

Name \_\_\_\_\_ Seat Assignment \_\_\_\_\_

## **ECO201: PRINCIPLES OF MICROECONOMICS**

### **SECOND MIDTERM EXAMINATION**

**November 17, 2009**

#### **FORM 1.**

#### Directions

1. **FILL IN YOUR SCANTRON WITH YOUR UNIQUE ID AND THE FORM NUMBER LISTED ON THIS PAGE.** This is worth the equivalent of one question.
2. There are 51 multiple choice questions. Be sure to fill in an answer for all 51 questions on the scantron and record your answers on your exam. Your scantron will not be returned.
3. A calculator is allowed. No cell phones are allowed.
4. You until 10:50 to finish the exam and fill in your scantron. Additional time may be purchased at a price of 5 percentage points per minute.
5. **When you finish, turn in your scantron. You may keep your copy of the exam.**

- 1) The implicit rental rate for capital is the
- A) depreciation on a piece of capital equipment.
  - B) total value of a piece of capital equipment.
  - C) amount paid for the use of a piece of capital equipment owned by someone else.
  - D) rental income forgone by not renting a piece of capital equipment to someone else.
- 2) \_\_\_\_\_ is the change in market value of capital over a given period.
- A) Implicit rental rate
  - B) Economic depreciation
  - C) Accounting depreciation
  - D) Accounting implicit rental cost
- 3) Sheila's Sports Shop is a very popular sporting goods store, which has a yearly revenue of \$600,000. Sheila runs the business herself. Her alternative employment options are to be a college swimming coach for \$50,000 per year or a construction worker for \$40,000 per year. Sheila spends \$230,000 purchasing goods for resale to her customers. She also has four employees, who each earn \$25,000 per year. Sheila owns the building that her Sports Shop is housed in—she remodeled a house that she owns and that she could have rented out for \$20,000 per year instead. Sheila's economic profit is equal to
- A) \$160,000 per year.
  - B) \$270,000 per year.
  - C) \$250,000 per year.
  - D) \$200,000 per year.
- 4) Flora's Flower Shop bought a new van for \$23,000. Today, the market price of this van is \$11,000. Over the years, Flora's accountant has depreciated the van by \$10,000. The economic depreciation of the van is \_\_\_\_\_.
- A) \$12,000
  - B) \$10,000
  - C) \$23,000
  - D) \$11,000
- 5) A chief reason firms give employees bonuses based on the firm's profit is to cope with
- A) the principal-agent problem.
  - B) the law of diminishing returns.
  - C) unions.
  - D) the tax laws.
- 6) The profits of a proprietorship are
- A) taxed as capital gains indexed for inflation.
  - B) subject to a corporate tax.
  - C) taxed at the same rate as the owner's other personal income.
  - D) exempt from taxation.

- 7) Owners of a proprietorship have \_\_\_\_\_ liability and stockholders in a corporation have \_\_\_\_\_.
- A) unlimited; limited
  - B) limited; limited
  - C) unlimited; unlimited
  - D) limited; unlimited

- 8) A corporation pays
- A) taxes on its profits, and stockholders pay taxes on capital gains.
  - B) taxes on its profits, but stockholders pay no taxes on capital gains.
  - C) no taxes on its profits, and stockholders pay no taxes on capital gains.
  - D) no taxes on its profits, but stockholders pay taxes on capital gains.

Technique	Capital (units)	Labor (units)
W	25	30
X	35	10
Y	25	25
Z	45	5

- 9) The table above shows techniques that can be used to produce 100 shirts. The technique that is NOT technologically efficient is
- A) Y
  - B) X
  - C) Z
  - D) W
- 10) Gilda's Art Gallery pays a commission to her sales people when they sell a painting. This practice is known as
- A) incentive pay.
  - B) the principal-agent problem.
  - C) minimizing explicit costs.
  - D) minimizing implicit costs.
- 11) There are six firms in an industry, with market shares of 50 percent, 25 percent, 10 percent, 10 percent, 3 percent and 2 percent. The four firm concentration ratio is \_\_\_\_\_, and the HHI is \_\_\_\_\_.
- A) 100, 100
  - B) 95, 10,000
  - C) 95, 3338
  - D) 100, 3338

Technique	Capital (units)	Labor (units)
W	25	30
X	35	10
Y	25	25
Z	45	5

- 12) The table above shows techniques that can be used to produce 100 shirts. If the price of an hour of labor is \$6 and the price of a unit of capital is \$30, then the economically efficient technique is
- X
  - W
  - Y
  - Z
- 13) When Jitters Coffee Company, Inc., can lower the cost of packaging a pound of coffee by doubling the quantity packaged each day, it is achieving
- economies of scope.
  - economies of scale.
  - economies of team production.
  - all of the above
- 14) If a firm that repairs *both* motorcycles and cars is able to do so at a lower cost than a firm that does only one or the other, this would be an example of
- economies of scale.
  - increasing transactions costs.
  - monitoring.
  - economies of scope.
- 15) When the demand for electricity peaks during the hottest days of summer, Florida Power and Light Company can generate more electricity by using more fuel and increasing the working hours of many of its employees. The company cannot, however, increase electric power production by building additional generating capacity. This means that the company is in the
- market run.
  - long run.
  - intermediate run.
  - short run.
- 16) In the long run, a firm has
- fixed factors of production but no variable resources.
  - no factors of production that are fixed.
  - no factors of production that are variable.
  - no factors of production that are either fixed or variable.
- 17) When the marginal product of labor is greater than the average product of labor, the
- marginal product of labor must be increasing as labor increases.
  - total product must be increasing at an increasing rate as labor increases.
  - average product of labor must be increasing as labor increases.
  - None of the above answers is correct.

Jefferson's Cleaners

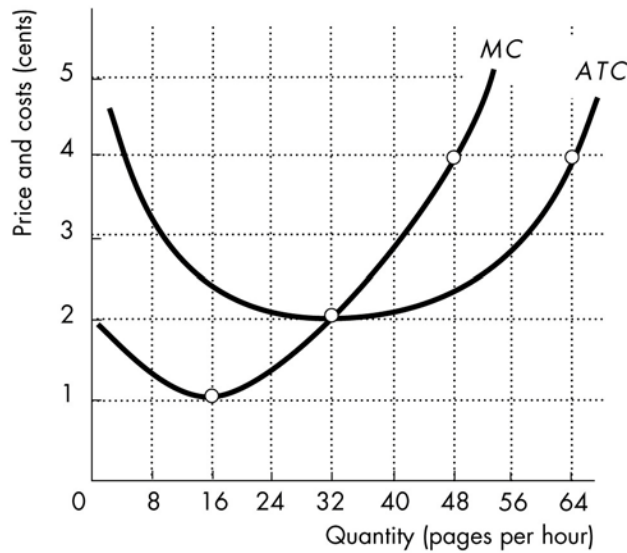
Labor (workers)	Total product (suits cleaned per day)
0	0
1	12
2	26
3	46
4	60
5	73
6	84
7	94
8	102
9	109

- 18) Based on the above table, what is the marginal product of the 6th worker hired at Jefferson's Cleaners?
- A) 10 suits per day
  - B) 84 suits per day
  - C) 11 suits per day
  - D) 14 suits per day
- 19) Using the above table, what is the average product of labor when Jefferson's Cleaners employs six workers?
- A) 13 suits per day
  - B) 14 suits per day
  - C) 12 suits per day
  - D) 11 suits per day

Labor (workers)	Output (bikes)	Total fixed costs (dollars)	Total variable cost (dollars)	Total cost (dollars)
0	0	200		
1	20		100	
2	50			
3	60			
4	64			

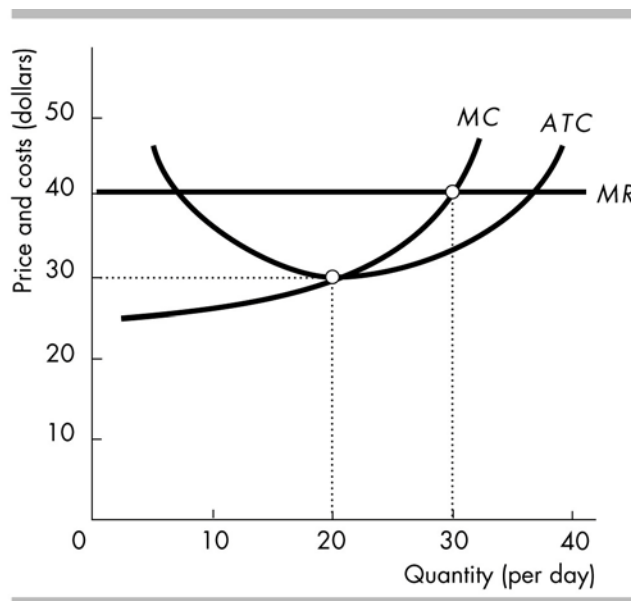
- 20) The table above gives costs at Jan's Bike Shop. Unfortunately, Jan's record keeping has been spotty. Each worker is paid \$100 a day. Labor costs are the only variable costs of production. What is the total fixed cost of producing 64 bikes?
- A) \$200  
B) \$400  
C) \$300  
D) \$500
- 21) The table above gives costs at Jan's Bike Shop. Unfortunately, Jan's record keeping has been spotty. Each worker is paid \$100 a day. Labor costs are the only variable costs of production. What is the total variable cost of producing 60 bikes?
- A) \$300  
B) \$500  
C) \$400  
D) \$200
- 22) Ernie's Earmuffs produces 200 earmuffs per year at a total cost of \$2,000 and \$400 of this cost is fixed. If he increases production to 220 earmuffs, his total cost increases to \$2100, and his fixed cost remains \$400. What is Ernie's marginal cost per earmuff?
- A) \$9.55  
B) \$5  
C) \$105  
D) \$35
- 23) Marginal cost eventually increases because
- A) eventually each additional worker produces a successively smaller addition to output.  
B) of the law of diminishing returns.  
C) the marginal product of the variable input eventually falls.  
D) All of the above answers are correct.
- 24) Economies of scale refer to the range of output over which
- A) the long-run average cost falls as output increases.  
B) marginal cost exceeds average cost.  
C) the marginal product of labor diminishes.  
D) the long-run average cost is lower than the short-run average total cost.

- 25) In order for perfect competition to arise, it must be the case that
- A) firms produce a good or service that is identical to those of its competitors.
  - B) demand for the good or service is large relative to the minimum efficient scale of any single producer.
  - C) the time frame under consideration is very long.
  - D) Both answers A and B are correct.
- 26) In a perfectly competitive market,
- A) each firm takes the good's price as given to it by the market.
  - B) consumers are persuaded by advertising.
  - C) an economic profit is certain.
  - D) each firm sets its own price so that it is different from its competitors.
- 27) The profit maximizing condition for a perfectly competitive firm is
- A)  $P = ATC$ .
  - B)  $TR = TC$ .
  - C)  $MR = P$ .
  - D)  $P = MC$ .



- 28) Fast Copy is a perfectly competitive firm. The figure above shows Fast Copy's cost curves. If the market price is 4 cents per page, what is Fast Copy's profit maximizing level of output?
- 48 pages per hour
  - 32 pages per hour
  - 16 pages per hour
  - 64 pages per hour
- 29) Fast Copy is a perfectly competitive firm. The figure above shows Fast Copy's cost curves. If the market price is 4 cents per page, what is Fast Copy's economic profit?
- more than \$1.00 per hour
  - zero
  - between \$0.51 and \$1.00 per hour
  - between 0 and \$0.50 per hour
- 30) Fast Copy is a perfectly competitive firm. The figure above shows Fast Copy's cost curves. The current market price is 4 cents per page. Assuming this is a constant cost industry, with no change in demand and technology, in the long run, the price will
- fall to 2 cents per page.
  - remain unchanged.
  - fall to 1 cent per page.
  - rise to 5 cents per page.
- 31) In a perfectly competitive market with no external economies or diseconomies, an increase in market demand
- raises the price in the short run and the long run.
  - has no effect on the price in either the short run or the long run because the firms are price takers.
  - raises the price in the short run and attracts new firms in the long run.
  - lowers the price in the short run and in the long run.

- 32) The market for maple syrup is perfectly competitive. Suppose that the market is in long-run equilibrium when the market demand for maple syrup increases. After the demand increases, a typical firm will
- earn a normal profit.
  - exit the market.
  - incur an economic loss.
  - earn an economic profit.
- 33) The market for maple syrup is perfectly competitive. Suppose that the market is in long-run equilibrium when the market demand for maple syrup increases. In the long run, firms will \_\_\_\_\_ the market and the market \_\_\_\_\_ will \_\_\_\_\_.
- leave; supply; decrease
  - enter; supply; decrease
  - leave; demand; decrease
  - enter; supply; increase

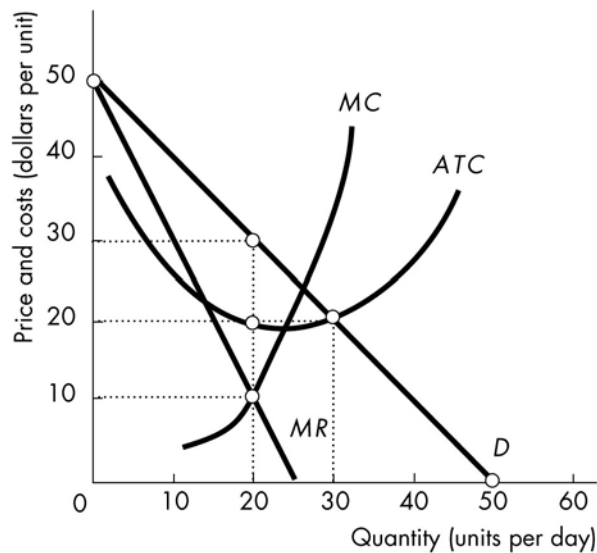


- 34) The figure above shows a perfectly competitive firm. In the short run, the firm will shut down if the price is
- below \$30.
  - above \$40.
  - below \$40.
  - More information is needed to answer the question.
- 35) In a perfectly competitive market, technological advances bring \_\_\_\_\_ economic profits for producers and \_\_\_\_\_ lower prices for consumers.
- temporary; permanently
  - permanent; permanently
  - permanent; temporarily
  - temporary; temporarily

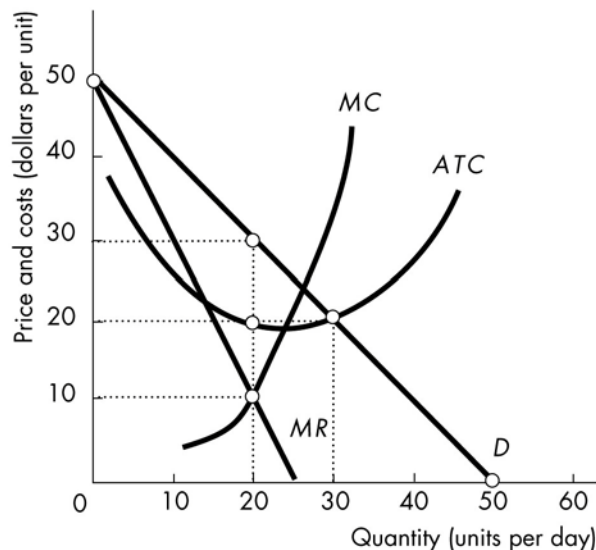
- 36) A natural monopoly is defined as
- A) a market in which competition and entry are restricted by the granting of a patent.
  - B) an industry in which one firm can supply the entire market at a lower price than two or more firms.
  - C) any market where one firm constitutes the entire industry.
  - D) a market in which competition and entry are restricted by the granting of a government license.

Quantity (units)	Price (dollars per unit)
4	16
5	14
6	12

- 37) The table above gives the demand for a monopolist's output. What is the marginal revenue of increasing production from 4 to 5 units?
- A) \$14
  - B) \$16
  - C) \$70
  - D) \$6
- 38) If a decrease in price decreases total revenue, then
- A) demand is unit elastic.
  - B) demand is inelastic.
  - C) the law of demand is violated.
  - D) demand is elastic.



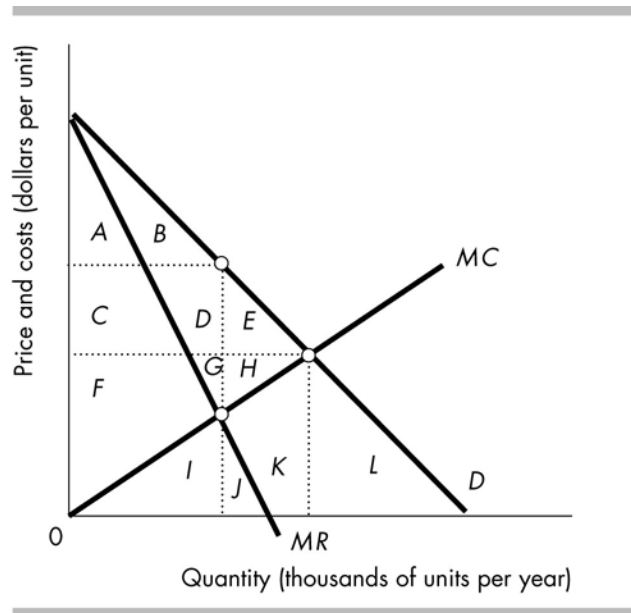
- 39) The figure above shows the demand and cost curves for a single-price monopoly. What price will the firm charge?
- A) \$20 per unit
  - B) \$50 per unit
  - C) \$30 per unit
  - D) \$10 per unit
- 40) Compared to the perfectly competitive equilibrium, a single-price monopolist in the same market would charge a \_\_\_\_\_ price and sell a \_\_\_\_\_ quantity.
- A) lower; greater
  - B) lower; lesser
  - C) higher; lesser
  - D) higher; greater
- 41) Which of the following markets will have the largest deadweight loss?
- A) A market that consists of a perfect price discriminating monopoly.
  - B) A market that consists of a single-price monopoly.
  - C) A market that consists of perfectly competitive firms.
  - D) None of the above. There is no deadweight loss as long as firms produce at the level of output where marginal revenue equals marginal cost.



- 42) The figure above shows the demand and cost curves for a single-price monopoly. What economic profit does this firm earn?
- A) \$200
  - B) \$600
  - C) \$400
  - D) zero
- 43) Price discrimination is the practice of charging different prices to
- A) the same customers because of changes in cost.
  - B) different customers even though the cost of selling to each is the same.
  - C) different customers because the costs of selling are different.
  - D) different countries because of tariffs and transportation costs.
- 44) Perfect price discrimination
- A) creates a deadweight loss.
  - B) cannot result in profit maximization.
  - C) turns all the producer surplus into consumer surplus.
  - D) turns all the consumer surplus into an economic profit.
- 45) For a monopoly able to practice perfect price discrimination, the market
- A) supply curve is the same as the marginal cost curve.
  - B) demand curve is the same as the marginal cost curve.
  - C) demand curve is the same as the marginal revenue curve.
  - D) supply curve is the same as the marginal revenue curve.
- 46) A price discriminating monopolist
- A) earns zero economic profit in the long run.
  - B) earns a smaller economic profit than that earned by the single-price monopolist.
  - C) has a lower marginal cost than that incurred by a single-price monopolist.
  - D) produces more output than that produced by a single-price monopolist.

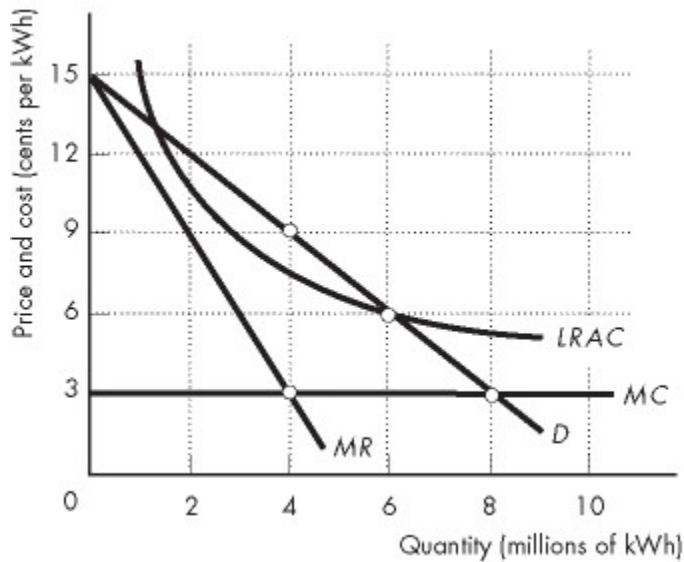
47) Suppose that a golf course currently charges everyone \$30 for a round of golf. Under what conditions would it make sense to give senior citizens a discounted price?

- A) If senior citizens have more elastic demand than other golfers since this means the marginal revenue per round will be higher from senior citizens than other golfers.
- B) If senior citizens have more inelastic demand than other golfers since this means the marginal revenue per round will be higher from senior citizens than other golfers.
- C) If senior citizens have more elastic demand than other golfers since this means the marginal cost per round will be higher from senior citizens than other golfers.
- D) If senior citizens have more inelastic demand than other golfers since this means the marginal cost per round will be higher from senior citizens than other golfers.

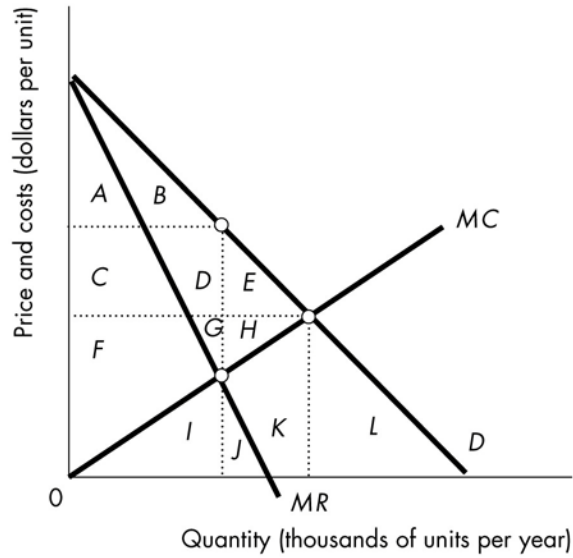


48) Which area in the above figure equals the producer surplus under perfect price discrimination?

- A)  $A + B + C + D + E + F + G + H + I + J + K$
- B)  $A + B + C + D + E + F + G + H$
- C)  $A + B + C + D + E + F + G + H + I + J + K + L$
- D)  $C + D + E + F + G + H$



- 49) The figure above shows the demand curve, marginal revenue curve and cost curves for Bright Power. The company cannot price discriminate. If the government uses an average cost pricing rule to regulate Bright Power, the deadweight loss will be
- \$60,000.
  - zero.
  - \$80,000
  - \$30,000.
- 50) The figure above shows the demand curve, marginal revenue curve and cost curves for Bright Power. The company cannot price discriminate. If the government uses a marginal cost pricing rule to regulate Bright Power, the company's economic profit will be
- zero.
  - \$80,000.
  - \$40,000.
  - None of the above answers are correct because the company incurs an economic loss.



- 51) Which area in the above figure equals the consumer surplus under perfect price discrimination?
- A)  $A + B + C + D + E$
  - B)  $A + B$
  - C)  $A + B + C + D + E + F + G + H$
  - D) There is no consumer surplus.