cost).
   d. (price minus average cost) times (quantity of output).

____ 7. As a general rule, profit-maximizing producers in a competitive market produce output at a point where
   a. marginal cost is increasing.
   b. marginal cost is decreasing.
   c. marginal revenue is increasing.
   d. price is less than marginal revenue.

Figure 14-1

The graph below depicts the cost structure for a firm in a competitive market.



____ 8. **Refer to Figure 14-1**. When price falls from P_3 to P_1, the firm finds that
   a. fixed cost is higher at a production level of Q_1 than it is at Q_3.
   b. it should produce Q_1 units of output.
   c. it should produce Q_3 units of output.
   d. it should shut down immediately.

____ 9. When price is greater than marginal cost for a firm in a competitive market,
   a. marginal cost must be falling.
   b. the firm must be minimizing its losses.
   c. there are opportunities to increase profit by increasing production.
   d. the firm should decrease output to maximize profit.

____ 10. When a profit-maximizing competitive firm finds itself minimizing losses because it is unable to earn a positive profit, this task is accomplished by producing the quantity at which price is equal to
a. sunk cost.
b. average fixed cost.
c. average variable cost.
d. marginal cost.

____ 11. In the long run, a profit-maximizing firm will choose to exit a market when
a. average fixed cost is falling.
b. variable costs exceed sunk costs.
c. marginal cost exceeds marginal revenue at the current level of production.
d. total revenue is less than total cost.

____ 12. A profit-maximizing firm in a competitive market is currently producing 200 units of output. It has average revenue of $9 and average total cost of $7. It follows that the firm's
a. average total cost curve intersects the marginal cost curve at an output level of less than 200 units.
b. average variable cost curve intersects the marginal cost curve at an output level of less than 200 units.
c. profit is $400.
d. All of the above are correct.

____ 13. A profit-maximizing firm in a competitive market is able to sell its product for $7. At its current level of output, the firm's average total cost is $10. The firm's marginal cost curve crosses its marginal revenue curve at an output level of 9 units. The firm experiences a
a. profit of more than $27.
b. profit of exactly $27.
c. loss of more than $27.
d. loss of exactly $27.

____ 14. The following table gives the average total cost of production for various levels of output for a competitive firm:

Q	ATC
0	--
1	10
2	8
3	7
4	8
5	10

If the firm's fixed cost of production is $3 and the market price is $10, how many units should the firm produce to maximize its profit?
a. 1
b. 2
c. 3
d. 4

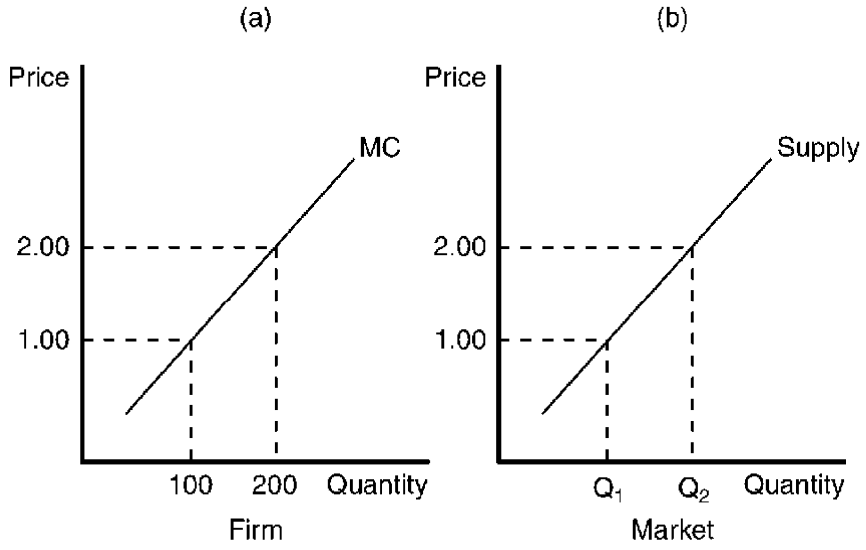
____ 15. Which of the following represents the firm's short-run condition for shutting down?
a. Shut down if TR < TC
b. Shut down if TR < FC
c. Shut down if P < ATC
d. Shut down if TR < VC

____ 16. Mrs. Smith operates a business in a competitive market. The current market price is $8.50, and at her profit-maximizing level of production, the average variable cost is $8.00 and the average total cost is $8.25.
a. Mrs. Smith should shut down her business in the short run but continue to operate in the long run..
b. Mrs. Smith should continue to operate in the short run but shut down in the long run.
c. Mrs. Smith should continue to operate in both the short run and long run.
d. Mrs. Smith should shut down in both the short run and long run.

____ 17. In a competitive market the price is $8. A typical firm in the market has ATC = $6, AVC = $5, and MC = $8. How much economic profit is the firm earning in the short run?
a. $0 per unit
b. $1 per unit
c. $2 per unit
d. $3 per unit

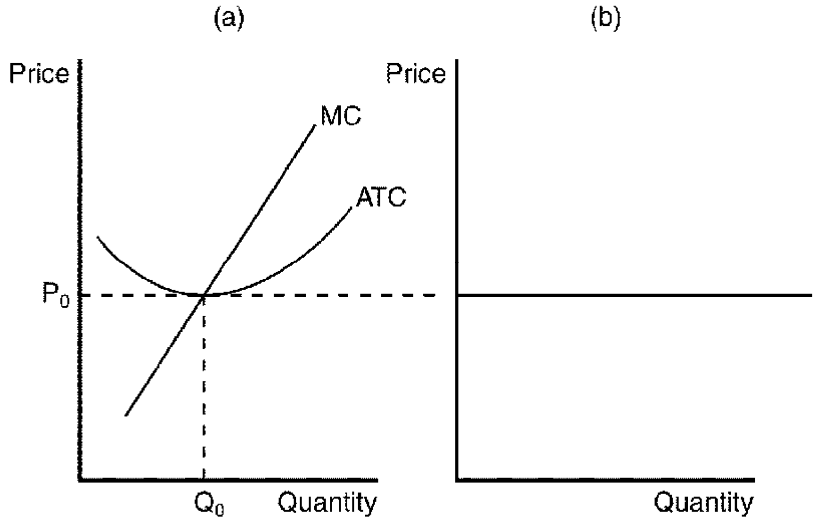
Figure 14-6

In the figure below, panel (a) depicts the linear marginal cost of a firm in a competitive market, and panel (b) depicts the linear market supply curve for a market with a fixed number of identical firms.



____ 18. **Refer to Figure 14-6**. If at a market price of $1.75, 52,500 units of output are supplied to this market, how many identical firms are participating in this market?
a. 75
b. 100
c. 250
d. 300

____ 19.



If the figure in panel (a) reflects the long-run equilibrium of a profit-maximizing firm in a competitive market, the figure in panel (b) most likely reflects

a. perfectly inelastic long-run market supply.
b. the idea that free entry and exit of firms in the market lead to only one market price in the long run.
c. the product of the individual supply curves of all firms in the market.
d. the fact that zero profits cannot be sustained in the long run.

____ 20. If all existing firms and all potential firms have the same cost curves, there are no inputs in limited quantities, and the market is characterized by free entry and exit, then the long-run

a. market supply curve is equal to the sum of marginal cost.
b. supply curve for the market must slope downward.
c. market supply curve must slope upward.
d. supply curve for the market is horizontal and equal to the minimum of long-run average cost for each firm.

____ 21. When entry and exit behavior of firms in an industry does not affect a firm's cost structure,

a. the long-run market supply curve must be horizontal.
b. the long-run market supply curve must be upward-sloping.
c. the long-run market supply curve must be downward-sloping.
d. we can't tell anything about the shape of the long-run market supply curve.

____ 22. Suppose a competitive market is comprised of firms that face identical cost curves. The firms experience an increase in demand that results in positive profits for the firms. Which of the following events are then most likely to occur?

(i) New firms will enter the market.
(ii) In the short run, price will rise; in the long run, price will rise further.
(iii) In the long run, all firms will be producing at their efficient scale.

a. (i) and (ii) only
b. (i) and (iii) only
c. (ii) and (iii) only
d. (i), (ii) and (iii)

____ 23. Regardless of the cost structure of firms in a competitive market, in the long run
a. firms will experience rising demand for their products.
b. the marginal firm will earn zero economic profit.
c. firms will experience a less competitive market environment.
d. exit and entry is likely to lead to a horizontal long-run supply curve.

____ 24. A market might have an upward-sloping long-run supply curve if
a. firms have different costs.
b. consumers exercise market power over producers.
c. all factors of production are essentially available in unlimited supply.
d. the entry of new firms into the market has no effect on the cost structure of firms in the market.

____ 25. When new entrants into a competitive market have higher costs than existing firms,
a. accounting profits will be the primary determinant of entry into the market.
b. sunk costs become an important determinant of the short-run entry strategy.
c. market price must be rising.
d. all firms will earn zero economic profit once the new equilibrium is reached.

____ 26. Suppose a competitive market has a horizontal long-run supply curve and is in long-run equilibrium. If demand decreases, we can be certain that in the short-run,
a. at least some firms will shut down.
b. price will fall below marginal cost for some firms.
c. price will fall below average total cost for some firms.
d. at least some firms will exit the industry.

____ 27. In the short run, a market consists of 100 identical firms. The market price is $8, and the total cost to each firm of producing various levels of output is given in the table below. What will total quantity supplied be in the market?

Q	TC
0	1
1	7
2	14
3	22
4	31
5	41

a. 200 units
b. 300 units
c. 400 units
d. 500 units

____ 28. In the short-run, a firm's supply curve is equal to
a. the marginal cost curve above its average variable cost curve.
b. the marginal cost curve above its average total cost curve.
c. the average variable cost curve above its marginal cost curve.
d. the average total cost curve above its marginal cost curve.

____ 29. When market conditions in a competitive industry are such that firms cannot cover their production costs, then
a. the firms will suffer long-run economic losses.
b. the firms will suffer short-run economic losses that will be exactly offset by long-run economic profits.
c. some firms will exit the market, causing prices to rise until the remaining firms can cover their production costs.
d. all firms will go out of business, since consumers will not pay prices that enable firms to cover their production costs.

____ 30. Natural monopolies differ from other forms of monopoly because they
a. are not subject to barriers to entry.
b. are not regulated by government.
c. generally don't make a profit.
d. are generally not worried about competition eroding their monopoly position in the market.

____ 31. Which of the following statements is true about patents and copyrights?
(i) They both have benefits and costs.
(ii) They lead to higher prices.
(iii) They enhance the ability of monopolists to earn above-average profits.

a. (i) and (ii)
b. (ii) and (iii)
c. (ii) only
d. (i), (ii), and (iii)

____ 32. A firm that is a natural monopoly
a. is not likely to be concerned about new entrants eroding its monopoly power.
b. is taking advantage of economies of scale.
c. would experience a higher average total cost if more firms entered the market.
d. All of the above are correct.

____ 33. Which of the following items is a primary source of barriers to entry?
a. The costs of production make a single firm more efficient than a large number of firms.
b. A single firm hires all the people who have the management skills that are important in the industry.
c. Contracts among firms prohibit them from competing with one another in the production and sale of certain products.
d. All of the above are correct.

____ 34. Which of the following is *not* a reason for the existence of a monopoly?
a. Sole ownership of a key resource
b. Patents
c. Copyrights
d. Diseconomies of scale

____ 35. The market demand curve for a monopolist is typically
a. unitary elastic at the point of profit maximization.
b. downward sloping.
c. horizontal.
d. vertical.

____ 36. A monopolist's average revenue is always
a. equal to marginal revenue.
b. greater than the price of its product.
c. equal to the price of its product.
d. less than the price of its product.

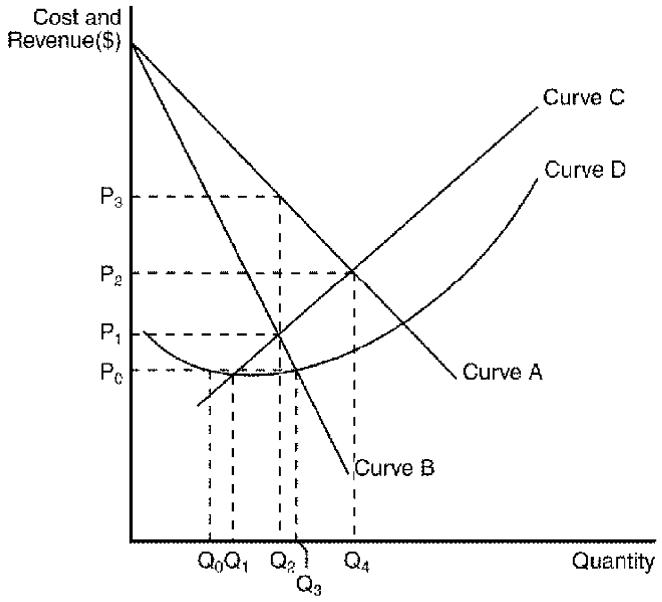
____ 37. When a monopolist increases the amount of output that it produces and sells, its average revenue
a. increases and its marginal revenue increases.
b. increases and its marginal revenue decreases.
c. decreases and its marginal revenue increases.
d. decreases and its marginal revenue decreases.

____ 38. Which of the following statements is true?
(i) When a competitive firm sells an additional unit of output, its revenue increases by an amount less than the price.
(ii) When a monopoly firm sells an additional unit of output, its revenue increases by an amount less than the price.
(iii) Average revenue is the same as price for both competitive and monopoly firms.

a. (ii) only
b. (iii) only
c. (i) and (ii)
d. (ii) and (iii)

Figure 15-2

The figure below illustrates the cost and revenue structure for a monopoly firm.

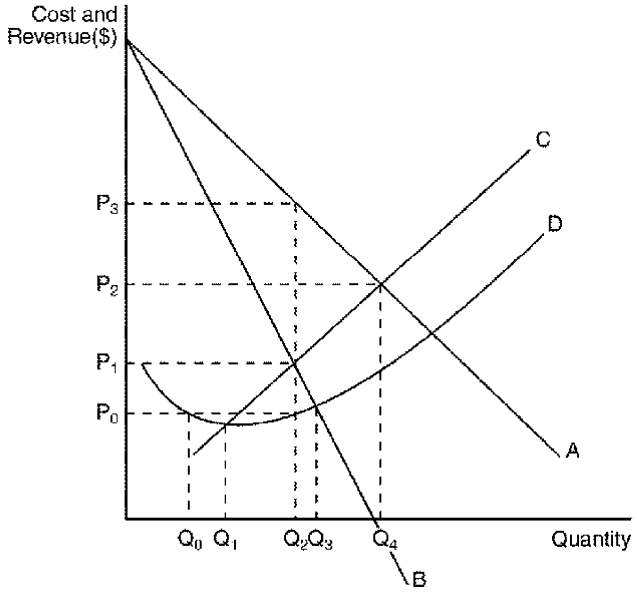


____ 39. **Refer to Figure 15-2**. The marginal revenue curve for a monopoly firm is depicted by curve
a. A.
b. B.
c. C.
d. D.

____ 40. **Refer to Figure 15-2**. The marginal cost curve for a monopoly firm is depicted by curve
a. A.
b. B.
c. C.
d. D.

Figure 15-3

The figure below illustrates the cost and revenue structure for a monopoly firm.



____ 41. **Refer to Figure 15-3**. A profit-maximizing monopoly's profit is equal to
a. $P_3 \times Q_2$.
b. $P_2 \times Q_4$.
c. $(P_3 - P_0) \times Q_2$.
d. $(P_3 - P_0) \times Q_4$.

____ 42. Suppose a firm has a monopoly on the sale of widgets and faces a downward-sloping demand curve. When selling the 100th widget, the firm will always receive
a. less marginal revenue on the 100th widget than it received on the 99th widget.
b. more average revenue on the 100th widget than it received on the 99th widget.
c. more total revenue on the 100 widgets than it received on the first 99 widgets.
d. a lower average cost per unit at 100 units output than at 99 units of output.

____ 43. For a monopolist,
a. average revenue is always greater than the price of the good.
b. marginal revenue is always less than the price of the good.
c. marginal cost is always greater than average total cost.
d. marginal revenue equals marginal cost at the point where total revenue is maximized.

____ 44. A monopolist can sell 200 units of output for $36.00 per unit. Alternatively, it can sell 201 units of output for $35.80 per unit. The marginal revenue of the 201st unit of output is
a. $-4.20.
b. $-0.20.
c. $4.20.
d. $35.80.

Scenario 15-2

A monopoly firm maximizes its profit by producing Q = 500 units of output. At that level of output, its marginal revenue is $30, its average revenue is $60, and its average total cost is $34.

____ 45. **Refer to Scenario 15-2**. The firm's profit-maximizing price is
a. $30.
b. between $30 and $34.
c. between $34 and $60.
d. $60.

____ 46. **Refer to Scenario 15-2.** The firm's maximum profit is
a. $13,000.
b. $15,000.
c. $17,000.
d. $30,000.

____ 47. A reduction in a monopolist's fixed costs would
a. decrease the profit-maximizing price and increase the profit-maximizing quantity produced.
b. increase the profit-maximizing price and decrease the profit-maximizing quantity produced.
c. not effect the profit-maximizing price or quantity.
d. possibly increase, decrease or not effect profit-maximizing price and quantity, depending on the elasticity of demand.

Table 15-2

Dreher's Designer Shirt Company, a monopolist, has the following cost and revenue information.

COSTS			REVENUES			
Quantit Produced	**Total Cost ($)**	**Marginal Cost**	**Quantity Demanded**	**Price ($/unit)**	**Total Revenue**	**Marginal Revenue**
0	100	--	0	170		--
1	140		1	160		
2	184		2	150		
3	230		3	140		
4	280		4	130		
5	335		5	120		
6	395		6	110		
7	475		7	100		
8	565		8	90		

____ 48. **Refer to Table 15-2**. What is the marginal revenue from selling the 2nd shirt?
a. $140
b. $150
c. $160
d. $170

____ 49. **Refer to Table 15-2**. What is the marginal revenue from selling the 8th shirt?
a. $10
b. $20
c. $40
d. $90

____ 50. Monopolies use their market power to
a. charge prices that equal minimum average total cost.
b. attain normal profits in the long run.
c. charge a price that is higher than marginal cost.
d. dump excess supplies of their product on the market.

____ 51. The problem with monopolies is their ability
(i) to do away with barriers to entry.
(ii) to price their product at a level that exceeds marginal cost.
(iii) to restrict output below the socially efficient level of production.

a. (i) and (ii)
b. (ii) and (iii)
c. (iii) only
d. (i), (ii), and (iii)

____ 52. One method used to control the ability of firms to capture monopoly profit in the United States is through
a. government purchase of products produced by monopolists.
b. government distribution of a monopolist's excess production.
c. enforcement of antitrust laws.
d. regulation of firms in highly competitive markets.

____ 53. The key issue in determining the efficiency of public versus private ownership of a monopoly is
a. the tendency for efficient management of publicly owned enterprises.
b. the inability of private monopolies to get rid of managers that are doing a bad job.
c. the propensity of private monopolies to generate excessive profits.
d. how ownership of the firm affects the cost of production.

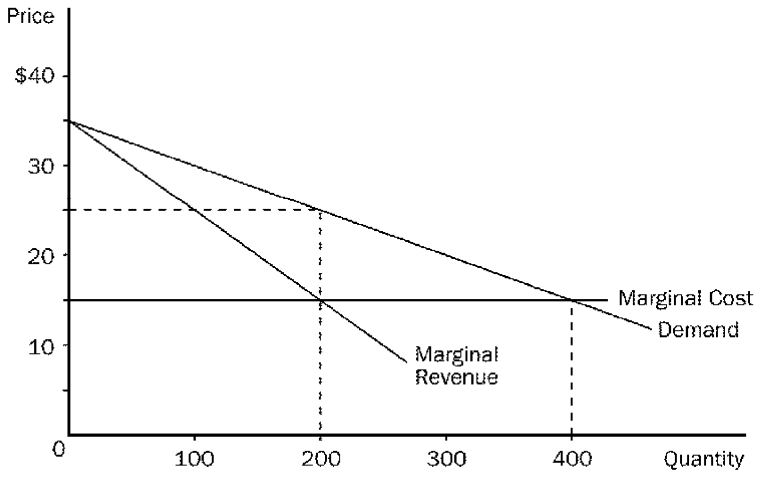
____ 54. For a long while, electricity producers were thought to be a classic example of a natural monopoly. People held this view because
a. the average cost of producing units of electricity by one producer in a specific region was lower than if the same quantity were produced by two or more producers in the same region.
b. the average cost of producing units of electricity by one producer in a specific region was higher than if the same quantity were produced by two or more produced in the same region.
c. the marginal cost of producing units of electricity by one producer in a specific region was higher than if the same quantity were produced by two or more producers in the same region.
d. electricity is a special non-excludable good that could never be sold in a competitive market.

____ 55. When deciding what price to charge consumers, the monopolist may choose to charge them different prices based on the customers'
a. geographical location.
b. age.
c. income.
d. All of the above are correct.

____ 56. Which of the following may eliminate some or all of the inefficiency that results from monopoly pricing?
a. The government can regulate the monopoly.
b. The monopoly can be prohibited from price discriminating.
c. The monopoly can be forced to operate at a point where its marginal revenue is equal to its marginal cost.
d. None of the above would eliminate any inefficiency associated with a monopoly.

Figure 15-7

The figure below depicts the demand, marginal revenue, and marginal cost curves of a profit-maximizing monopolist.



____ 57. **Refer to Figure 15-7**. If the monopoly firm is NOT allowed to price discriminate, then consumer surplus amounts to
a. $0.
b. $500.
c. $1,000.
d. $2,000.

____ 58. **Refer to Figure 15-7**. If there are no fixed costs of production, monopoly profit without price discrimination equals
a. $500.
b. $1,000.
c. $2,000.
d. $4,000.

____ 59. **Refer to Figure 15-7**. If there are no fixed costs of production, monopoly profit with perfect price discrimination equals
a. $500.
b. $1,000.
c. $2,000.
d. $4,000.

____ 60. A monopolist faces the following demand curve:

Price	Quantity Demanded
$8	300
$7	400
$6	500
$5	600
$4	700
$3	800
$2	900
$1	1,000

The monopolist has fixed costs of $1,000 and has a constant marginal cost of $2 per unit. If the monopolist were able to perfectly price discriminate, how many units would it sell?

a. 400
b. 500
c. 900
d. 4,200

____ 61. It is not uncommon to find that prescription drugs sell for more in the United States than they do in other countries. Which of the following statements about this issue is most likely to be true?

a. Drug companies are engaging in price discrimination, and this practice certainly reduces global social welfare.
b. Global social welfare could be improved if the price in the United States were reduced to the price charged in other countries.
c. Global social welfare could be improved if the price in the other countries were increased to the price charged in the United States.
d. Drug companies are engaging in price discrimination, but this might improve global social welfare if it gives more people access to the drugs.

____ 62. An airline knows that there are two types of travelers: business travelers and vacationers. For a particular flight, there are 100 business travelers who will pay $600 for a ticket while there are 50 vacationers who will pay $300 for a ticket. There are 150 seats available on the plane. Suppose the cost to the airline of providing the flight is $20,000, which includes the cost of the pilots, flight attendants, fuel, etc. How much profit will the airline earn if it sets the price of a ticket at $600?

a. -$5,000
b. $15,000
c. $40,000
d. $70,000

Table 15-5

Dreher's Designer Shirt Company, a monopolist, has the following cost and revenue information. Assume that Dreher's is able to engage in perfect price discrimination.

COSTS			REVENUES			
Quantity Produced	**Total Cost ($)**	**Marginal Cost**	**Quantity Demanded**	**Price ($)**	**Total Revenue**	**Marginal Revenue**
0	100	--	0	170		--
1	140		1	160		
2	184		2	150		
3	230		3	140		
4	280		4	130		
5	335		5	120		
6	395		6	110		
7	475		7	100		
8	575		8	95		

____ 63. **Refer to Table 15-5**. What are Dreher's Designer Shirt Company's fixed costs?
a. $100
b. $150
c. $354
d. $654

____ 64. There are two types of imperfectly competitive markets:
a. monopoly and monopolistic competition.
b. monopoly and oligopoly.
c. monopolistic competition and oligopoly.
d. monopolistic competition and cartels.

____ 65. Crude oil is primarily supplied to the world market by a few Middle Eastern countries. Such a market is an example of a(n)
(i) imperfectly competitive market.
(ii) monopoly market.
(iii) oligopoly market.

a. (i) and (ii)
b. (ii) and (iii)
c. (i) and (iii)
d. (iii) only

____ 66. If there are many firms participating in a market, the market is either
a. an oligopoly or monopolistically competitive.
b. perfectly competitive or monopolistically competitive.
c. an oligopoly or perfectly competitive.
d. an oligopoly or a cartel.

____ 67. A market structure with only a few sellers, offering similar or identical products, is known as
a. oligopoly.
b. monopoly.
c. monopolistic competition.
d. perfect competition.

Table 16-1

The following table shows the percentage of output supplied by the top eight firms in four different industries.

Firm	Industry A	Industry B	Industry C	Industry D
1	0.24	0.46	0.10	0.32
2	0.13	0.24	0.08	0.16
3	0.10	0.10	0.06	0.08
4	0.08	0.05	0.05	0.04
5	0.05	0.04	0.04	0.02
6	0.03	0.03	0.03	0.01
7	0.02	0.02	0.02	0.01
8	0.01	0.01	0.01	0.01

____ 68. **Refer to Table 16-1.** What is the concentration ratio in Industry B?
a. 5%
b. 46%
c. 85%
d. 95%

____ 69. What do economists call a market structure in which there are many firms selling products that are similar but not identical?
a. Perfect competition
b. Monopoly
c. Monopolistic competition
d. Oligopoly

Table 16-3

The information in the table below shows the total demand for premium-channel digital cable TV subscriptions in a small urban market. Assume that each digital cable TV operator pays a fixed cost of $100,000 (per year) to provide premium digital channels in the market area and that the marginal cost of providing the premium channel service to a household is zero.

Quantity	Price (per year)
0	$120
3,000	$100
6,000	$ 80
9,000	$ 60
12,000	$ 40
15,000	$ 20
18,000	$ 0

____ 70. **Refer to Table 16-3**. Assume that there are two profit-maximizing digital cable TV companies operating in this market. Further assume that they are able to collude on the price and quantity of premium digital channel subscriptions to sell. As part of their collusive agreement they decide to take an equal share of the market. How much profit will each company make?
a. $40,000
b. $170,000
c. $480,000
d. $540,000

____ 71. **Refer to Table 16-3**. Assume that there are two profit-maximizing digital cable TV companies operating in this market. Further assume that they are not able to collude on the price and quantity of premium digital channel subscriptions to sell. How many premium digital channel cable TV subscriptions will be sold altogether when this market reaches a Nash equilibrium?
a. 3,000
b. 6,000
c. 9,000
d. 12,000

Table 16-4

Imagine a small town in which only two residents, Tony and Jill, own wells that produce safe drinking water. Each week Tony and Jill work together to decide how many gallons of water to pump, to bring the water to town, and to sell it at whatever price the market will bear. To keep things simple, suppose that Tony and Jill can pump as much water as they want without cost so that the marginal cost of water equals zero.

The weekly town demand schedule and total revenue schedule for water is shown in the table below.

Weekly Quantity (in gallons)	Price	Weekly Total Revenue (and Total Profit)
0	$12	$ 0
10	11	110
20	10	200
30	9	270
40	8	320
50	7	350
60	6	360
70	5	350
80	4	320
90	3	270
100	2	200
110	1	110
120	0	0

____ 72. **Refer to Table 16-4**. If the market for water were perfectly competitive instead of monopolistic, how many gallons of water would be produced and sold?
a. 70
b. 90
c. 110
d. 120

____ 73. **Refer to Table 16-4**. Suppose the town enacts new antitrust laws that prohibit Tony and Jill from operating as a monopolist. What will the new price of water end up being once the Nash equilibrium is reached?
a. $3
b. $4
c. $5
d. $6

____ 74. When oligopolistic firms interacting with one another each choose their best strategy given the strategies chosen by other firms in the market, we have
a. a cartel.
b. a group of oligopolists behaving as a monopoly.
c. a Nash equilibrium.
d. the perfectly competitive outcome.

____ 75. As the number of firms in an oligopoly market
a. decreases, the market approaches the cartel outcome.
b. decreases, the market approaches the competitive market outcome.
c. increases, the market approaches the competitive market outcome.
d. increases, the market approaches the monopoly outcome.

____ 76. For cartels, as the number of firms (members of the cartel) increases,
a. the monopoly outcome becomes more likely.
b. the magnitude of the price effect decreases.
c. the more concerned each seller is about its own impact on the market price.
d. the easier it becomes to observe members violating their agreements.

____ 77. An agreement among firms regarding price and/or production levels is called
a. an antitrust market.
b. a free-trade arrangement.
c. collusion.
d. a Nash agreement.

____ 78. To increase their individual profits, members of a cartel have an incentive to
a. charge a higher price than the other members of the cartel.
b. increase production above the level agreed upon.
c. ignore the choices made by the other firms and act as a monopolist.
d. charge the same price a monopolist would charge.

____ 79. If an oligopolist is part of a cartel that is collectively producing the monopoly level of output, then that oligopolist has the incentive to lower production with the aim of
a. lowering prices.
b. increasing profits for the group of firms as a whole.
c. increasing profits for itself, regardless of the impact on profits for the group of firms as a whole.
d. None of the above is correct.

____ 80. An oligopolist will increase production if the output effect is
a. less than the price effect.
b. equal to the price effect.
c. greater than the price effect.
d. The oligopolist never has an incentive to increase production.

____ 81. The theory of oligopoly provides a reason as to why
a. perfect competition is not a useful object of study.
b. price is less than marginal cost for many firms.
c. all countries can benefit from free trade among nations.
d. firms do not want to capture larger shares of their markets.

Table 16-6

Quantity	Price
0	10
5	9
10	8
15	7
20	6
25	5
30	4
35	3
40	2
45	1
50	0

____ 82. **Refer to Table 16-6.** This table shows the demand schedule for a particular product. Suppose that the marginal cost to produce this product is constant at $2 per unit and that the fixed cost of producing this product is $10. If the market is served by two duopolists who each, acting in their own self-interest, choose the Nash equilibrium level of production, how much profit will each firm earn?
a. $10
b. $20
c. $30
d. $40

Table 16-8

Two cigarette manufacturers (Firm A and Firm B) are faced with lawsuits from states to recover the healthcare related expenses associated with cigarette smoking. Both cigarette firms have evidence that indicates that cigarette smoke causes lung cancer (and other related illnesses). State prosecutors do not have access to the same data used by cigarette manufacturers and thus will have difficulty recovering full costs without the help of at least one cigarette firm study. Each firm has been presented with an opportunity to lower its liability in the suit if it cooperates with attorneys representing the states.

		Firm B	
		Concede that cigarette smoke causes lung cancer	*Argue that there is no evidence that smoke causes cancer*
Firm A	*Concede that cigarette smoke causes lung cancer*	Firm A profit = $–20 Firm B profit = $–15	Firm A profit = $–50 Firm B profit = $–5
	Argue that there is no evidence that smoke causes cancer	Firm A profit = $–5 Firm B profit = $–50	Firm A profit = $–10 Firm B profit = $–10

____ 83. **Refer to Table 16-8**. Pursuing its own best interests, Firm B will concede that cigarette smoke causes lung cancer

a. only if Firm A concedes that cigarette smoke causes lung cancer.
b. only if Firm A does not concede that cigarette smoke causes lung cancer.
c. regardless of whether Firm A concedes that cigarette smoke causes lung cancer.
d. None of the above; in pursuing its own best interests, Firm B will in no case concede that cigarette smoke causes lung cancer.

Table 16-9

Each year the United States considers renewal of Most Favored Nation (MFN) trading status with China. Historically, legislators have made threats of not renewing MFN status because of human rights abuses in China. The non renewal of MFN trading status is likely to involve some retaliatory measures by China. The payoff table below shows the potential economic gains associated with a game in which China may impose trade sanctions against U.S. firms and the United States may not renew MFN status with China. The table contains the dollar value of all trade-flow benefits to the United States and China.

		China	
		Impose trade sanctions against U.S. firms	*Do not impose trade sanctions against U.S. firms*
United States	*Don't renew MFN status with China*	U.S. trade value = $65 b China trade value = $75 b	U.S. trade value = $140 b China trade value = $5 b
	Renew MFN status with China	U.S. trade value = $35 b China trade value = $285 b	U.S. trade value = $130 b China trade value = $275 b

____ 84. **Refer to Table 16-9**. This particular game
a. features a dominant strategy for Firm A.
b. features a dominant strategy for Firm B.
c. is a version of the prisoners' dilemma game.
d. All of the above are correct.

Table 16-10

Two discount superstores (Ultimate Saver and SuperDuper Saver) in a growing urban area are interested in expanding their market share. Both are interested in expanding the size of their store and parking lot to accommodate potential growth in their customer base. The following game depicts the strategic outcomes that result from the game. Growth-related profits of the two discount superstores are shown in the table below.

		SuperDuper Saver	
		Increase the size of store and parking lot	*Do not increase the size of store and parking lot*
Ultimate Saver	*Increase the size of store and parking lot*	SuperDuper Saver = $50 Ultimate Saver = $65	SuperDuper Saver = $25 Ultimate Saver = $275
	Do not increase the size of store and parking lot	SuperDuper Saver = $250 Ultimate Saver = $35	SuperDuper Saver = $85 Ultimate Saver = $135

____ 85. **Refer to Table 16-10**. Suppose the owners of SuperDuper Saver and Ultimate Saver meet for a friendly game of golf one afternoon and happen to discuss a strategy to optimize growth related profit. They should both agree to
a. increase their store and parking lot sizes.
b. refrain from increasing their store and parking lot sizes.
c. be more competitive in capturing market share.
d. share the context of their conversation with the Federal Trade Commission.

Scenario 16-1

Assume that the countries of Irun and Urun are the only two producers of crude oil. Further assume that both countries have entered into an agreement to maintain certain production levels in order to maximize profits. In the world market for oil, the demand curve is downward sloping.

____ 86. **Refer to Scenario 16-1**. As long as production levels are less than the Nash equilibrium level, both Irun and Urun have the individual incentive to
a. hold production levels constant.
b. decrease production.
c. increase production.
d. increase price.

____ 87. **Refer to Scenario 16-1**. If Irun fails to live up to the production agreement and overproduces, which of the following statements will be true of Urun's condition?
a. Urun will invariably be worse off than before the agreement was broken.
b. Urun will counter by decreasing its production in order to maintain price stability.
c. Urun's profit will be maximized by holding its production constant.
d. Urun will be hurt worse if it follows suit and increases production.

____ 88. What happens when the prisoners' dilemma game is repeated numerous times in an oligopoly market?
(i) The firms may well reach the monopoly outcome.
(ii) The firms may well reach the competitive outcome.
(iii) Buyers of the oligopolists' product will likely be worse off as a result.

a. (i) and (ii)
b. (ii) and (iii)
c. (i) and (iii)
d. (i), (ii), and (iii)

Table 16-13

		B		
		Left	*Center*	*Right*
A	*Up*	(4, 2)	(2, 5)	(3, 3)
	Middle	(3, 1)	(5, 3)	(5, 2)
	Down	(1, 3)	(4, 4)	(6, 1)

____ 89. **Refer to Table 16-13.** This table shows a game played between two players, A and B. The payoffs are given in the table as (Payoff to A, Payoff to B). Which of the following statements is true regarding this game?
a. Both players have a dominant strategy.
b. Neither player has a dominant strategy.
c. A has a dominant strategy, but B does not have a dominant strategy.
d. B has a dominant strategy, but A does not have a dominant strategy.

____ 90. **Refer to Table 16-13.** This table shows a game played between two players, A and B. The payoffs in the table are shown as (Payoff to A, Payoff to B). Which of the following outcomes represents a Nash equilibrium in the game?
a. Middle-Center
b. Down-Center
c. Up-Left
d. More than one of the above is a Nash equilibrium in this game.

Table 16-14

		B	
		Q=2	*Q=3*
A	*Q=2*	(10, 10)	(8, 12)
	Q=3	(12, 8)	(6, 6)

____ 91. **Refer to Table 16-14.** This table shows a game played between two firms, A and B. In this game each firm must decide how much output to produce. The profit for each firm is given in the table as (Profit for A, Profit for B). In this game
a. neither player has a dominant strategy.
b. both players have a dominant strategy.
c. A has a dominant strategy, but B does not have a dominant strategy.
d. B has a dominant strategy, but A does not have a dominant strategy.

Table 16-16

Consider a small town that has two grocery stores from which residents can choose to buy a gallon of milk. The store owners each must make a decision to set a high milk price or a low milk price. The payoff table, showing profit per week, is provided below. The profit in each cell is shown as (Store 1, Store 2).

		Store 2	
		Low Price	*High Price*
Store 1	*Low Price*	(500, 500)	(800, 100)
	High Price	(100, 800)	(650, 650)

____ 92. **Refer to Table 16-16.** If grocery store 2 sets a low price, what price should grocery store 1 set? And what will grocery store 1's payoff equal?
a. Low price, $500
b. High price, $800
c. Low price, $100
d. High price, $100

____ 93. **Refer to Table 16-16.** If grocery store 1 sets a high price, what price should grocery store 2 set? And what will grocery store 2's payoff equal?
a. Low price, $800
b. High price, $100
c. Low price, $500
d. High price, $650

____ 94. The Sherman Act made cooperative agreements
a. unenforceable outside of established judicial review processes.
b. enforceable with proper judicial review.
c. a criminal conspiracy.
d. a crime, but did not give direction on possible penalties.

____ 95. The Clayton Act
a. replaced the Sherman Act.
b. strengthened the Sherman Act.
c. was specifically designed to reduce the ability of cartels to organize.
d. was enforced by the executive, rather than judicial, branch of government.

Scenario 16-5

Assume that a local bank sells two services, checking accounts and ATM card services. Mr. Donethat is willing to pay $8 a month for the bank to service his checking account and $2 a month for unlimited use of his ATM card. Ms. Beenthere is willing to pay only $5 for a checking account, but is willing to pay $9 for unlimited use of her ATM card. Assume that the bank can provide each of these services at zero marginal cost.

____ 96. **Refer to Scenario 16-5**. If the bank is unable to use tying, what is the profit-maximizing price to charge for a checking account?
a. $13
b. $9
c. $8
d. $5

____ 97. **Refer to Scenario 16-5**. How much additional profit can the bank earn by switching to the use of a tying strategy to price checking accounts and ATM service rather than pricing these services separately?
a. $14
b. $11
c. $7
d. $1

____ 98. Which of the following statements is true?
a. The proper scope of antitrust laws is well defined and definite.
b. Antitrust laws focus on granting certain firms the option to form a cartel.
c. Policymakers have the difficult task of determining whether some firms' decisions have legitimate purposes even though they appear anti-competitive.
d. There is always a need for policymakers to try to limit a firm's pricing power, regardless of whether the firm's market is competitive, a monopoly, or an oligopoly.

____ 99. Consider a market served by a monopolist, Firm A. A new firm, Firm B, enters the market and, as a result, Firm A lowers its price to try to drive Firm B out of the market. This practice is known as
a. resale price maintenance.
b. predatory tying.
c. tying.
d. predatory pricing.

____ 100. The primary purpose of antitrust legislation is to
a. protect small businesses.
b. protect the competitiveness of U.S. markets.
c. protect the prices of American-made products.
d. ensure firms earn only a fair profit.

Exam 3 Study Guide
Answer Section

MULTIPLE CHOICE

1. ANS: A PTS: 1 DIF: 2 REF: 14-1
   TOP: Competitive markets MSC: Interpretive
2. ANS: C PTS: 1 DIF: 1 REF: 14-1
   TOP: Competitive markets MSC: Analytical
3. ANS: D PTS: 1 DIF: 1 REF: 14-1
   TOP: Competitive markets MSC: Definitional
4. ANS: B PTS: 1 DIF: 2 REF: 14-1
   TOP: Competitive markets MSC: Interpretive
5. ANS: D PTS: 1 DIF: 2 REF: 14-1
   TOP: Average revenue MSC: Applicative
6. ANS: D PTS: 1 DIF: 1 REF: 14-2
   TOP: Profit MSC: Definitional
7. ANS: A PTS: 1 DIF: 2 REF: 14-2
   TOP: Profit maximization MSC: Analytical
8. ANS: D PTS: 1 DIF: 2 REF: 14-2
   TOP: Profit maximization MSC: Analytical
9. ANS: C PTS: 1 DIF: 2 REF: 14-2
   TOP: Profit maximization MSC: Analytical
10. ANS: D PTS: 1 DIF: 2 REF: 14-2
    TOP: Profit maximization MSC: Interpretive
11. ANS: D PTS: 1 DIF: 2 REF: 14-2
    TOP: Profit maximization MSC: Analytical
12. ANS: D PTS: 1 DIF: 3 REF: 14-2
    TOP: Profit maximization MSC: Applicative
13. ANS: D PTS: 1 DIF: 3 REF: 14-2
    TOP: Profit MSC: Applicative
14. ANS: C PTS: 1 DIF: 3 REF: 14-2
    TOP: Profit maximization MSC: Analytical
15. ANS: D PTS: 1 DIF: 2 REF: 14-2
    TOP: Profit maximization MSC: Definitional
16. ANS: C PTS: 1 DIF: 2 REF: 14-2
    TOP: Profit maximization MSC: Applicative
17. ANS: C PTS: 1 DIF: 2 REF: 14-2
    TOP: Profit MSC: Analytical
18. ANS: D PTS: 1 DIF: 3 REF: 14-3
    TOP: Supply curve MSC: Applicative
19. ANS: B PTS: 1 DIF: 2 REF: 14-3
    TOP: Supply curve MSC: Interpretive
20. ANS: D PTS: 1 DIF: 2 REF: 14-3
    TOP: Supply curve MSC: Interpretive

21. ANS: A PTS: 1 DIF: 2 REF: 14-3
TOP: Supply curve MSC: Interpretive
22. ANS: B PTS: 1 DIF: 2 REF: 14-3
TOP: Competitive markets MSC: Interpretive
23. ANS: B PTS: 1 DIF: 2 REF: 14-3
TOP: Competitive markets MSC: Interpretive
24. ANS: A PTS: 1 DIF: 2 REF: 14-3
TOP: Supply curve MSC: Interpretive
25. ANS: C PTS: 1 DIF: 2 REF: 14-3
TOP: Competitive markets MSC: Interpretive
26. ANS: C PTS: 1 DIF: 2 REF: 14-3
TOP: Competitive markets MSC: Analytical
27. ANS: B PTS: 1 DIF: 2 REF: 14-3
TOP: Market supply MSC: Analytical
28. ANS: A PTS: 1 DIF: 1 REF: 14-3
TOP: Supply curve MSC: Definitional
29. ANS: C PTS: 1 DIF: 2 REF: 14-3
TOP: Profit maximization MSC: Interpretive
30. ANS: D PTS: 1 DIF: 2 REF: 15-1
TOP: Natural monopoly MSC: Interpretive
31. ANS: D PTS: 1 DIF: 2 REF: 15-1
TOP: Patents MSC: Interpretive
32. ANS: D PTS: 1 DIF: 2 REF: 15-1
TOP: Natural monopoly MSC: Interpretive
33. ANS: A PTS: 1 DIF: 2 REF: 15-1
TOP: Barriers to entry MSC: Interpretive
34. ANS: D PTS: 1 DIF: 1 REF: 15-1
TOP: Monopoly MSC: Interpretive
35. ANS: B PTS: 1 DIF: 2 REF: 15-2
TOP: Demand curve MSC: Interpretive
36. ANS: C PTS: 1 DIF: 2 REF: 15-2
TOP: Average revenue MSC: Definitional
37. ANS: D PTS: 1 DIF: 2 REF: 15-2
TOP: Demand curve MSC: Analytical
38. ANS: D PTS: 1 DIF: 3 REF: 15-2
TOP: Marginal revenue MSC: Interpretive
39. ANS: B PTS: 1 DIF: 2 REF: 15-2
TOP: Marginal revenue MSC: Interpretive
40. ANS: C PTS: 1 DIF: 2 REF: 15-2
TOP: Marginal cost MSC: Interpretive
41. ANS: C PTS: 1 DIF: 2 REF: 15-2
TOP: Profit MSC: Analytical
42. ANS: A PTS: 1 DIF: 2 REF: 15-2
TOP: Demand curve MSC: Analytical
43. ANS: B PTS: 1 DIF: 2 REF: 15-2
TOP: Marginal revenue MSC: Interpretive

44. ANS: A PTS: 1 DIF: 2 REF: 15-2
TOP: Marginal revenue MSC: Applicative
45. ANS: D PTS: 1 DIF: 2 REF: 15-2
TOP: Pricing MSC: Analytical
46. ANS: A PTS: 1 DIF: 2 REF: 15-2
TOP: Profit MSC: Applicative
47. ANS: C PTS: 1 DIF: 3 REF: 15-2
TOP: Fixed cost MSC: Interpretive
48. ANS: A PTS: 1 DIF: 2 REF: 15-2
TOP: Marginal revenue MSC: Applicative
49. ANS: B PTS: 1 DIF: 2 REF: 15-2
TOP: Marginal revenue MSC: Applicative
50. ANS: C PTS: 1 DIF: 2 REF: 15-2
TOP: Pricing MSC: Interpretive
51. ANS: B PTS: 1 DIF: 2 REF: 15-3
TOP: Monopoly MSC: Interpretive
52. ANS: C PTS: 1 DIF: 2 REF: 15-4
TOP: Antitrust MSC: Interpretive
53. ANS: D PTS: 1 DIF: 2 REF: 15-4
TOP: Welfare MSC: Interpretive
54. ANS: A PTS: 1 DIF: 2 REF: 15-4
TOP: Natural monopoly MSC: Interpretive
55. ANS: D PTS: 1 DIF: 2 REF: 15-5
TOP: Price discrimination MSC: Interpretive
56. ANS: A PTS: 1 DIF: 2 REF: 15-5
TOP: Regulation MSC: Interpretive
57. ANS: C PTS: 1 DIF: 2 REF: 15-5
TOP: Consumer surplus MSC: Applicative
58. ANS: C PTS: 1 DIF: 3 REF: 15-5
TOP: Profit MSC: Applicative
59. ANS: D PTS: 1 DIF: 3 REF: 15-5
TOP: Profit MSC: Applicative
60. ANS: C PTS: 1 DIF: 3 REF: 15-5
TOP: Perfect price discrimination MSC: Analytical
61. ANS: D PTS: 1 DIF: 2 REF: 15-5
TOP: Price discrimination MSC: Interpretive
62. ANS: C PTS: 1 DIF: 2 REF: 15-5
TOP: Price discrimination MSC: Analytical
63. ANS: A PTS: 1 DIF: 2 REF: 15-5
TOP: Fixed cost MSC: Applicative
64. ANS: C PTS: 1 DIF: 1 REF: 16-1
TOP: Imperfect competition MSC: Definitional
65. ANS: C PTS: 1 DIF: 2 REF: 16-1
TOP: Oligopoly MSC: Interpretive
66. ANS: B PTS: 1 DIF: 2 REF: 16-1
TOP: Markets MSC: Interpretive

67. ANS: A PTS: 1 DIF: 1 REF: 16-1
TOP: Oligopoly MSC: Definitional
68. ANS: C PTS: 1 DIF: 2 REF: 16-1
TOP: Concentration ratio MSC: Applicative
69. ANS: C PTS: 1 DIF: 1 REF: 16-1
TOP: Monopolistic competition MSC: Definitional
70. ANS: B PTS: 1 DIF: 2 REF: 16-2
TOP: Profit MSC: Applicative
71. ANS: D PTS: 1 DIF: 2 REF: 16-2
TOP: Nash equilibrium MSC: Applicative
72. ANS: D PTS: 1 DIF: 2 REF: 16-2
TOP: Competitive markets MSC: Applicative
73. ANS: B PTS: 1 DIF: 3 REF: 16-2
TOP: Nash equilibrium MSC: Applicative
74. ANS: C PTS: 1 DIF: 2 REF: 16-2
TOP: Nash equilibrium MSC: Definitional
75. ANS: C PTS: 1 DIF: 2 REF: 16-2
TOP: Oligopoly MSC: Analytical
76. ANS: B PTS: 1 DIF: 2 REF: 16-2
TOP: Cartels MSC: Interpretive
77. ANS: C PTS: 1 DIF: 1 REF: 16-2
TOP: Collusion MSC: Definitional
78. ANS: B PTS: 1 DIF: 2 REF: 16-2
TOP: Cartels MSC: Analytical
79. ANS: D PTS: 1 DIF: 2 REF: 16-2
TOP: Cartels MSC: Analytical
80. ANS: C PTS: 1 DIF: 2 REF: 16-2
TOP: Profit maximization MSC: Analytical
81. ANS: C PTS: 1 DIF: 2 REF: 16-2
TOP: Oligopoly MSC: Interpretive
82. ANS: B PTS: 1 DIF: 3 REF: 16-2
TOP: Duopoly MSC: Applicative
83. ANS: D PTS: 1 DIF: 2 REF: 16-3
TOP: Game theory MSC: Applicative
84. ANS: D PTS: 1 DIF: 2 REF: 16-3
TOP: Prisoners' dilemma MSC: Applicative
85. ANS: B PTS: 1 DIF: 2 REF: 16-3
TOP: Cartels MSC: Applicative
86. ANS: C PTS: 1 DIF: 2 REF: 16-3
TOP: Cartels MSC: Analytical
87. ANS: A PTS: 1 DIF: 2 REF: 16-3
TOP: Cartels MSC: Analytical
88. ANS: C PTS: 1 DIF: 2 REF: 16-3
TOP: Prisoners' dilemma MSC: Interpretive
89. ANS: D PTS: 1 DIF: 2 REF: 16-3
TOP: Game theory MSC: Applicative

90. ANS: A PTS: 1 DIF: 2 REF: 16-3
TOP: Game theory MSC: Applicative
91. ANS: A PTS: 1 DIF: 2 REF: 16-3
TOP: Game theory MSC: Applicative
92. ANS: A PTS: 1 DIF: 2 REF: 16-3
TOP: Game theory MSC: Applicative
93. ANS: A PTS: 1 DIF: 2 REF: 16-3
TOP: Game theory MSC: Applicative
94. ANS: C PTS: 1 DIF: 1 REF: 16-4
TOP: Sherman Antitrust Act of 1890 MSC: Interpretive
95. ANS: B PTS: 1 DIF: 1 REF: 16-4
TOP: Clayton Act of 1914 MSC: Interpretive
96. ANS: D PTS: 1 DIF: 2 REF: 16-4
TOP: Tying MSC: Applicative
97. ANS: D PTS: 1 DIF: 3 REF: 16-4
TOP: Tying MSC: Applicative
98. ANS: C PTS: 1 DIF: 2 REF: 16-4
TOP: Antitrust MSC: Interpretive
99. ANS: D PTS: 1 DIF: 1 REF: 16-4
TOP: Predatory pricing MSC: Interpretive
100. ANS: B PTS: 1 DIF: 2 REF: 16-4
TOP: Antitrust MSC: Interpretive