Exam

Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Because resources are scarce, individuals are required to
   A) improve production but not distribution.
   B) sacrifice production but not consumption.
   C) improve distribution but not production.
   D) make choices among alternatives.
   E) use resources inefficiently.

The diagram below shows two production possibilities boundaries for Country X.

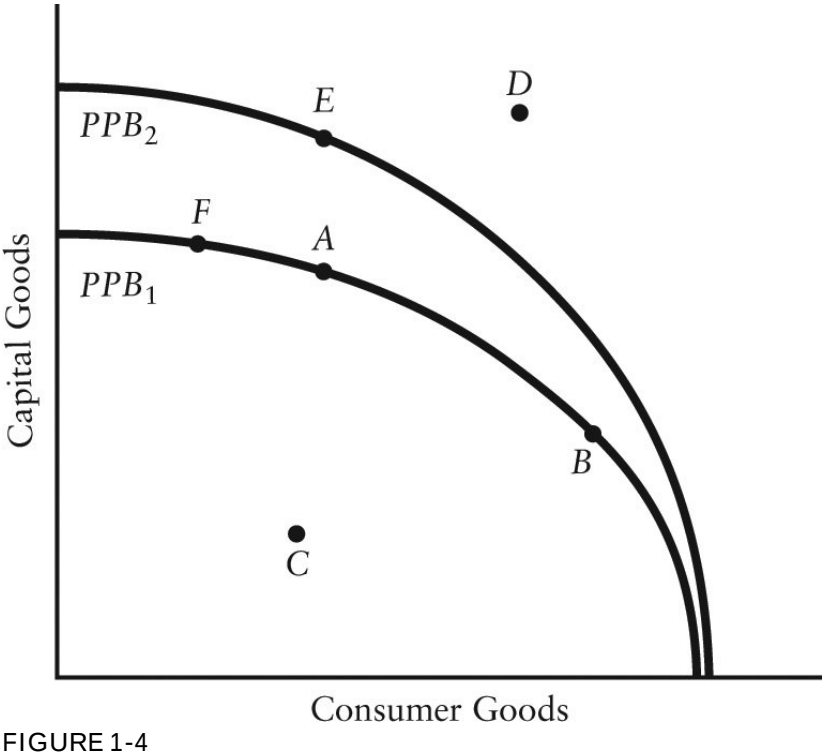

FIGURE 1-4

2) Refer to Figure 1-4. Suppose that Country X is currently producing at point E. Country X could achieve production at point D if
   A) firms reduced output of capital goods.
   B) the prices of capital goods and consumption goods fell.
   C) the given resources were more efficiently employed.
   D) the given resources were fully employed.
   E) sufficient improvements in technology occurred in either the capital goods industry or the consumer goods industries.

3) Consider cars and gasoline. Other things being equal, when the price of cars decreases, the demand for gasoline is likely to
A) increase because the two goods are complements.
B) remain unchanged.
C) remain unchanged because cars and gasoline are two distinct markets.
D) remain unchanged because cars and gasoline are produced independently of one another.
E) decrease because the two goods are complements.

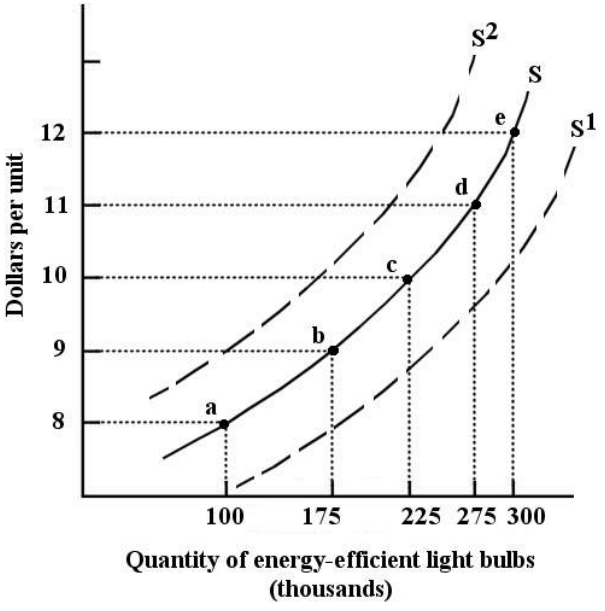

FIGURE 3-2

4) Refer to Figure 3-2. A shift of the supply curve from *S* to S^1 could be caused by
A) a decrease in the price of energy-efficient light bulbs.
B) a decrease in the price of glass, a major input in the production of energy-efficient light bulbs.
C) an increase in the price of energy-efficient light bulbs.
D) a change in consumers' preferences away from ordinary light bulbs toward energy-efficient light bulbs.
E) an expectation that new government regulations will ban the use of energy-efficient light bulbs.

5) If a demand curve and a supply curve can be stated functionally as $Q_d = 100 - 5P$; and $Q_S = 90 + 5P$, respectively, then the equilibrium quantity and price (Q, P) would be
A) 1; 95. B) 95; 1. C) 95; 10. D) 190; 1. E) 190; 10.

6) Suppose a fast-food chain determines that the price elasticity of demand for its hamburgers is 1.7, and the price of the hamburger is currently $4.00. What will be the effect on quantity demanded and total expenditure on this chain's hamburgers if the price is increased to $6.00?
   A) Quantity demanded will fall by 1.7% and total expenditure will increase.
   B) Quantity demanded will fall by 11.76% and total expenditure will decrease.
   C) Quantity demanded will fall by 17% and total expenditure will increase.
   D) Quantity demanded will fall by 34% and total expenditure will decrease.
   E) Quantity demanded will fall by 68% and total expenditure will decrease.

7) If the income elasticity of demand for a good is 1.25, a 10% increase in income results in
   A) a decrease in quantity demanded.
   B) a 12.5% decrease in the quantity demanded.
   C) a 12.5% increase in the quantity demanded.
   D) a 125% increase in the quantity demanded.
   E) There is not enough information to answer this question.

8) If pizza and beer are complementary goods, we can conclude that
   A) both goods are inferior goods.
   B) the income elasticity of demand is negative.
   C) their cross-elasticity of demand is negative.
   D) the income elasticity of demand is positive.
   E) their cross-elasticity of demand is positive.

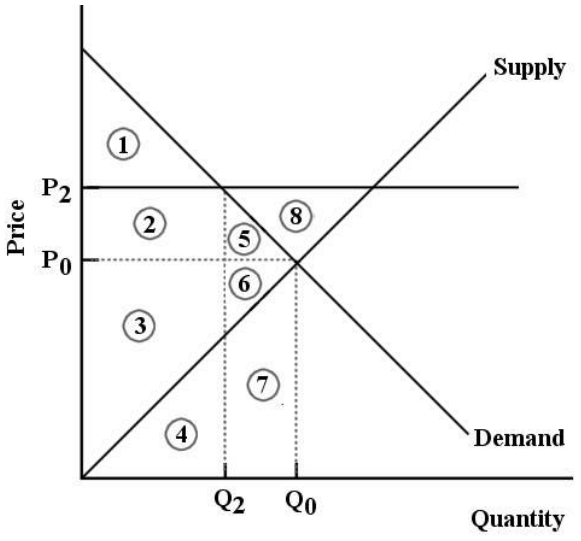

FIGURE 5-7

9) Refer to Figure 5-7. The market for good X is in equilibrium at P_0 and Q_0. Now suppose the government imposes a _____ at P_2. One result would be _____.
A) price floor; an increase in economic surplus represented by area 1
B) price floor; a deadweight loss represented by areas 5 and 6
C) price ceiling; a deadweight loss represented by areas 5 and 6
D) price floor; a deadweight loss represented by area 8
E) price ceiling; an increase in economic surplus represented by areas 2 and 5

The table below shows the total value (in dollars) that Andrew gets from playing 9-hole rounds of golf.

Rounds of Golf per Month	Total Value ($)
0	0
1	40
2	70
3	92
4	108
5	120
6	130
7	130

TABLE 6-3

10) Refer to Table 6-3. If the price of a 9-hole round of golf is $9, then Andrew will play _____ rounds per month.
A) 2 B) 3 C) 4 D) 5 E) 6

11) The period of time over which all factors of production and technology are variable is known as the
A) very-short run. B) short run. C) long run. D) very-long run.

12) Consider a basket-producing firm with fixed capital. If the firm can produce 24 baskets per day with 3 workers and then increases production to 36 baskets per day with 4 workers, then which of the following statements is definitely true?
A) With 4 workers, the average product is greater than the marginal product.
B) With 4 workers, the marginal product is greater than the average product.
C) The firm has passed the point of diminishing marginal productivity.
D) The firm has passed the point of diminishing average productivity.
E) The marginal productivity of the fourth worker is 9.

The following data show the total output for a firm when different amounts of labour are combined with a fixed amount of capital. Assume that the wage per unit of labour is $10 and the cost of the capital is $50.

Labour per period	Total output per period
0	0
1	10
2	30
3	90
4	132
5	150

TABLE 7-3

13) Refer to Table 7-3. The marginal product of labour is at its maximum when the firm changes the amount of labour hired from
A) 0 to 1 unit. B) 1 to 2 units. C) 2 to 3 units. D) 3 to 4 units. E) 4 to 5 units.

14) Refer to Table 7-3. The average product of labour when the firm hires 3 units of labour is _____. The average product of labour when the firm hires 4 units of labour is _____.
A) 60; 42 B) 30; 90 C) 90; 132 D) 30; 33 E) 90; 222

15) When a firm's total-product curve is increasing at a decreasing rate
A) average product is falling.
B) average product is zero.
C) marginal product is positive but declining.
D) the marginal-product curve lies below the average-product curve.
E) marginal product is negative and decreasing.

The following data show the total output for a firm when specified amounts of labour are combined with a fixed amount of capital. When answering the questions, you are to assume that the wage per unit of labour is $25 and the cost of the capital is $100.

Labour per unit of time	Total output
0	0
1	25
2	75
3	175
4	250
5	305

TABLE 7-4

16) Refer to Table 7-4. Average variable costs for 175 units of output is approximately
A) 25 cents. B) 32 cents. C) 43 cents. D) 57 cents. E) $1.00.

17) Suppose a firm is producing 500 units of output, incurring a total cost of $700 000 and total fixed cost of $100 000. It can be concluded that average variable cost is
A) $200. B) $600. C) $1200. D) $1400. E) $1600.

18) Suppose a firm producing digital cameras is operating such that marginal costs are higher than average costs. If the firm produces one more camera, average costs will
A) rise.
B) remain constant.
C) reach a point of diminishing returns.
D) fall.
E) reach their maximum.

The table below shows the number of units of labour and capital used in 4 alternative production techniques for producing 1000 widgets per month.

Technique	A	B	C	D
Labour	25	35	50	30
Capital	50	35	25	60

TABLE 8-1

19) Refer to Table 8-1. If the price of labour is $10 and the price of capital is $5, which production technique minimizes the costs of producing 1000 units of output?
   A) A
   B) B
   C) C
   D) D
   E) Any of the techniques have the same cost.

20) Suppose that capital costs $10 per unit and labour costs $4 per unit. If the marginal product of capital is 50 and the marginal product of labour is 50, the firm should _____ in order to minimize its costs of producing its output.
   A) not change its current factor use
   B) employ less capital and labour
   C) employ more capital and labour
   D) employ less capital and more labour
   E) employ more capital and less labour

The figure below shows a family of cost curves for a firm. The subscripts 1, 2, and 3 for the SRATC curves refer to different plant sizes.

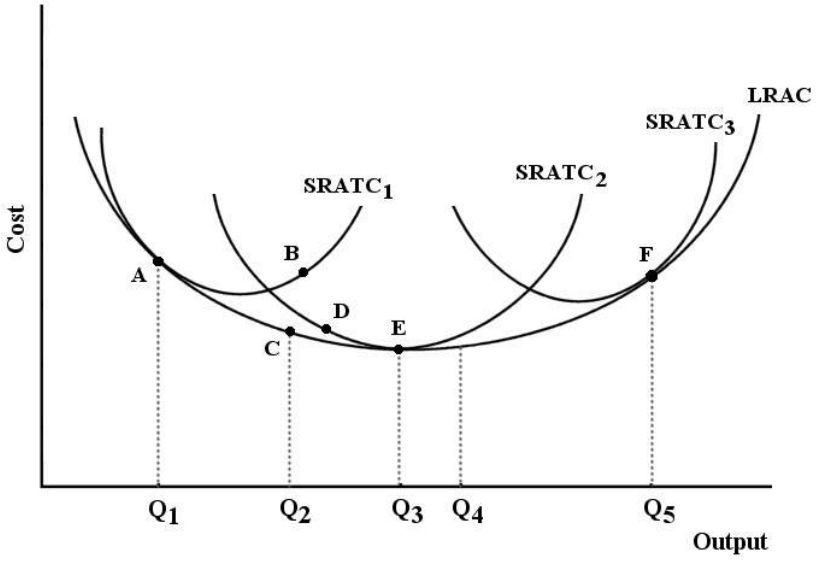

FIGURE 8-3

21) Refer to Figure 8-3. If this firm is producing at point B, then
A) this firm is experiencing decreasing returns to scale.
B) this firm is producing a level of output that is technically inefficient in the long run.
C) it should employ more of its variable factors of production.
D) plant size 1 is optimal.
E) this firm could produce the same level of output at a lower cost with plant size 2.

22) Which of the following statements most accurately makes the distinction between the *long run* and the *very-long run* with respect to the long-run average cost (LRAC) curve?
A) In the long run, the firm is moving along the existing LRAC curve, whereas in the very-long run, the LRAC curve is shifting down.
B) In the long run, the firm is moving along the existing LRAC curve, whereas in the very-long run, the LRAC curve is shifting up.
C) In the long run, the LRAC curve is shifting down, whereas in the very-long run the firm is moving along the existing LRAC curve.
D) In the long run, the LRAC curve is shifting up, whereas in the very-long run the firm is moving along the existing LRAC curve.
E) There is no distinction between the long run and the very-long run with respect to the LRAC curve.

23) Under perfect competition, the demand curve facing an individual firm is
A) infinitely price elastic.
B) a rectangular hyperbola.
C) the same as the industry's demand curve.
D) upward sloping.
E) downward sloping.

Consider the price and quantity data below for a perfectly competitive firm producing mousetraps.

Price ($)	Quantity
5	1000
5	1250
5	1500
5	1750
5	2000

TABLE 9-1

24) Refer to Table 9-1. If this firm is producing 1250 mousetraps, its total revenue is _____, its average revenue is _____ and its marginal revenue is _____.
A) $5; $5; $5
B) $1750; $250; $5
C) $5000; $5; $250
D) $6250; $5; $5
E) $6250; $250; $5

25) A perfectly competitive firm is currently producing an output level where price is $10.00, average variable cost is $6.00, average total cost is $10.00, and marginal cost is $8.00. In order to maximize profits, this firm should
A) increase the market price.
B) produce zero output.
C) decrease its output.
D) not change its output — this firm is at its profit-maximizing position.
E) increase its output.

Assume the following total cost schedule for a perfectly competitive firm.

Output	TVC ($)	TFC ($)
0	0	100
1	40	100
2	70	100
3	120	100
4	180	100
5	250	100
6	330	100

TABLE 9-2

26) Refer to Table 9-2. If the market price were $75, this perfectly competitive firm wishing to maximize its profits would
A) not produce because *P* < *TFC*.
B) not produce because *P* < minimum of *ATC*.
C) produce 2 units of output.
D) produce 5 units of output.
E) produce 6 units of output.

27) Refer to Table 9-2. What is the marginal cost of producing the 5th unit of output?
A) $30 B) $35 C) $50 D) $70 E) $80

28) Suppose that in a perfectly competitive industry, the market price of the product is $6. A firm is producing the output level at which average total cost equals marginal cost, both of which are $8. Average variable cost is $4. To maximize its profits in the short run, the firm should
A) shut down.
B) reduce its output.
C) leave its output unchanged.
D) expand its output.
E) There is insufficient information to know.

29) Which of the following statements about a perfectly competitive industry in long-run equilibrium is true?
A) Firms must exhibit economies of scale.
B) Each firm is producing at the minimum point on its *LRAC* curve.
C) In order to stay in the industry each firm is making an economic profit.
D) Individual firms will have no incentive for technological improvement.
E) Losses are tolerable because of high fixed costs.

The diagram below shows the short-run cost curves for 3 perfectly competitive firms in the same industry.

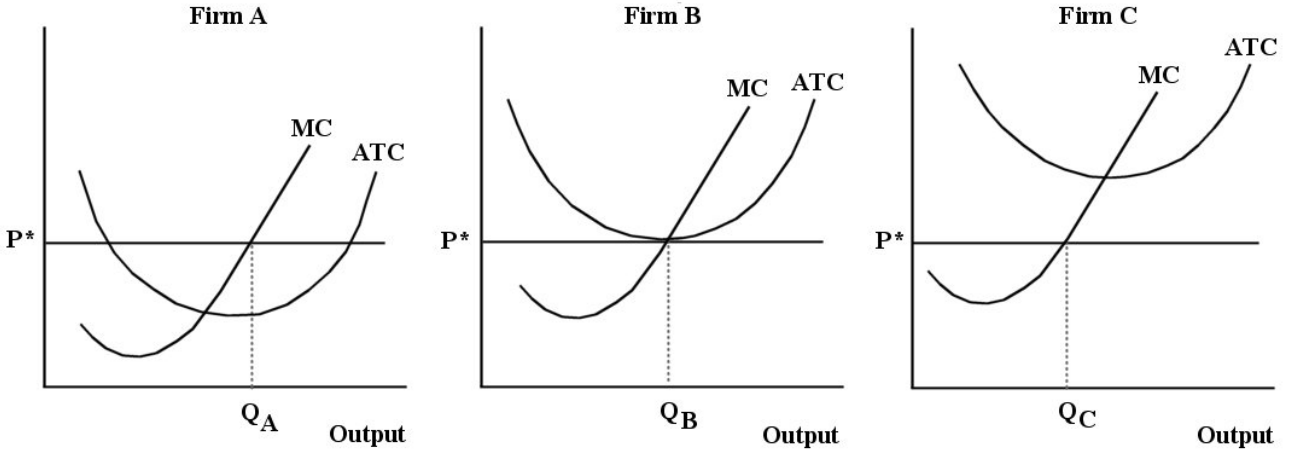

FIGURE 9-6

30) Refer to Figure 9-6. Which firm or firms is likely to exit this industry?
A) Firm A
B) Firm B
C) Firm C
D) all of Firms A, B, and C
E) none of Firms A, B, and C

31) Marginal revenue is less than price for a single-price monopolist because the
A) monopolist must worry about how its price setting will lead to entry by other firms.
B) firm must lower its price for all units if it wants to sell more of the product.
C) monopolist has achieved economies of scale.
D) monopolist charges a price higher than the unit production cost.
E) firm's output decisions do not affect the selling price.

Price	Quantity Demanded
$8	5
$7	6
$6	7
$5	8
$4	9
$3	10
$2	11

TABLE 10-1

32) Refer to Table 10-1. For a single-price monopolist, the marginal revenue associated with increasing sales from 5 to 6 units is
A) -4. B) -2. C) 0. D) 2. E) 4.

33) If a single-price monopolist sets price where the price elasticity of demand exactly equals 1, its
A) total revenue is rising, although marginal revenue is falling.
B) total profits are at a maximum.
C) total revenue is falling.
D) total revenue is at its maximum.
E) marginal revenue is always positive.

34) If a single-price monopoly is presently producing an output at which marginal revenue is less than marginal cost, it can increase its profits by
A) reducing output and holding prices unchanged.
B) reducing output and raising prices.
C) reducing barriers to entry.
D) expanding output and raising price.
E) expanding output and lowering price.

35) If a monopolist's marginal revenue is $MR = 12 - 2Q$ and its marginal cost is $MC = 3$, then the profit-maximizing quantity is
A) 0. B) 4. C) 4.5. D) 6. E) 12.

36) Suppose that a single-price monopolist knows the following information:

Price	Quantity	TR	MR	Fixed Cost	TC	ATC	MC
$10.00	1500		$7.00	$6000		$5.00	$5.00

The total profit being earned by this firm at the current level of output is _____ which _____ the maximum possible.

A) $3000; is not
B) $7500; is not
C) $15 000; is
D) $97 500; is not
E) $105 000; is

37) Suppose you go to a retailer's website and print a coupon that gives you a discount on your next purchase at their store. But your friend, who also plans to purchase there, can't be bothered. You are revealing to the store that

A) you have a lower income than your friend.
B) you understand price discrimination and your friend does not.
C) elasticity of demand changes according to the size of the discount offered.
D) you have a lower elasticity of demand than your friend.
E) you have a higher elasticity of demand than your friend.

The table below shows the market shares for the only firms in a domestic cement market.

	Market Share
Firm A	45%
Firm B	22%
Firm C	10%
Firm D	8%
Firm E	7%
Firm F	5%
Firm G	2%
Firm H	1%

TABLE 11-1

38) Refer to Table 11-1. The four-firm concentration ratio in this industry is _____%.

A) 45 B) 67 C) 85 D) 92 E) 100

The diagram below shows selected cost and revenue curves for a firm in a monopolistically competitive industry.

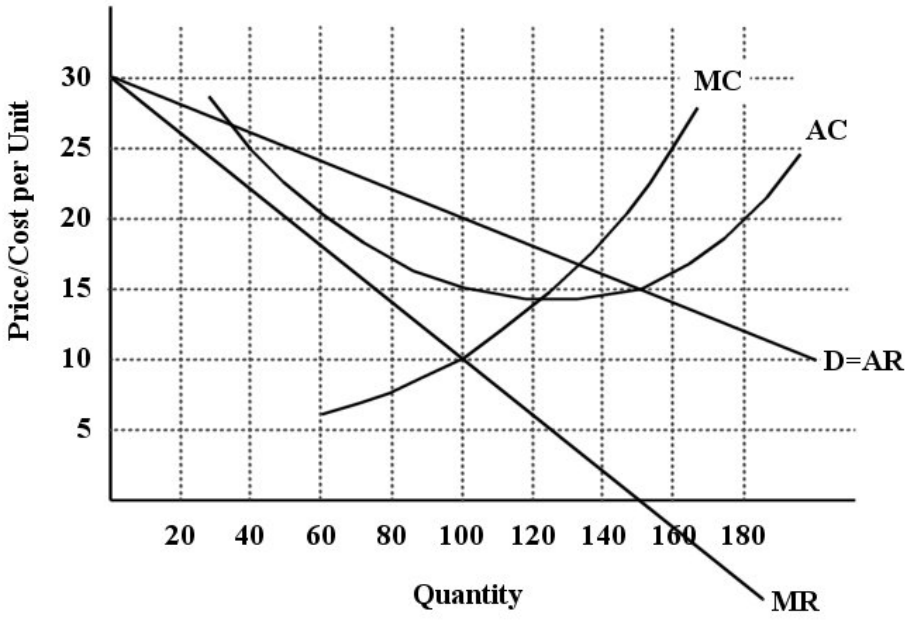

FIGURE 11-1

39) Refer to Figure 11-1. If this firm is maximizing its profits, does the diagram depict a long-run equilibrium situation?
A) Yes, because this firm is producing where MC = MR and is earning economic profits.
B) Yes, because this firm is producing where MC = MR and is earning zero profits.
C) No, because this firm is suffering losses and firms will exit this market.
D) No, because this firm is earning profits which will attract new firms to this market.
E) No, because this firm is a natural monopoly.

The diagram below shows selected cost and revenue curves for a firm in a monopolistically competitive industry.

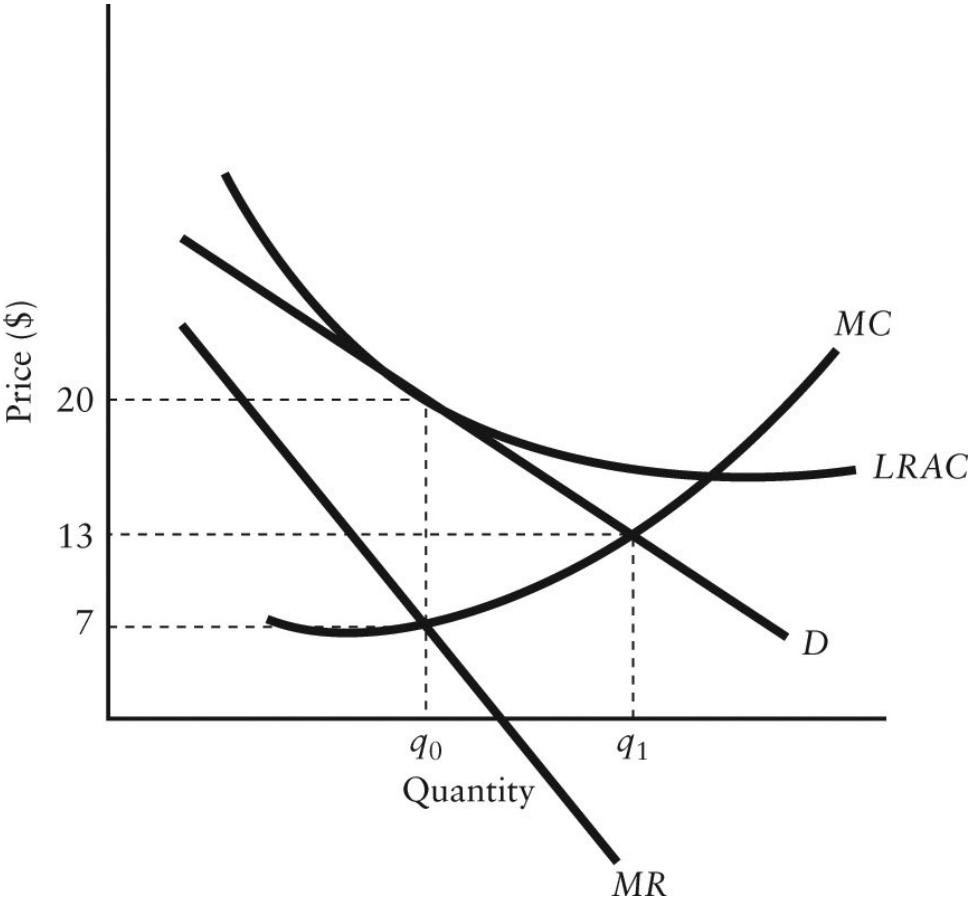

FIGURE 11-4

40) Refer to Figure 11-4. How is the excess-capacity theorem demonstrated in this diagram?
A) In long-run equilibrium the firm is earning positive profits, but has unexploited economies of scale.
B) The long-run equilibrium occurs where the firm is producing output at q_1, which is the same as for a perfectly competitive industry.
C) The short-run equilibrium occurs where the firm is producing output at q_0, which is less than that corresponding to the lowest point on its LRAC curve.
D) The long-run equilibrium occurs where the firm is producing output at q_0, which is less than that corresponding to the lowest point on its LRAC curve.
E) In long-run equilibrium, this firm has excess capacity because they are selling output at a price below their LRAC.

41) Refer to Figure 11-4. Which of the following best describes this industry if all firms have the same cost and revenue curves and are producing output of q_0?

A) firms are earning positive profits and new firms will enter the industry until all firms are operating at their minimum LRAC
B) all firms are earning positive profits and there is no incentive for firms to enter or exit the industry
C) firms are earning zero profits and there is no incentive for firms to enter or leave the industry
D) firms are incurring losses and firms will exit this industry
E) all firms will try to minimize costs and move toward minimum LRAC

42) If firms are able to freely enter and exit a monopolistically competitive industry, then we can predict

A) strategic behaviour with regard to other firms in the industry.
B) brand proliferation.
C) zero profits in long-run equilibrium.
D) that exit will occur until no firm has excess capacity.
E) a negatively sloped demand curve for the industry.

43) Which of the following is a characteristic of oligopoly?

A) The industry usually has a low concentration ratio.
B) Prices are usually above marginal costs.
C) Firms compete solely on the basis of price.
D) There are large numbers of significantly sized sellers.
E) The pricing policies of one firm have no impact on pricing policies of other firms.

The payoff matrix below shows the payoffs for Firm A and Firm B, each of whom can either "cooperate" or "cheat." The numbers in parentheses are (payoff for A, payoff for B).

		Firm B	
		Cooperate	Cheat
Firm A	Cooperate	(30, 30)	(10, x)
	Cheat	(x, 10)	(20, 20)

TABLE 11-2

44) Refer to Table 11-2. If x = 40, what is the Nash equilibrium in this game?
A) (Firm A: cheat, Firm B: cheat)
B) (Firm A: cheat, Firm B: cooperate)
C) (Firm A: cooperate, Firm B: cheat)
D) (Firm A: cooperate, Firm B: cooperate)
E) there is no Nash equilibrium for this value of x

The payoff matrix below shows the payoffs to Firms A and B from producing different levels of output. The numbers in parentheses are (payoff to A, payoff to B).

		Firm B	
		Produce 1000 Units	**Produce 2000 Units**
Firm A	**Produce 1000 Units**	(100, 100)	(10, 150)
	Produce 2000 Units	(150, 10)	(30, 30)

TABLE 11-3

45) Refer to Table 11-3. From the payoff matrix we can infer that
A) there is no Nash equilibrium in the game.
B) it is optimal for Firm B to produce 1000 units of output regardless of what Firm A is doing.
C) both firms are indifferent between an equilibrium (Produce 1000 units, Produce 1000 units) and (Produce 2000 units, Produce 2000 units).
D) it is optimal for Firm A to produce 1000 units of output regardless of what Firm B is doing.
E) it is optimal for Firm A to produce 2000 units of output regardless of what Firm B is doing.

46) An ineffective means of discouraging the entry of new firms by existing firms in an oligopolistic industry is
A) spending heavily on advertising.
B) raising their prices.
C) producing a wide range of brands of their products.
D) carrying out industrial sabotage.
E) seeking greater patent protection.

47) The process of "creative destruction" in an oligopolistic industry suggests that
A) firms can enter and leave without incurring any sunk costs of entry.
B) profits are driven to zero by the entry of new firms.
C) there are no costs of exit in oligopoly.
D) no firm can survive in the long run.
E) the prospect of keeping the resulting profits provides an incentive for firms to innovate.

The diagram below shows supply, demand, and quantity exchanged of Monday matinee movie tickets. Assume it is a perfectly competitive market.

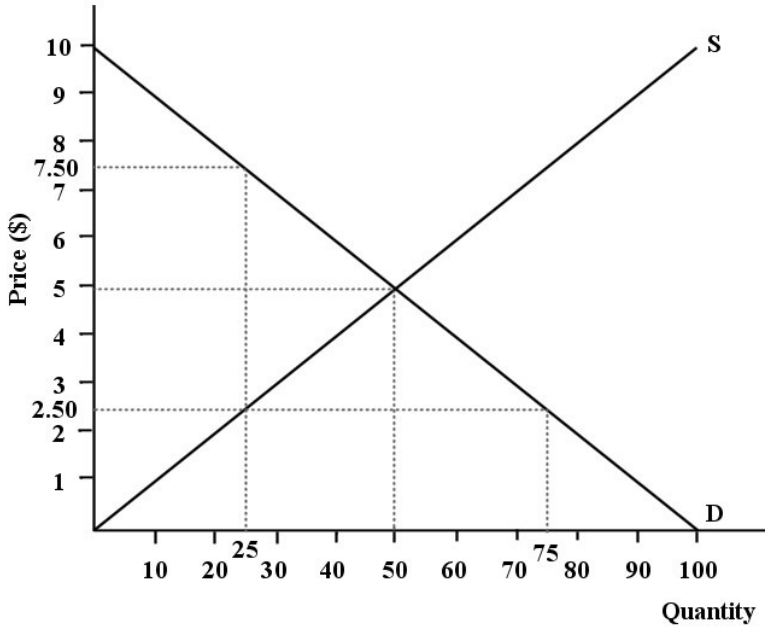

FIGURE 12-4

48) Refer to Figure 12-4. What is the total economic surplus generated in this market at the allocatively efficient level of output?
A) $500 B) $250 C) $125 D) $10 E) $5

49) Which of the following is the result of a monopolist's pricing and output behaviour, as compared to a perfectly competitive outcome?
A) a reduction in both consumer and producer surplus
B) a reduction in the sum of consumer and producer surplus
C) an increase in the sum of consumer and producer surplus
D) an increase in both consumer and producer surplus
E) a reduction in producer surplus and increase in consumer surplus

The diagram below shows the market *demand curve and the cost curves for a single firm.*

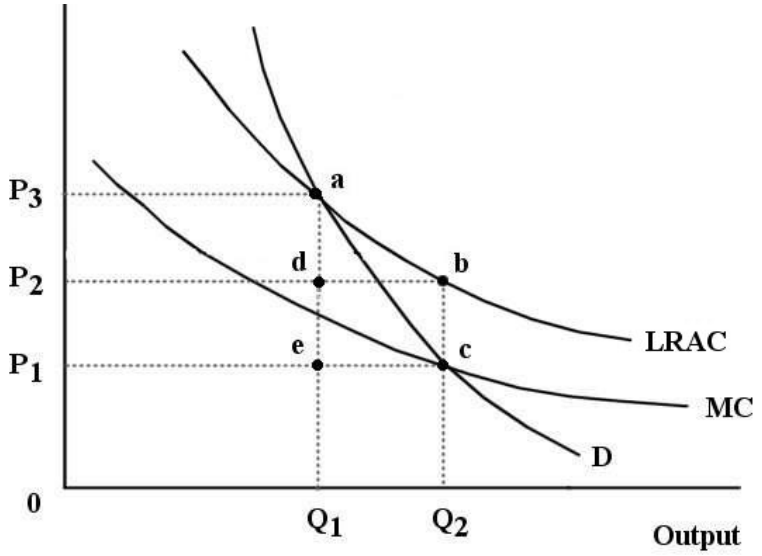

FIGURE 12-6

50) Refer to Figure 12-6. Suppose the firm is being regulated using a policy of average-cost pricing. The resulting price and output would be
A) P_1 and Q_1. B) P_3 and Q_2. C) P_2 and Q_2. D) P_3 and Q_1. E) P_1 and Q_2.

1) D
2) E
3) A
4) B
5) B
6) E
7) C
8) C
9) B
10) E
11) D
12) B
13) C
14) D
15) C
16) C
17) C
18) A
19) A
20) D
21) E
22) A
23) A
24) D
25) E
26) D
27) D
28) B
29) B
30) C
31) B
32) D
33) D
34) B
35) C
36) B
37) E
38) C
39) D
40) D
41) C
42) C
43) B
44) A
45) E
46) B
47) E
48) B
49) B
50) D