Economics 103h Fall 2012: Part 1 of review questions for final exam

This is the first set of review questions. The short answer/graphing go through to the end of monopolistic competition. The multiple choice go only through to the end of monopoly. I will post the second set of review questions, continuing through oligopoly, next Monday.
:Short answer/graphing review questions for final exam
Note: When referring to monopoly below, we are always assuming a natural monopoly when the issue is regulation. Here and in class, to make the presentation simpler, we sometimes explicity put in 'natural' before monopoly but sometimes leave it out. It is always assumed, however, in the case of regulation.

This is not an assumption for the general case of monopoly, in which the average total cost curve can be increasing when it crosses the demand curve. Thus the graph for a monopoly that is not specifically defined as a natural monopoly will have a U-shaped average total cost curve that is increasing when it crosses the demand curve.

1. Draw on a graph and explain in words the shut-down point of the perfectly competitive firm that is making a loss. Show on the graph the economic loss of the firm at its shut-down point. Be sure to refer to all of the relevant cost curves in your explanation and define and explain the shut-down point.
2. Draw on a graph and explain in words the long run equilibrium level of output and price of the perfectly competitive firm. Draw on a graph and explain in words the long run equilibrium level of output and price of the monopolistically competitive firm. Compare the efficiency and the economic profit of the two equilibria (use two separate graphs, one for each market condition).
3. Using the total cost and total revenue method, show on a graph and explain in words the profit maximizing level of output. Explain the shapes of the total cost and total revenue curves.
4. Using the marginal cost and marginal revenue method, show on a graph and explain in words the short run profit maximizing level of output. Explain the shapes of the marginal cost and marginal revenue curves. To explain the profit maximizing level of output, show on the graph a point out of equilibrium and explain why the firm won't stay at that point. What else does the marginal revenue curve represent in the case of perfect competition and why?
5. What is a natural monopoly and why does it arise? Is a natural monopoly efficient? Why or why not?
6. Draw on a graph and explain in words the equilibrium of a natural monopoly that is regulated by marginal cost pricing. What is the problem with marginal cost pricing for a
natural monopoly? What is a possible solution to the problem and what problem does this solution in turn cause?
7. Show on a graph and explain in words the short run equilibrium of the monopolistically competitive firm. You can draw a graph with a firm making a profit or a loss. What is the economic profit (or loss) of the firm at this short run equilibrium? Explain the profit (or loss) of the specific situation you have drawn and show it on the graph.
8. What is the economic profit in the long run of a monopolistically competitive firm and why? Are the equilibrium levels of output and price efficient in this firm? If not, explain why and show the area of inefficiency on the graph.
9. Explain and show on a graph why advertising may actually reduce the markup in monopolistic competition.
10. Explain and show on a graph (the same graph) the difference between the equilibrium of the perfectly competitive firm and a monopoly firm (not a natural monopoly). Be sure to compare efficiency, the price and the level of output between the two firms.
11. Explain and show on a graph average cost regulation of a natural monopoly. What is the efficiency, the profit (or loss) and the level of output of this firm compared to an unregulated natural monopoly? Show this on the graph and explain in words.
12. Explain and show on a graph a long run equilibrium in a rent-seeking monopoly industry (not a natural monopoly). What is the efficiency, the profit (or loss) and the level of output of this firm compared to a monopoly without rent seeking? Show this on the graph and explain in words why there are differences between the two.
13. Explain in words and show on a graph a situation of a monopolist (not a natural monopolist) who can achieve perfect price discrimination. Compare efficiency, price and quantity at equilibrium of this monopolist to one who cannot price discriminate and explain why there are differences between the two.
14. Draw on a graph and explain in words the equilibrium of a natural monopoly that is regulated by price cap regulation. What incentive does this form of regulation give to the firm? What does this regulation do to the equilibrium level of output and price compared to an unregulated monopoly? Explain in words and refer to the graph.
15. Draw on a graph and explain in words the excess capacity and markup in monopolistic competition versus perfect competition. Use separate graphs for each market situation. Show on the monopolistic competition graph the deadweight loss and the markup.

Multiple Choice questions (through monopoly only)

1) A market is perfectly competitive if
A) each firm in it can influence the price of its product.
B) there are many firms in it, each selling a slightly different product.
C) there are many firms in it, each selling an identical product.
D) there are few firms in the market.

Answer: C
2) In perfect competition, restrictions on entry into an market
A) apply to both capital and labor.
B) apply to labor but not to capital.
C) apply to capital but not to labor.
D) do not exist.

Answer: D
3) In perfect competition,
A) each firm can influence the price of the good.
B) there are few buyers.
C) there are significant restrictions on entry.
D) all firms in the market sell their product at the same price.

Answer: D
4) Individual firms in perfectly competitive industries are price takers because
A) the government sets all prices.
B) buyers set prices.
C) firms decide together on the best price to charge.
D) each individual firm is too small to affect the market price.

Answer: D
5) In perfect competition, the market demand for the good $\qquad$ perfectly elastic and the demand for the output of one firm $\qquad$ perfectly elastic.
A) is; is
B) is; is not
C) is not; is
D) is not; is not

Answer: C
6) The demand for wheat from farm $A$ is perfectly elastic because wheat from farm $A$ is
A) a perfect complement for wheat from farm B.
B) a normal good.
C) a perfect substitute for wheat from farm B.
D) an inferior good.

Answer: C
7) The difference between a firm's total revenue and its total cost is the firm's
A) normal profit.
B) economic profit.
C) marginal profit.
D) marginal revenue.

Answer: B
8) The return that the entrepreneur can obtain in the best alternative business is called the
A) normal profit.
B) economic profit.
C) marginal profit.
D) marginal revenue.

Answer: A
9) A perfectly competitive firm has a total revenue curve that is
A) upward sloping with an increasing slope.
B) downward sloping with a constant slope.
C) upward sloping with a decreasing slope.
D) upward sloping with a constant slope.

Answer: D
10) In perfect competition, the marginal revenue of an individual firm
A) is zero.
B) is positive but less than the price of the product.
C) equals the price of the product.
D) exceeds the price of the product.

Answer: C
11) Which of the following is always true for a perfectly competitive firm?
A) $P=M R$
B) $P=A T C$
C) $M R=A T C$
D) $P=A V C$

Answer: A
12) The marginal revenue curve for a perfectly competitive firm is
A) an upward sloping curve.
B) a downward sloping curve.
C) a horizontal line.
D) None of the above answers is correct.

Answer: C
13) At a firm's break-even point, its
A) total revenue equals its total opportunity cost.
B) marginal revenue exceeds its marginal cost.
C) marginal revenue equals its average variable cost.
D) marginal revenue equals its average fixed cost.

Answer: A
14) The break-even point is defined as occurring at an output rate at which
A) total revenue equals total cost.
B) economic profit is maximized.
C) marginal revenue equals marginal cost.
D) total cost is minimized.

Answer: A
15) A firm is producing the profit-maximizing amount of output when it is producing where its $\qquad$ curve intersects its $\qquad$ curve.
A) $M C ; M R$
B) $M C$; $A V C$
C) $M C$; $A T C$
D) $M C$; $T R$

Answer: A
16) Charlie's Chimps is a perfectly competitive firm that produces cuddly chimps for children. The market price of a chimp is $\$ 10$, and Charlie's produces 100 chimps at a marginal cost of $\$ 9$ a chimp. Charlie's $\qquad$ .
A) is maximizing its profit
B) will maximize its profit if it produces more than 100 chimps
C) will maximize its profit if it lowers the price to $\$ 9$ a chimp
D) will maximize its profit if it produces fewer than 100 chimps

Answer: B

| Output | Total <br> Revenue | Total Cost |
| :---: | :---: | :---: |
| 0 | $\$ 0$ | $\$ 25$ |
| 1 | $\$ 30$ | $\$ 49$ |
| 2 | $\$ 60$ | $\$ 69$ |
| 3 | $\$ 90$ | $\$ 91$ |
| 4 | $\$ 120$ | $\$ 117$ |
| 5 | $\$ 150$ | $\$ 147$ |
| 6 | $\$ 180$ | $\$ 180$ |

17) In the above table, the price of the product is
A) $\$ 30$.
B) $\$ 147$.
C) $\$ 150$.
D) $\$ 180$.

Answer: A

| Output | Total <br> Revenue | Total Cost |
| :---: | :---: | :---: |
| 0 | $\$ 0$ | $\$ 25$ |
| 1 | $\$ 30$ | $\$ 49$ |
| 2 | $\$ 60$ | $\$ 69$ |
| 3 | $\$ 90$ | $\$ 91$ |
| 4 | $\$ 120$ | $\$ 117$ |
| 5 | $\$ 150$ | $\$ 147$ |


| 6 | $\$ 180$ | $\$ 180$ |
| :--- | :--- | :--- |

18) In the above table, the price of the product is
A) $\$ 30$.
B) $\$ 147$.
C) $\$ 150$.
D) $\$ 180$.

Answer: A

| Price <br> (dollars per CD) | Quantity demanded <br> (CDs per week) |
| :---: | :---: |
| 8.00 | 30,000 |
| 8.50 | 25,000 |
| 9.00 | 20,000 |
| 9.50 | 15,000 |
| 10.00 | 10,000 |


| Quantity <br> (CDs per week) | Marginal cost <br> (dollars per CD) |
| :---: | :---: |
| 50 | 8.50 |
| 100 | 9.00 |
| 150 | 9.50 |
| 200 | 10.00 |
| 250 | 10.20 |

19) The first table shows the market demand schedule for CDs, and the second table shows the cost structure of each firm. The CD market is perfectly competitive and there are 100 identical firms. The market price of a CD is $\qquad$ , and $\qquad$ CDs are produced and sold.
A) $\$ 9.00 ; 20,000$
B) $\$ 9.50 ; 15,000$
C) $\$ 10.00 ; 10,000$
D) $\$ 8.50 ; 24,000$

Answer: B

20) The above figure illustrates a firm's total revenue and total cost curves. Which one of the following statements is FALSE?
A) Economic profit is the vertical distance between the total revenue curve and the total cost curve.
B) At output $Q_{1}$ the firm makes zero economic profit.
C) At an output above Q3 the firm incurs an economic loss.
D) At output Q2 the firm incurs an economic loss.

Answer: D
21) The feature of the above figure that indicates that the firm is a perfectly competitive firm is the
A) shape of the total cost curve.
B) shape of the total revenue curve.
C) fact that the total cost and total revenue curves are farthest apart at output is Q 2 .
D) fact that the total cost and total revenue curves cross twice.

Answer: B
22) A firm will expand the amount of output it produces as long as its
A) average total revenue exceeds its average total cost.
B) average total revenue exceeds its average variable cost.
C) marginal cost exceeds its marginal revenue.
D) marginal revenue exceeds its marginal cost.

Answer: D
23) A perfectly competitive firm's marginal cost exceeds its marginal revenue at its current output. To increase its profit, the firm will
A) lower its price.
B) raise its price.
C) decrease its output.
D) increase its output.

Answer: C

| Quantity <br> (pounds of <br> cookies) | Total revenue <br> (dollars) | Total cost, <br> (dollars) |
| :---: | :---: | :---: |
| 1 | 15 | 13 |
| 2 | 30 | 24 |
| 3 | 45 | 39 |
| 4 | 60 | 58 |
| 5 | 75 | 81 |

24) The table above gives the total revenue and total cost for a perfectly competitive firm producing chocolate chip cookies. If the firm is producing 1 pound of cookies, to maximize its profit it will
A) increase its output.
B) decrease its output.
C) continue producing 1 pound of cookies.
D) shut down.

Answer: A

| Quantity | Total fixed <br> cost, TFC <br> (dollars) | Total variable <br> cost, $T V C$ <br> (dollars) |
| :---: | :---: | :---: |
| 0 | 500 | 0 |
| 1 | 500 | 100 |
| 2 | 500 | 180 |
| 3 | 500 | 220 |
| 4 | 500 | 300 |
| 5 | 500 | 390 |
| 6 | 500 | 500 |
| 7 | 500 | 640 |
| 8 | 500 | 800 |
| 9 | 500 | 1000 |
| 10 | 500 | 1250 |

25) The table above shows some of the costs for a perfectly competitive firm. The firm will produce 9 units of output if the price per unit is
A) $\$ 1750$.
B) $\$ 200$.
C) $\$ 300$.
D) $\$ 500$.

Answer: B

26) In the above figure, the firm will produce
A) 0 units.
B) 5 units.
C) 15 units
D) 20 units.

Answer: D
27) In the above figure, the marginal cost of the last unit produced by the profit maximizing firm is
A) $\$ 5$.
B) $\$ 10$.
C) $\$ 15$.
D) $\$ 20$.

Answer: B
Topic: Profit-Maximizing Output
Skill: Analytical
Question history: Previous edition, Chapter 12
AACSB: Analytical Skills
28) In the above figure, the firm's total economic profit is equal to
A) $\$ 60$.
B) $\$ 200$.
C) $\$ 150$.
D) $M R-M C$.

Answer: A
29) A firm's shutdown point is the quantity and price at which the firm's total revenue just equals its
A) total cost.
B) total variable cost.
C) total fixed cost.
D) marginal cost.

Answer: B
30) A firm's shutdown point is the output and price at which the firm just covers its
A) total fixed cost.
B) total variable cost.
C) total cost.
D) marginal cost.

Answer: A
31) In the short run, a perfectly competitive firm will shut down if at the profit maximizing quantity the
A) $P<A V C$.
B) $A V C<A T C$.
C) $P>A T C$.
D) $P>M C$.

Answer: A
32) A firm that shuts down and produces no output incurs a loss equal to its
A) total fixed costs.
B) total variable costs.
C) marginal costs.
D) marginal revenue
33) In the short run, a perfectly competitive firm NEVER
A) earns an economic profit.
B) incurs a loss greater than its total fixed costs.
C) produces where $M R=M C$.
D) earns a normal profit.

Answer: B
34) If the market price in a perfectly competitive market is less than a firm's minimum average variable cost, then the firm's total revenue will always $\qquad$ .
A) exceed its total fixed cost
B) be less than its total economic loss
C) equal its total cost
D) be less than its total variable cost

Answer: D

| Output <br> (tons of rice <br> per year) | Total cost <br> (dollars per <br> ton) |
| :---: | :---: |
| 0 | $\$ 1,000$ |
| 1 | $\$ 1,200$ |
| 2 | $\$ 1,600$ |
| 3 | $\$ 2,200$ |
| 4 | $\$ 3,000$ |
| 5 | $\$ 4,000$ |

35) Based on the table above which shows Chip's costs, if rice sells for $\$ 600$ a ton, Chip
will
A) shut down because he incurs an economic loss.
B) shut down because the price is below his minimum average variable cost.
C) stay open because he makes an economic profit.
D) stay open because the price is above his minimum average variable cost.

Answer: D

| Output <br> (sandwiches per <br> hour) | Average total cost <br> (\$ per sandwich) |
| :---: | :---: |
| 1 | 17.00 |
| 2 | 10.00 |
| 3 | 8.00 |
| 4 | 8.00 |
| 5 | 8.80 |
| 6 | 10.00 |

36) The table above shows output and costs of Evan's Subs, a typical perfectly competitive firm in a local market for sandwiches. Evan's fixed cost is $\$ 9$ per hour. The current market price of a sandwich is $\$ 6$. What quantity of sandwiches produced will maximize Evan's economic profit in the short run?
A) 2 sandwiches per hour
B) 3 sandwiches per hour
C) 4 sandwiches per hour
D) 5 sandwiches per hour

Answer: B

37) The figure above shows a perfectly competitive firm. In the short run, the firm will shut down
A) only if the AVC of producing 10 units is less than $\$ 20$.
B) only if the AVC of producing 10 units is more than $\$ 20$.
C) only if the AVC curve reaches its minimum before 10 units are produced.
D) always.

Answer: B
38) Because of a decrease in the wage rate it must pay, a perfectly competitive firm's marginal costs decrease but its demand curve stays the same. As a result, the firm
A) decreases the amount of output it produces and raises its price.
B) increases the amount of output it produces and lowers it price.
C) increases the amount of output it produces and does not change its price.
D) decreases the amount of output it produces and lowers its price.

Answer: C

39) If the price is $\$ 12$ per pizza, the perfectly competitive firm in the above figure is A) making an economic profit.
B) making zero economic profit.
C) incurring an economic loss.
D) More information about the firm's total cost is needed to determine if the firm has a positive economic profit, zero economic profit, or an economic loss.
Answer: B

40) Consider the perfectly competitive firm in the figure above. At the profit maximizing level of output, the firm will
A) make an economic profit equal to the area $A B C D$.
B) incur an economic loss equal to the area $A B C D$.
C) make zero economic profit.
D) make an economic profit equal to the area $A E C D$.

Answer: A
41) The firms in a perfectly competitive are making an economic profit when new firms enter. The entry shifts the short-run market supply curve $\qquad$ , the market price , and each firm's economic profit $\qquad$ .
A) leftward; rises; decreases
B) rightward; rises; increases
C) rightward; falls; decreases
D) leftward; falls; decreases

Answer: C
42) Suppose firms in a perfectly competitive market are incurring an economic loss. As firms exit, the price $\qquad$ and the economic loss of the surviving firms $\qquad$ .
A) rises; increases
B) rises; decreases
C) falls; increases
D) falls; decreases

Answer: B
43) In the long run, fixed costs are
A) zero and variable costs are zero.
B) zero and variable costs are positive.
C) positive and variable costs are zero.
D) positive and variable costs are positive.

Answer: B
44) In the long-run equilibrium in a perfectly competitive market,
A) the firms make an economic profit.
B) the firms' owners make a normal profit.
C) the average total cost is maximized.
D) marginal cost is at a minimum.

Answer: B
45) Which of the following is NOT a characteristic of a monopoly?
A) a single firm
B) no close substitutes for the product produced
C) barriers to entry
D) easy entry and exit

Answer: D
46) Which of the following is a barrier to entry for a monopoly?
A) a patent
B) severe diseconomies of scale
C) close substitutes for the good or service exist
D) All of the above answers are correct.

Answer: A
47) Natural monopolies occur when there are
A) large diseconomies of scale.
B) external economies.
C) large economies of scale.
D) natural resources involved.

Answer: C
36) Which of the following is true of a natural monopoly?
A) Its long-run average cost curve slopes upward as it intersects the demand curve.
B) Economies of scale exist to only a very low level of output.
C) Economies of scale allow one firm to supply the entire market at the lowest possible cost.
D) The firm is not protected by any barrier to entry.

Answer: C
37) A single-price monopoly charges the same price
A) even if the demand curve shifts.
B) even if its cost curves shift.
C) to all customers for each unit of output they buy.
D) at all times and that price equals the firm's marginal revenue.

Answer: C
38) All of the following are examples of price discrimination EXCEPT
A) buy-one-get-one-free offers.
B) "early bird specials" at a restaurant.
C) lower ticket prices for matinee performances.
D) "buy now, pay later" payment options.

Answer: D
39) Firms that can price discriminate between customers do so to $\qquad$ .
A) increase consumer surplus
B) increase employment
C) increase their profit
D) decrease the quantity they produce

Answer: C
40) For a monopoly, the market demand curve is the firm's
A) supply curve.
B) marginal revenue curve.
C) demand curve.
D) profit function.

Answer: C
41) Monopolists
A) maximize revenue, not profits.
B) have no short-run fixed costs.
C) face downward sloping demand curves.
D) are price takers.

Answer: C
42) For a single-price monopoly's demand curve lies
A) below its marginal revenue curve.
B) on top of its marginal revenue curve.
C) above its marginal revenue curve.
D) on top of its total revenue curve.

Answer: C
43) A single-price monopolist
A) can sell as much as it wants at the chosen price because it is the only seller.
B) can increase the price and the quantity sold at the same time.
C) can increase the price only if it decreases the quantity sold.
D) is not restricted by the law of demand.

Answer: C
44) Which of the following is a characteristic of a single-price monopoly?
A) The firm is a price taker.
B) Demand is perfectly elastic.
C) There are many close substitutes for the firm's product.
D) Price exceeds marginal revenue.

Answer: D
45) A major difference between a single-price monopolist and a perfectly competitive firm is that the
A) monopolist can maximize profit by setting the price of the output where demand is inelastic.
B) monopolist can always increase its profits by increasing the price of its output.
C) monopolist's marginal revenue is less than price.
D) monopolist is guaranteed to earn an economic profit.

Answer: C

| Quantity <br> (units) | Price <br> (dollars per unit) |
| :---: | :---: |
| 4 | 16 |
| 5 | 14 |
| 6 | 12 |

46) 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) $\$ 70$
B) $\$ 16$
C) $\$ 14$
D) $\$ 6$

Answer: D
47) For a monopolist, on the inelastic range of its demand,
A) marginal revenue is negative.
B) marginal revenue is positive.
C) marginal revenue is equal to zero.
D) total revenue is maximized.

Answer: A
48) If a monopolist was operating in a price range where marginal revenue was negative, it would be
A) in the inelastic range of the demand for its product.
B) in the unit elastic range of the demand for its product.
C) in the elastic range of the demand for its product.
D) maximizing revenue but not profits.

Answer: A
49) For a single-price monopolist, as output increases, total revenue
A) initially increases and then decreases.
B) initially decreases and then increases.
C) increases continually.
D) decreases continually.

Answer: A
50) A single-price monopolist will always produce where the elasticity of demand
A) is greater than 1 .
B) is smaller then 1.
C) equals 1 .
D) equals infinity.

Answer: A
51) To maximize profit, the monopolist produces on the $\qquad$ portion of its demand where $\qquad$
A) elastic; $P=M C$
B) elastic; $M R=M C$
C) inelastic; $P=M C$
D) inelastic; $M R=M C$

Answer: B
52) Which of the following is ALWAYS true for a profit-maximizing single-price monopolist?
A) $P>M C$
B) $P>M R$
C) $M R=M C$
D) All of the above are always true.

Answer: D
58) Suppose that a monopoly is currently producing the quantity at which marginal revenue is less than marginal cost. The monopoly can increase its profit by $\qquad$ .
A) shutting down
B) lowering its price and increasing its output
C) raising its price and decreasing its output
D) lowering its price and decreasing its output

Answer: C
59) For a single-price monopolist that is maximizing profit, the price is
A) less than marginal revenue.
B) equal to marginal revenue.
C) equal to marginal cost.
D) greater than marginal cost.

Answer: D
60) In the long-run, a single-price monopolist will
A) make zero economic profit.
B) be able to continue to make an economic profit as long as the market remains a monopoly.
C) end up being regulated by the government because it is making short-run economic profits.
D) Both answers A and C are correct.

Answer: B
61) Which of the following is a characteristic of monopoly in the long run?
A) The firm makes zero economic profit.
B) The firm can make an economic profit.
C) Price equals marginal cost.
D) Price equals marginal revenue.

Answer: B

62) The figure above shows the cost, demand, and marginal revenue curves for a monopoly. At an output level of $\qquad$ , demand is $\qquad$ -
A) 20 ; elastic
B) 50 ; unit elastic
C) 50 ; elastic
D) 30; unit elastic

Answer: A

63) The monopoly illustrated in the figure above is unregulated and charges a single price. The deadweight loss created by the monopoly is
A) $\$ 0$.
B) $\$ 22.50$.
C) $\$ 45.00$.
D) $\$ 90.00$.

Answer: B
64) A key difference between a monopoly and a perfectly competitive firm is that the monopolist
A) does not face fixed costs in the short run.
B) has a marginal revenue curve that lies below its demand curve.
C) has no marginal cost curve.
D) faces a perfectly elastic demand for its product.

Answer: B
65) Relative to a perfectly competitive market with the same cost and demand, a singleprice monopolist produces $\qquad$ output and has a $\qquad$ price.
A) more; higher
B) less ; lower
C) more; lower
D) less; higher

Answer: D
66) A single-price monopoly causes a deadweight loss because it $\qquad$ .
A) restricts its output so it is less than the efficient quantity
B) increases the amount produced beyond the efficient quantity
C) maximizes marginal revenue rather than minimizes marginal cost
D) increases marginal cost

Answer: A

67) In the figure above, the efficient amount of output is
A) 20 units per day.
B) 40 units per day.
C) 60 units per day.
D) 80 units per day.

Answer: B

68) The area of economic profit shown in the above figure for the single-price monopolist is
A) bed.
B) $P_{3} P_{5} f c$.
C) $0 P_{5} f Q_{1}$.
D) $0 P 4 e Q 3$.

Answer: B
69) If the market illustrated in the above figure was a perfectly competitive market with the MC curve being the sum of all individual firms' marginal costs, then the perfectly competitive price and quantity would be
A) $P_{3}$ and Q1.
B) $P_{5}$ and $Q_{1}$.
C) $P_{1}$ and $Q_{1}$.
D) $P_{4}$ and Q3.

Answer: D

70) In the above figure, if the market was a single-price monopoly rather than perfectly competitive, which area shows the transfer of consumer surplus from consumers to producers?
A) $A+B$
B) $C+D$
C) $C+D+E$
D) $E+H$

Answer: B
71) Which of the following is necessary for a monopolist to price discriminate between groups?
A) The groups are identifiable.
B) The groups have different willingness to pay.
C) A customer from one group cannot resell to a customer in another group.
D) All of the above conditions are necessary for the monopolist to price discriminate.

Answer: D
72) Price discrimination by a monopoly
A) increases consumer surplus.
B) decreases consumer surplus.
C) increases the firm's profit.
D) Both answers B and C are correct.

Answer: D
73) A price discriminating monopolist
A) produces more output than that produced by a single-price monopolist.
B) has a lower marginal cost than that incurred by a single-price monopolist.
C) makes a smaller economic profit than that earned by the single-price monopolist.
D) makes zero economic profit in the long run.

Answer: A
74) Which of the following occurs with both perfectly price discriminating and single-price
monopolies?
A) The amount of output is inefficient.
B) All consumer surplus goes to the monopoly.
C) Deadweight loss is created.
D) There is a redistribution of consumer surplus to the monopoly.

Answer: D
76) If a monopolist can perfectly price discriminate, then
A) price equals average cost for each unit sold.
B) price equals marginal cost for each unit sold.
C) price equals marginal cost for the last unit sold.
D) the firm can ignore the marginal cost curve.

Answer: C
77) Which of the following is true about a perfect price discriminating monopolist?
A) There is inefficiency.
B) All consumers pay a price equal to marginal cost.
C) There is no consumer surplus.
D) There is zero economic profit.

Answer: C
78) Which of the following statements is true?
A) Perfectly competitive markets are efficient, but monopoly markets never are efficient.
B) Perfectly competitive markets always reach equilibrium but monopoly markets never reach equilibrium.
C) Perfect price discriminating monopolists can eliminate all deadweight losses and achieve efficiency.
D) All the above statements are true.

Answer: C
79) A natural monopoly that is regulated to set its price equal to its marginal cost
A) incurs an economic loss.
B) makes zero economic profit.
C) makes an economic profit.
D) creates the maximum deadweight loss.

Answer: A
80) In a regulated natural monopoly, a marginal cost pricing rule maximizes
A) total costs.
B) producer surplus.
C) economic profit.
D) total surplus.

Answer: D
81) For a regulated natural monopoly, an average cost pricing rule sets price equal to
A) average fixed cost.
B) average total cost.
C) average external cost.
D) average variable cost.

Answer: B
82) An average cost pricing rule for a natural monopoly sets the price $\qquad$ the marginal cost, thereby $\qquad$ a deadweight loss.
A) below; avoiding
B) below; creating
C) above; avoiding
D) above; creating

Answer: D
83) A regulated monopoly facing average cost pricing rule will make the same profit as a firm in $\qquad$ market does in the long run.
A) an unregulated monopoly
B) an oligopoly
C) a perfectly competitive
D) All of the above answers are correct.

Answer: C

84) Natural gas is a natural monopoly. The figure above shows the market for natural gas in the city of Lucknow. When a marginal cost pricing rule regulation is imposed, the price per household per month is $\qquad$ .
A) $\$ 30$ and 20,000 household are served
B) $\$ 10$ and 40,000 household are served
C) $\$ 10$ and 20,000 household are served
D) $\$ 20$ and 30,000 households are served

Answer: B
85) Natural gas is a natural monopoly. The figure shows the market for natural gas in the city of Lucknow. When an average cost price rule regulation is imposed, the price per household per month is $\qquad$ .
A) $\$ 30$ and 20,000 household are served
B) \$10 and 40,000 household are served
C) \$25 and 20,000 household are served
D) $\$ 20$ and 30,000 households are served Answer: D

86) In the above figure, if this natural monopoly is not regulated the deadweight loss to society is
A) ecf.
B) $e b c$.
C) $g a c$.
D) $g d e$.

Answer: C
87) In the above figure, if the natural monopoly is regulated with an average cost pricing rule and the firm does not inflate its costs, the deadweight loss to society is
A) zero.
B) efc.
C) ebc.
D) gac.

Answer: C

