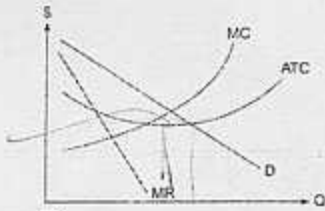
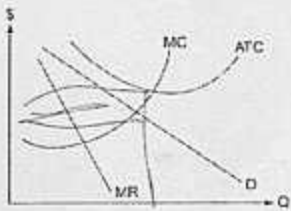


Use the following information to answer questions 92-93.

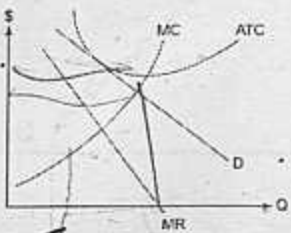
A.



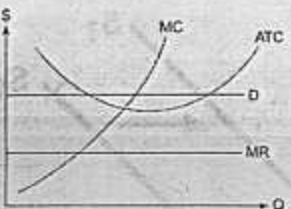
B.



C.



D.



92. Which of the graphs shown would be consistent with a monopolistically competitive firm that is making economic losses?

- A. Panel a
- B. Panel b
- C. Panel c
- D. Panel d

85. Given the following "Advertising Game," what would be the profit for each firm if they collude and if they each realize that they will be repeating this game indefinitely?

## Export A's Decision

		Advertise	Don't Advertise
du Maurier's Decision	Advertise	\$3 billion profit for each	Export A: \$2 billion profit Du Maurier: \$5 billion profit
	Don't Advertise	Export A: \$5 billion profit du Maurier: \$2 billion profit	\$4 billion profit for each

- A. \$4 billion profit each  
 B. \$3 billion profit each  
 C. Export A: \$5 billion profit, du Maurier: \$2 billion profit  
 D. Export A: \$2 billion profit, du Maurier: \$5 billion profit
86. Cooperation among oligopolists frequently leads to a loss of social well-being because \_\_\_\_\_ and \_\_\_\_\_.
- A. production is too low, price is too high  
 B. production is too high, productive resources are wasted  
 C. price is too high, workers are paid low wages  
 D. production is too high, price is too low
87. Competition laws in general are used to
- A. encourage oligopolists to pursue cooperative interest at the expense of self-interest.  
 B. prevent oligopolists from acting in ways that make markets less competitive.  
 C. encourage frivolous lawsuits among competitive firms.  
 D. all of the above
88. What is the federal government entity charged with investigating and enforcing competition laws?
- A. the Department of Finance  
 B. the Competition Bureau  
 C. the World Trade Organization  
 D. Revenue Canada

UNIVERSITY OF CALGARY  
DEPARTMENT OF ECONOMICS  
FINAL EXAMINATION  
ECONOMICS 201 (07, 09, 91)

DECEMBER, 2002  
MARKS: 100

TIME: 2 HOURS

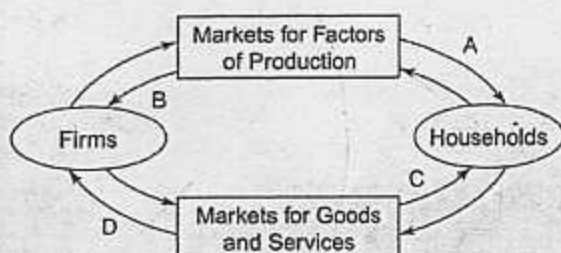
INSTRUCTIONS:

This examination consists entirely of multiple choice questions. Choose the best answer and mark your choice in pencil on the sheet provided.

Any calculator may be used in this examination.

1. **Scarcity** exists when
  - ☒ A. there is less than an infinite amount of a resource or good.
  - ☐ B. there is less of a good or resource available than people wish to have.
  - ☐ C. society cannot meet the wants of every individual.
  - ☐ D. b and c
2. In most societies, resources are allocated
  - ☒ A. by a single central planner.
  - ☐ B. through the combined actions of millions of households and firms.
  - ☐ C. by a central planning board.
  - ☐ D. by a relatively few large corporations.
3. If the federal government declares a large part of Alberta a national park to be available for recreation and enjoyment for all Canadians, the tradeoff is
  - ☐ A. nothing, because the land belongs to all Canadians, not just to citizens of Alberta.
  - ☐ B. nothing, because the land has no economic value.
  - ☐ C. the potential value of the land for grazing, oil and gas extraction, and other development.
  - ☐ D. the increased incomes of Alberta businesses from increased tourism.
4. A rational decision maker takes an action only if
  - ☐ A. the marginal benefit is greater than the marginal cost.
  - ☒ B. the average benefit is greater than the average cost.
  - ☐ C. the average benefit is greater than the average cost, and the marginal benefit is greater than the marginal cost.
  - ☐ D. the marginal benefit is greater than both the average cost and the marginal cost.

5. If a copper refinery does not bear the entire cost of the smoke it emits,
- it will emit less than the optimal amount of smoke.
  - it will emit the right amount of smoke.
  - ☒ it will emit too much smoke.
  - it will eliminate all smoke so as to avoid the entire cost of the smoke.
6. If a sawmill creates air pollution,
- interference by the government will surely make matters worse.
  - a sense of social responsibility will cause the owners of the mill to reduce pollution.
  - ☒ the government can raise economic well-being by requiring the sawmill to close down.
  - the government can raise economic well-being through environmental regulation.

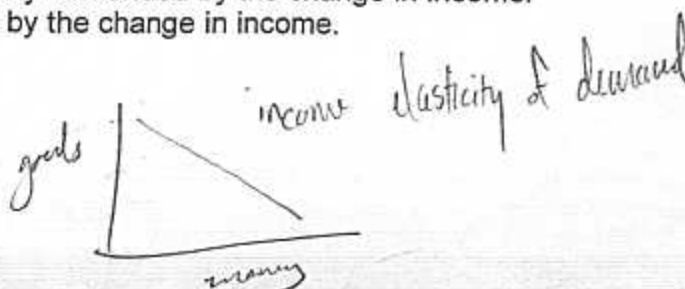


7. In the circular-flow diagram shown, which arrow shows the flow of the factors of production?
- A
  - B
  - C
  - D
8. The **production possibilities frontier** is
- a map that shows the margin of cultivation for a country — the frontier beyond which agriculture is unprofitable.
  - a graph that shows the various combinations of output the economy can possibly produce given the available resources and technology.
  - a graph that shows the various combinations of resources that can be used to produce a given level of output.
  - a map that shows areas of the world in which capitalist production is now possible.
9. Which of the following is an example of a positive statement?
- ☒ If welfare payments increase, the world will be a better place.
  - If the money supply increases, interest rates will fall, other things equal.
  - Inflation is more harmful to the economy than is unemployment.
  - The benefits to the economy of improved equity are greater than the costs of reduced efficiency.

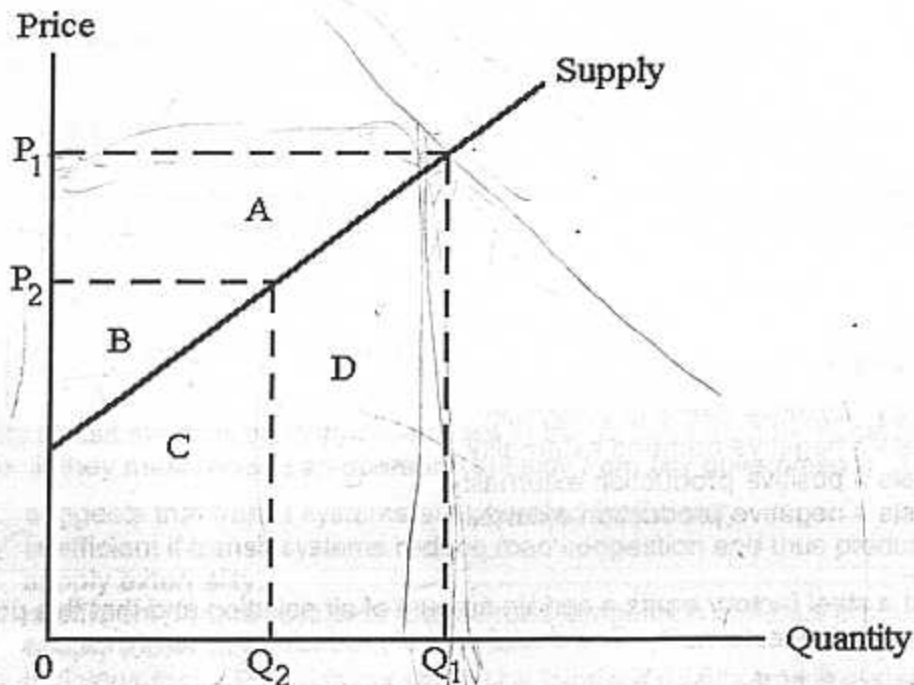


10. A **monopoly** is necessarily
- A. a market with few sellers.
  - B. a market with one seller.
  - C. a market with one buyer.
  - D. a market where the government sets the price.
11. If the price of a substitute to good X increases, then
- A. the demand for good X will increase.
  - B. the market price of good X will decrease.
  - C. the demand for good X will decrease.
  - D. the demand for good X will not change.
12. If a decrease in income increases the demand for a good, then
- A. the good is a substitute good.
  - B. the good is a complement good.
  - ☒ C. the good is a normal good.
  - D. the good is an inferior good.
  - ☒ E. the good is a luxury good.
13. A **demand curve** is
- A. a downward-sloping line relating the price of the good with the quantity demanded.
  - B. an upward-sloping line relating price with quantity supplied.
  - C. a curve that relates income with quantity demanded.
  - D. none of the above answers are correct
14. Which of the following is *not* a determinant of an individual's willingness and ability to purchase a good or service?
- ☒ A. income
  - ☒ B. the price of related goods
  - C. the number of buyers
  - D. expectations
  - ☒ E. the price of the good itself
15. The relationship between price and quantity supplied is
- A. positive, or direct.
  - B. negative, or inverse.
  - ☒ C. the same as the relationship between price and quantity demanded.
  - ☒ D. There is no relationship between price and quantity supplied.

16. Suppose that the number of buyers in a market increases and there is technological advancement. What would we expect to happen in the market?
- A. The equilibrium price would increase, but the impact on the amount sold in the market would be ambiguous.
  - B. The equilibrium price would decrease, but the impact on the amount sold in the market would be ambiguous.
  - C. Both equilibrium price and equilibrium quantity would increase.
  - D. Equilibrium quantity would increase, but the impact on equilibrium price would be ambiguous.
  - E. Equilibrium quantity would decrease, but the impact on equilibrium price would be ambiguous.
17. Price elasticity of demand measures
- A. how much the price of a good changes when there is a change in the quantity demanded.
  - B. how much the quantity demanded responds to a change in the price.
  - C. how much the price of a good changes when there is a change in the number of buyers.
  - D. how much the demand shifts for a given change in the price of the good.
18. Maple nut ice cream would tend to have a very price-sensitive demand elasticity because
- A. other flavours of ice cream are perfect substitutes.
  - B. the market is broadly defined.
  - C. there are few substitutes.
  - D. it must be eaten quickly.
19. Holding all other forces constant, if raising the price of a good results in less total revenue,
- A. the demand for the good must be elastic.
  - B. the demand for the good must be perfectly elastic.
  - ☒ C. the demand for the good must be inelastic.
  - D. the demand for the good must be unit elastic.
  - ☒ E. the demand for the good must be perfectly inelastic.
20. Generally speaking, if we want to calculate the income elasticity of demand for a good, we need to
- ☒ A. divide the percentage change in price by the percentage change in income.
  - ☒ B. divide the percentage change in quantity supplied by the change in income.
  - C. divide the percentage change in quantity demanded by the percentage change in income.
  - D. divide the change in quantity demanded by the change in income.
  - ☒ E. divide the change in price by the change in income.



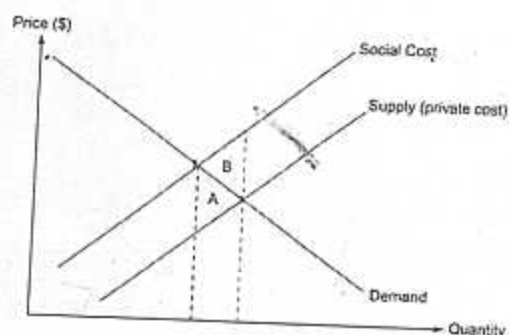
21. Which is an accurate statement about price controls?
- A. Price controls are usually enacted when policymakers believe that the market price of a good or service is unfair to buyers or sellers.
  - B. Price controls are used to make markets more efficient.
  - C. Price controls are nearly always effective in eliminating inequities.
  - D. all of the above
22. A binding price floor causes
- A. an excess demand.
  - B. a shortage.
  - C. an excess supply.
  - D. a and b



23. When the price is  $P_1$ , producer surplus is
- A. A.
  - B. A+B.
  - C. B.
  - D. A+B+C+D.
24. When a tax is levied on the seller of a good,
- A. the demand curve shifts upward (right).
  - B. the supply curve shifts upward (left).
  - C. both a and b
  - D. neither a, b, nor c

25. The loss in total surplus (economic welfare) resulting from a tax is called
- the government deficit.
  - the government surplus.
  - the deadweight loss.
  - total tax revenue.

26. Negative externalities occur when one person's actions
- cause another person to lose money in a stock market transaction.
  - cause his/her employer to lose business.
  - reveal a preference for foreign-produced goods.
  - adversely affect the well-being of a person (or persons) who is not party to a market exchange.



27. In the figure shown,

- there exists a positive demand externality.
- there exists a negative demand externality.
- there exists a positive production externality.
- there exists a negative production externality.

28. Suppose that a steel factory emits a certain amount of air pollution and that this pollution constitutes a negative externality. The social cost of producing the steel includes
- the private costs of the steel producers plus the price consumers pay for the steel.
  - the private costs of the steel producers plus the costs to the bystanders affected by the pollution.
  - the costs to the bystanders affected by the pollution only.
  - the price consumers pay for the steel plus the costs to the bystanders affected by the pollution.

29. In a market that is affected by a positive production externality, the optimum level of output is less the free market level of output and the optimum price is greater the free market price.
- less than, greater than
  - greater than, less than
  - greater than, greater than
  - less than, less than

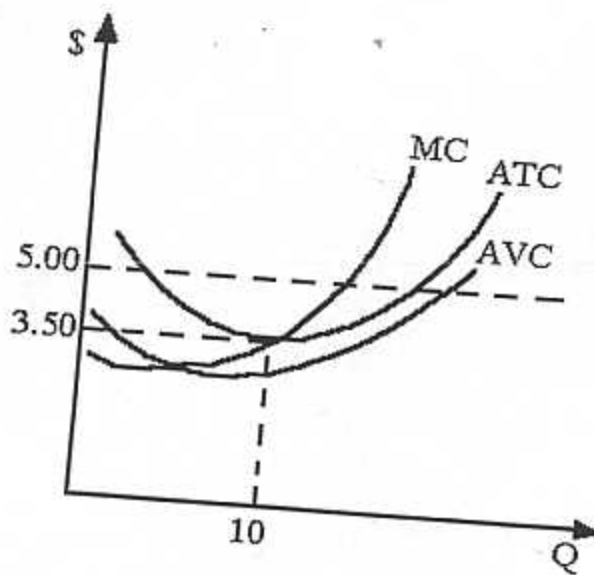


30. Internalizing a negative production externality will cause an industry to \_\_\_\_\_ the quantity it supplies to the market and \_\_\_\_\_ the price of the good produced.
- A. decrease, decrease
  - B. decrease, increase
  - C. increase, decrease
  - D. increase, increase
31. To remedy the problem of externalities, the government can internalize the externalities by \_\_\_\_\_ goods with negative externalities and \_\_\_\_\_ goods with positive externalities.
- A. subsidizing, taxing
  - B. taxing, regulating
  - C. taxing, subsidizing
  - D. regulating, taxing
32. Tradeable pollution permits
- (i) allow markets to efficiently allocate scarce 'clean air' resources.
  - (ii) could potentially be a source of revenue to the firms who own them.
  - ~~(iii) eventually lead to an efficient elimination of all pollution.~~
- A. all of the above
  - B. (iii) only
  - C. (i) and (iii) only
  - D. (i) and (ii) only
33. City transit systems typically collect less in transit fares than they cost to operate. As a result they must receive an operating subsidy from city governments. This situation
- A. suggests that transit systems are operated inefficiently.
  - B. is efficient if transit systems reduce road congestion and thus produce a positive supply externality.
  - ~~C. is efficient if transit systems reduce road congestion and thus produce a negative supply externality.~~
  - ~~D. indicates that a Pigovian tax should be imposed on city transit systems.~~
34. When a private solution to externalities cannot be reached, the government often steps in. When the government does interfere in a market, it should
- A. ensure that social efficiency is always achieved.
  - B. distribute the social costs of the externalities equally among all firms.
  - C. enact policy that forces decision makers to bear the full costs of their actions.
  - D. impose either a Pigovian tax or a regulation.
35. Public goods are identified by the characteristics of
- A. rivalry and excludability.
  - B. non-rivalry and excludability.
  - C. non-rivalry and non-excludability.
  - D. rivalry and non-excludability.

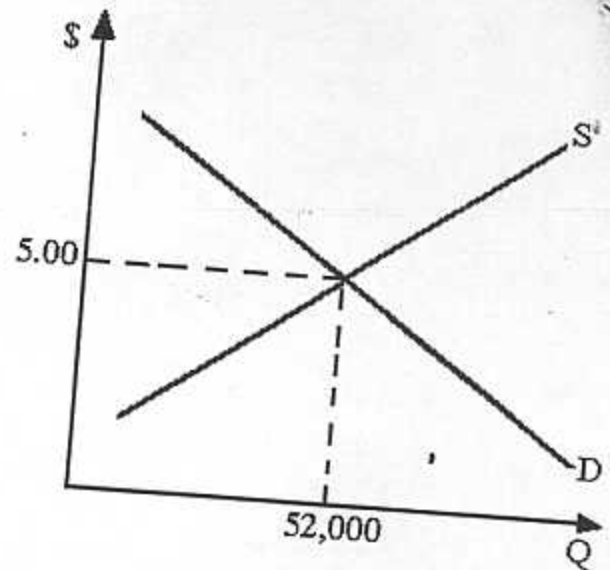
36. Common resource goods are
  - A. rival and non-excludable.
  - B. rival and excludable.
  - C. non-rival and excludable.
  - D. non-rival and non-excludable.
37. Which of the following is an example of a public good?
  - A. national defence
  - B. congested roads
  - C. food
  - D. utilities
38. Lakes and streams are examples of
  - A. private goods.
  - B. natural monopolies.
  - C. public goods.
  - D. common resources.
39. When a free-rider problem arises in the private provision of a public good,
  - A. individuals should provide the public good and exclude consumption by those who don't pay for it.
  - B. the community should regulate the level of provision.
  - C. the community should provide the public good, and tax residents to pay for its provision.
  - D. individuals should consider the level of provision that is in the community's best interest.
40. National defence is a classic example of a public good because
  - ☒ A. private security services are very difficult to find.
  - ☐ B. it is difficult to exclude people from receiving the benefits from national defence once it is provided.
  - ☐ C. everyone agrees that some level of national defence is important.
  - ☒ D. if individuals were required to purchase their own armored tanks, there wouldn't be enough to go around.
41. A free rider is a person who
  - A. receives the benefit of a good and pays less for the good than its marginal benefit.
  - B. is not willing to pay for a good from which he/she benefits.
  - C. receives the benefit of a good but avoids paying for it.
  - D. none of the above

42. If the use of a common resource is not regulated,
- A. it is a natural monopoly.
  - B. it is a public good.
  - C. its marginal cost will increase.
  - D. it will be overused.
43. Foregone interest from investing your savings in a business is an example of
- ☒ A. an explicit cost.
  - B. an accounting cost.
  - C. an implicit cost.
  - ☒ D. a foregone tax liability.
44. When economists analyze a firm's production costs, they include
- A. opportunity costs.
  - B. explicit costs.
  - C. implicit costs.
  - D. all of the above
45. Utilities, raw materials, and maintenance are typically considered \_\_\_\_\_ of production.
- A. fixed costs
  - ☒ B. sunk costs
  - ☒ C. opportunity costs
  - D. variable costs
46. As the quantity produced increases,
- ☒ A. average fixed cost decreases.
  - ☒ B. fixed cost increases.
  - C. variable cost decreases.
  - D. none of the above
47. Marginal cost tells us
- A. the marginal increment to profitability when price is constant.
  - ☒ B. the value of all resources used in a production process.
  - C. the amount total cost rises when output rises by one unit.
  - D. the amount fixed cost rises when output rises by one unit.
48. Economies of scale occur when
- A. average fixed cost increases as output increases.
  - B. average total cost declines as output increases.
  - C. average variable cost increases as output increases.
  - D. average fixed cost declines as output increases.

Use the following information to answer questions 49-51.



Firm



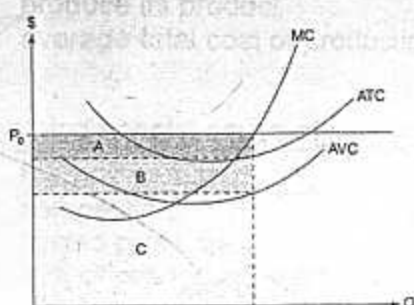
Market

49. For the perfectly competitive firm depicted in the graph,
  - A. marginal revenue is equal to \$3.50.
  - B. average revenue is equal to \$5.00.
  - C. economic profits are zero.
  - D. accounting profits are zero.
50. For the perfectly competitive firm depicted in the graph the profit-maximizing level of output
  - A. is 10 units.
  - B. is zero units.
  - C. is greater than 10 units.
  - D. is more than zero units but fewer than 10 units.
51. If all firms had cost curves like those of the perfectly competitive firm depicted in the graph, we would expect
  - ☒ A. some firms would exit from this industry.
  - B. new firms would enter this industry.
  - C. no change in the number of firms in this industry.
  - ☒ D. it is impossible to say what would happen to the number of firms in this industry.



52. Large numbers of buyers and sellers, a standardized product, and no obstacles to entering or leaving the market are characteristics of a(n)
- perfectly competitive market.
  - monopolistic competitive market.
  - monopoly.
  - oligopoly.
53. Firms in a perfectly competitive market are said to be price takers because
- if a firm were to charge more than the going price, it would sell none of its goods.
  - firms have no incentive to charge less than the going price.
  - C each firm can sell as much as it wants at the going price.
  - all of the above
54. A(n) \_\_\_\_\_ refers to a short-run decision by a firm while a(n) \_\_\_\_\_ refers to a long-run decision.
- shutdown, exit
  - exit, shutdown
  - closure, leave
  - leave, closure
55. A firm's short-run shutdown criterion is
- A Average Revenue > minimum of Marginal Cost.
  - Price < minimum of Average Variable Cost.
  - C Price > minimum of Average Total Cost.
  - D Average Revenue > Average Fixed Cost.

Use the following information to answer questions 56-57.



56. In the figure shown, total profit to the profit-maximizing firm is represented by area
- A + B.
  - A.
  - B.
  - We can't tell from the information provided.

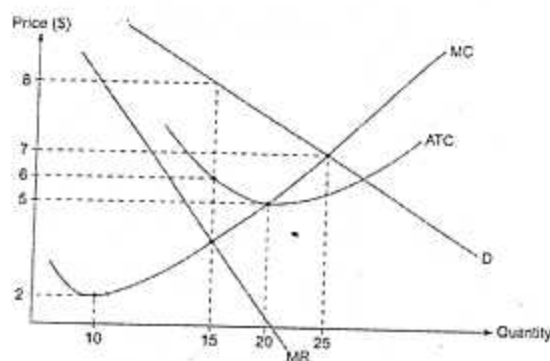
57. In the figure shown, total fixed cost to the profit-maximizing firms is represented by area
- C.
  - B + C.
  - B.
  - We can't tell from the information provided.
58. A firm will choose to increase production when
- ☒ marginal revenue is less than marginal cost.
  - average total cost is less than marginal cost.
  - marginal cost is less than average total cost.
  - marginal cost is less than marginal revenue.
59. A competitive firm's short-run supply curve is its
- marginal revenue curve above its average total cost curve.
  - average variable cost curve above the marginal revenue curve.
  - marginal cost curve above its average variable cost curve.
  - average total cost curve above the marginal revenue curve.
60. In the long run, a firm will exit the market when price is less than
- average variable costs.
  - average total costs.
  - marginal revenue.
  - none of the above
61. Equilibrium, the point at which no firms will enter or exit the market, in a perfectly competitive market occurs when
- price equals marginal cost.
  - firms are operating at their efficient scale.
  - price equals average total cost.
  - ~~price equals average variable cost.~~  
ALL OF THE ABOVE
62. In a perfectly competitive market where all firms have identical cost structures, the market supply curve will be equal to
- the sum of supply curves for all firms in the market.
  - the product of supply curves for all firms in the market.
  - ☒ the sum of average variable cost curves for all firms in the market.
  - ☒ the sum of average total cost curves for all firms in the market.
63. When a firm in a perfectly competitive market shuts down production,
- ☒ market supply increases.
  - ☒ the market supply curve shifts right.
  - the market supply curve shifts left.
  - ☒ costs of all remaining firms in the market must fall.

64. When new firms enter a perfectly competitive market,
- A. entering firms will earn no more than a "normal" rate of return upon entry into the market.
  - B. profits of incumbent firms must fall.
  - ☒ C. incumbent firms will see their costs rise.
  - D. consumers will be likely to observe increasing prices.
65. In the long run, firms in a perfectly competitive market must be operating
- A. under economies of scale.
  - B. at their efficient scale.
  - C. with marginal profitability.
  - D. all of the above
66. Barriers to entry arise when
- (i) a key resource is owned by a single firm.
  - (ii) the government awards a firm the exclusive right to produce a product.
  - (iii) average total costs are always declining.
  - (iv) a firm faces perfectly elastic demand.
- A. (i) or (ii) only
  - B. (i) only
  - C. (i), (ii), or (iii)
  - D. all of the above
67. A natural monopoly occurs when
- ☒ A. the monopolist product is sold in its natural state (such as water or diamonds).
  - B. firms are characterized by falling marginal cost curves.
  - C. a monopoly firm requires the use of free natural resources (such as water or air) to produce its product.
  - ☒ D. average total cost of production decreases as more output is produced.
68. The fundamental cause of monopoly is
- A. barriers to entry.
  - B. competition.
  - C. limited profit margins.
  - D. lack of product differentiation.
69. The key difference between a competitive firm and a monopoly firm is
- ☒ A. the ability to select the price of its output.
  - ☒ B. the ability to capture economic profits.
  - C. the ability to select the level of production.
  - ☒ D. the ability to select inputs in the production process.

70. The market demand curve for a monopolist is typically

- A. downward sloping.
- B. horizontal.
- C. unitary elastic.
- D. perfectly elastic at market price.

Use the following information to answer questions 71-72.



71. A profit-maximizing monopolist will choose to produce \_\_\_\_\_ units of output.
- A. 15
  - B. 20
  - C. 25
  - D. 10
72. A profit-maximizing monopolist will enjoy a total profit of
- A. \$30.
  - B. \$120.
  - C. \$90.
  - D. \$15.
73. A monopolist is a \_\_\_\_\_, therefore it has no \_\_\_\_\_ curve.
- A. price setter, supply
  - B. price setter, variable cost
  - C. price taker, supply
  - D. none of the above
74. Since natural monopolies have a declining average cost curve, regulating natural monopolies by setting price equal to marginal cost would
- A. result in a less than optimal total surplus.
  - B. maximize producer surplus.
  - C. cause the monopolist to operate at a loss.
  - ☒ D. all of the above



75. When a monopolist is able to sell its product at different prices, it is engaging in
- A. quality adjusted pricing.
  - B. distribution pricing.
  - C. price discrimination.
  - D. price differentiation.
76. If a monopolist is able to price discriminate,
- ☒ A. consumer surplus is increased.
  - ☒ B. deadweight loss is increased.
  - ☒ C. the price effect dominates the output effect on monopoly revenue.
  - ☒ D. consumer surplus and deadweight losses are transformed into monopoly profits.
77. Certain market forces such as \_\_\_\_\_ can prevent firms from price discriminating.
- A. arbitrage
  - B. fluctuating resource prices
  - C. high fixed costs
  - D. all of the above
78. Monopolistically competitive firms are typically characterized by
- A. many firms selling identical products.
  - B. few firms selling similar or identical products.
  - C. few firms selling highly different products.
  - D. many firms selling similar, but not identical products.
79. Cartels are difficult to maintain because
- A. laws often prohibit explicit collusive agreements among competing firms.
  - B. cartel agreements are difficult to enforce.
  - C. there is always tension between cooperation and self-interest in a cartel.
  - D. all of the above
80. There are two types of markets in which firms face some competition yet are still able to have some control over the prices of their products. The names given these market structures are
- A. oligopoly and duopoly.
  - B. imperfect competition and monopolistic competition.
  - C. duopoly and imperfect competition.
  - D. monopolistic competition and oligopoly.
81. In what type of market do the actions of any one seller have a significant impact on the profits of all other sellers?
- A. a monopoly
  - B. an oligopoly
  - C. perfect competition
  - D. monopolistic competition

82. If all the oligopolists in a market collude to form a cartel, total revenue for the cartel is \_\_\_\_\_ that of a monopolist.
- less than
  - greater than or equal to
  - greater than
  - equal to
83. If oligopolists individually pursue their own self-interest when deciding how much to produce, they provide a total quantity \_\_\_\_\_ the monopoly quantity and charge a price \_\_\_\_\_ the monopoly price.
- less than, greater than
  - equal to, equal to
  - greater than, less than
  - none of the above
84. Given the following prisoners' dilemma table, if Bonnie and Clyde make the appropriate self-interested decision, how much time should each spend in jail

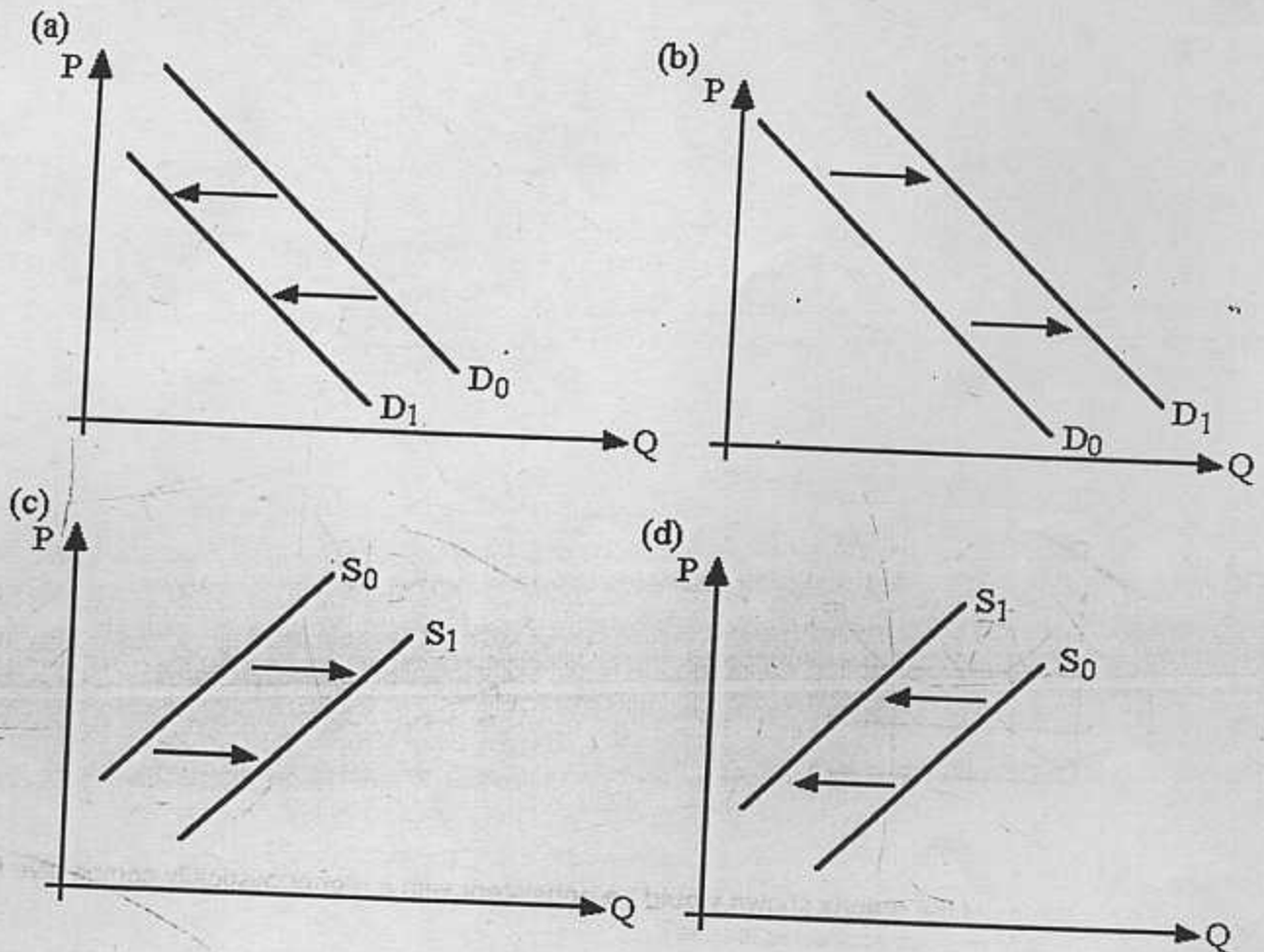
		Bonnie's Decision	
		Confess	Remain Silent
Clyde's Decision	Confess	8 years for each	Bonnie gets 20 years Clyde goes free
	Remain Silent	Bonnie goes free Clyde gets 20 years	1 year for each

- Bonnie goes free, Clyde gets 20 years
- 1 year for each
- 8 years each
- Bonnie gets 20 years, Clyde goes free

89. Monopolistic competition is characterized by which of the following attributes?
- (i) many sellers
  - (ii) product differentiation
  - (iii) barriers to entry
- A. (i) and (iii) only  
B. (i) and (ii) only  
C. (ii) and (iii) only  
D. all of the above
90. Monopolistic competition differs from oligopoly because in oligopoly markets
- ☒ A. there are no barriers to entry.
  - ☒ B. all firms eventually earn zero economic profits.
  - ☒ C. strategic interactions between firms are rarely evident.
  - ☒ D. there are only a few sellers in the market.
91. A monopolistically competitive firm differs from a perfectly competitive firm because a monopolistically competitive firm
- ☒ A. faces a downward sloping demand curve for its product.
  - ☒ B. faces a horizontal demand curve at the market clearing price.
  - ☒ C. is characterized by profit maximization.
  - ☒ D. has no barriers to entry.

93. Which of the graphs shown would be consistent with a monopolistically competitive firm threatened by the possibility of new entrants into the market?
- A. Panel a.  
B. Panel b.  
C. Panel c.  
D. Panels a, b and c are all possible.

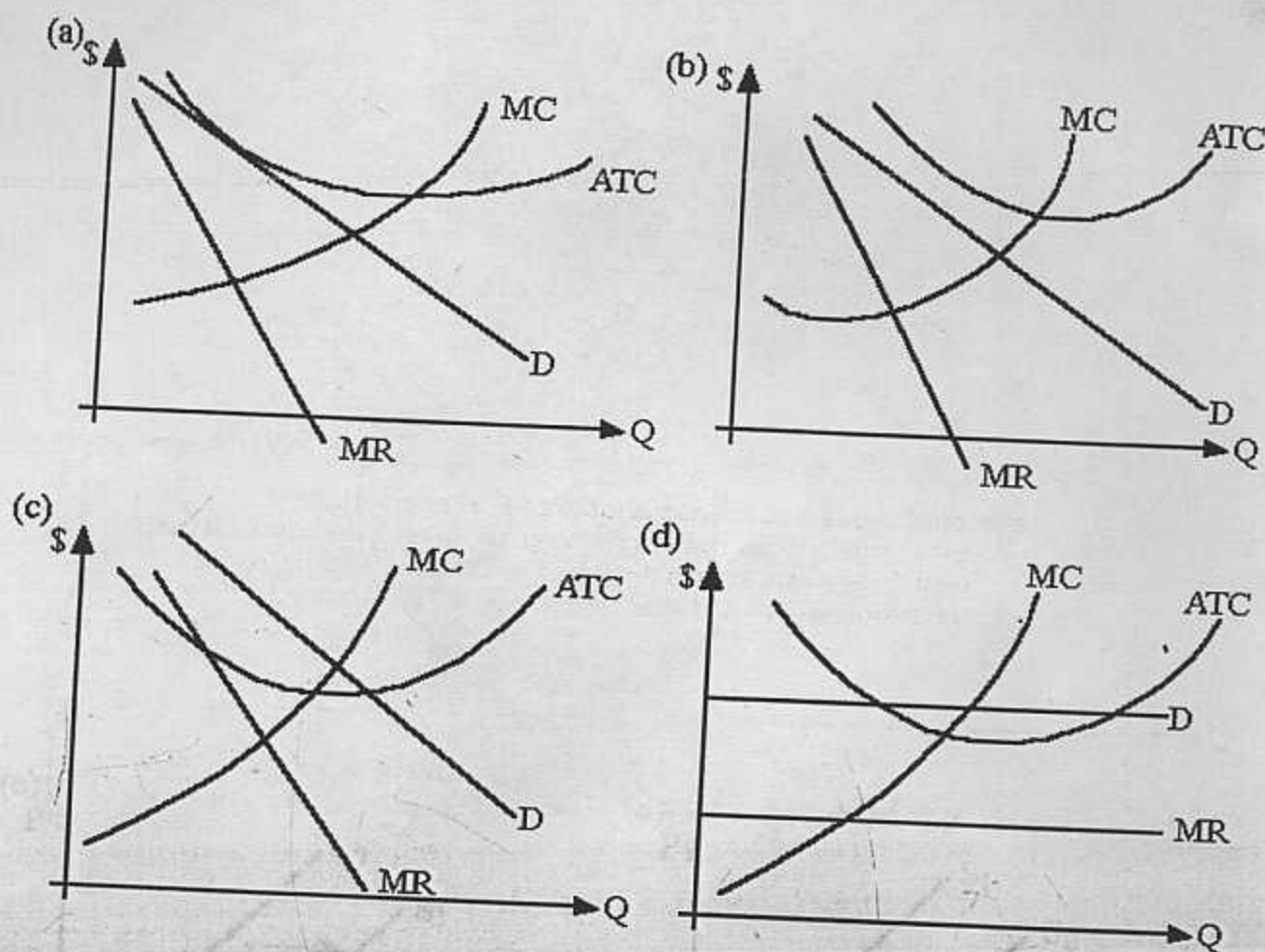
The graphs below depict the effect on incumbent firms of entry and exit in a monopolistically competitive market.



94. If firms in a monopolistically competitive market are incurring economic losses, which of the graphs shown would reflect the change in demand for incumbent firms (who are able to stay in the market) as the market adjusts to its new equilibrium?
- A. Panel a  
B. Panel b  
C. Panel c  
D. Panel d



95. As new firms enter a monopolistically competitive market, profits of existing firms \_\_\_\_\_ and product diversity in the market \_\_\_\_\_.  
A. decline, decreases  
B. rise, decreases  
C. rise, increases  
D. decline, increases
96. As some incumbent firms exit a monopolistically competitive market, profits of existing firms \_\_\_\_\_ and product diversity in the market \_\_\_\_\_.  
A. decline, decreases  
B. rise, increases  
C. rise, decreases  
D. decline, increases
97. The entry and exit of firms in a monopolistically competitive market guarantees that  
A. economic profits and economic losses are all dissipated in the long run.  
B. economic profits can survive in the long run, but not economic losses.  
C. economic losses will exist in the long run, but not economic profits.  
D. both economic profits and economic losses will exist in the long run.



98. Panel b in the set of figures shown is consistent with

- ☒ A. a perfectly competitive firm that is incurring economic losses.
- ☐ B. a monopolistically competitive firm in short-run equilibrium, but not a long-run equilibrium.
- ☒ C. a monopolistically competitive firm in both a short-run and a long-run equilibrium.
- ☐ D. a monopolistically competitive firm in a long-run equilibrium, but not a short-run equilibrium.

99. In the long run, a perfectly competitive firm operates at \_\_\_\_\_ and a monopolistically competitive firm operates at \_\_\_\_\_.

- ☐ A. efficient scale, excess capacity
- ☐ B. efficient scale, efficient scale
- ☐ C. excess capacity, excess capacity
- ☐ D. excess capacity, efficient scale

100. When the indifference curve is tangent to the budget constraint,
- ☒ A. the consumer is likely to be at a sub-optimal level of consumption.
  - ☒ B. indifference curves are likely to intersect.
  - ☐ C. a consumer cannot be made better off without increasing her current income.
  - ☐ D. income is at its maximum for a consumer.

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