Note the practice exam, the exam from last year, does NOT contain material from chapters 9 and 10 - but your exam will!

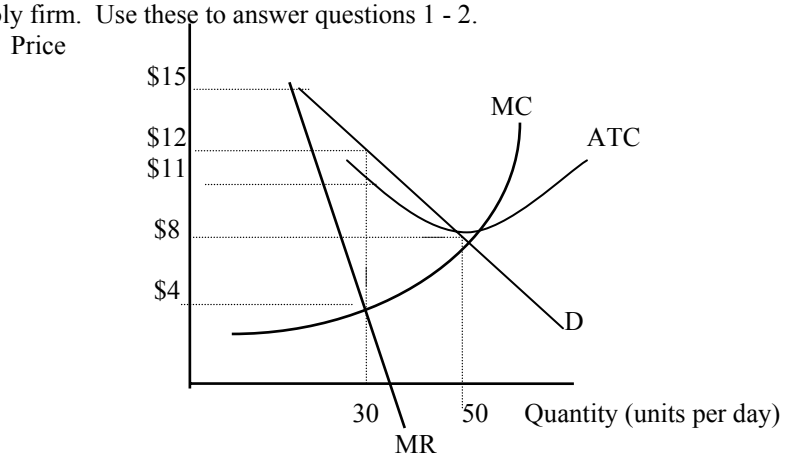
NAME:_____

E210 **EXAM 2** **FALL 2003**

Multiple Choice (3 points. each)
Choose the one option that best answers each of the following questions. Mark your answers in the blanks provided **on this page**.

1._____	4._____	7._____	10._____	13._____	16. _____
2._____	5._____	8._____	11._____	14._____	17._____
3._____	6._____	9._____	12._____	15._____	18._____

The graph drawn below shows the average cost, marginal cost, demand and marginal revenue curves for a monopoly firm. Use these to answer questions 1 - 2.



1. If the firm is a **single-price monopolist** and it seeks to maximize profit it should set a price equal to:

A. $12
B. $11
C. $8
D. $4

2. The maximum possible profit the a **single-price monopolist** can earn per day is

A. $0
B. $30
C. $120
D. $200

3. Which monopoly assumption allows long run profits to exist?

A. a single firm.
B. no close substitutes.
C. barriers to entry.
D. ALL of the above.

Use the following table to answer questions 4 and 5.

Labor (# of workers)	***Output***	***Marginal Product of Labor***
0	0	
1		200
2	520	
3		450
4	1050	
5	1110	
6		40

4. What is the Total Product (Output) of the 6 workers?

A. 690
B. 1050
C. 1110
D. 1150

5. Marginal cost starts to increase:

A. After the second worker is hired (before the third worker is hired)
B. After the third workers is hired (before the fourth worker is hired)
C. After the fourth workers is hired (before the fifth worker is hired)
D. Cannot be determined with the given information

6. Firms can have

(i) Accounting profits and economic losses.
(ii) Accounting profits and economic profits.
(iii) Accounting losses and economic losses.
(iv) Accounting losses and economic profits.

A. Only (i), (ii) and (iii).
B. Only (i) and (iv).
C. Only (ii) and (iii).
D. All of the above.

7. Whenever the marginal cost curve lies below the average total cost curve:

A. average variable cost is increasing.
B. average variable cost is decreasing.
C. average total cost is increasing.
D. average total cost is decreasing.

8. When the LRATC decreases and then increases as output increases?

A. There are constant returns to scale.
B. There are diseconomies of scale, then economies of scale.
C. There are economies of scale, then diseconomies of scale.
D. There are economics of scale, then constant returns to scale.

9. If the total variable cost of producing 7 units is $54 and the marginal cost of the eighth unit is $10, then

A. fixed costs are $8
B. fixed costs are $33
C. the average total cost of 8 units is $8
D. the average variable cost of 8 units is $8

10. A perfectly competitive firm is producing 500 units of output in a market where the price is $60 per unit. At this output, TC=$40,000 and TVC = $25,000. The firm is currently producing a level of output where MC is $40 per unit. This output level maximizes the difference between market price and MC. Using only this information, and assuming this firm wants to maximize total profits, we can conclude that:

A. This firm should increase output.
B. This firm should decrease output.
C. This firm is producing the output level that maximizes profits.
D. This firm should shut down.

11. A perfectly competitive firm sells 500 units of output per day for $60 per unit. At the profit maximizing output level of 500 units per day, average total cost is $65 per unit, and average variable cost is $55 per unit. In the short run, the firm should:

A. Decrease output, but not shut down.
B. Maintain its current level of output.
C. Shut down.
D. Increase output.

12. If the price of a monopoly firm is located on the inelastic portion of its demand curve, to maximize profits it should necessarily:

A. increase output and decrease price
B. decrease output and increase price
C. increase output and increase price
D. not change output or price.

13. If price just equals the average variable cost of production for a competitive firm,

A. total fixed cost is equal to zero
B. total variable cost equals total fixed cost
C. total revenue equals total fixed costs and the firm's loss equals total variable cost
D. total revenue equals total variable costs and the firm's loss equals total fixed cost

14. If a **single-price monopolist's** marginal revenue at the current level of output is positive:

A. demand for its product is elastic.
B. demand for its product is inelastic.
C. demand for its product is unit elastic.
D. price is equal to marginal revenue.

15. The demand curve faced by a **single-price monopolist**:

A. is less elastic than that faced by a single purely competitive firm.
B. is more elastic than that faced by a single purely competitive firm.
C. has the same elasticity as that faced by a single purely competitive firm.
D. may be either more or less elastic than that faced by a single purely competitive firm, depending on the shape of its marginal cost curves.

16. (I) When **natural monopoly** is present, splitting the single large firm in an industry into many smaller competitors will probably cause prices to fall and output to increase.
(II) Compared to firms in a competitive setting, a monopolist will restrict current output so that a higher price can be charged for his product.

A. I is true, II is false.
B. I is false, II is true.
C. Both are true.
D. Both are false.

17. A **single price monopoly** is producing an output level of 50 units where MC =$7 and MR=$10. At this output, ATC=$10, AVC=$7, and consumers' reservation price (the corresponding price for 50 units) is $12. The firm should:

A. increase output and lower price.
B. decrease output and lower price.
C. increase output and increase price.
D. decrease output and increase price.

18. Assume the average total cost of producing 10 units of some good is $25 and the average variable cost of producing 9 units is $20. If the marginal cost of producing the 10^{th} unit is $20, how much are fixed costs?

A. $70.
B. $50
C. $20
D, $5

SHORT ANSWER
(3 points)
19. Why does the short run marginal cost curve slope upward?

(3 points)
20. What is the difference between the short run and the long run?

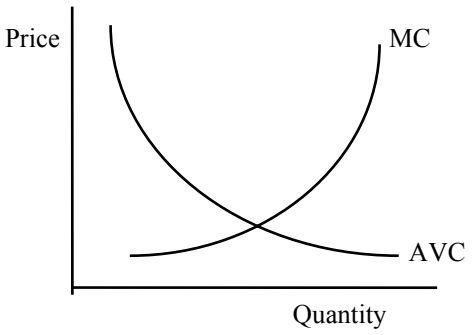
(3 points)

21. Explain the process that drives long-run economic profits to zero for a perfectly competitive firm.

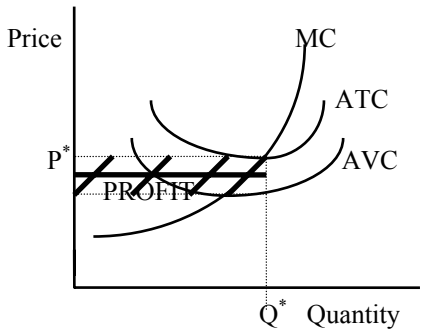
(3 points each – 12 points total)

22. What is wrong with each of the following **Perfectly Competitive graphs** (state the problem <u>at the bottom in the space provided</u>)?

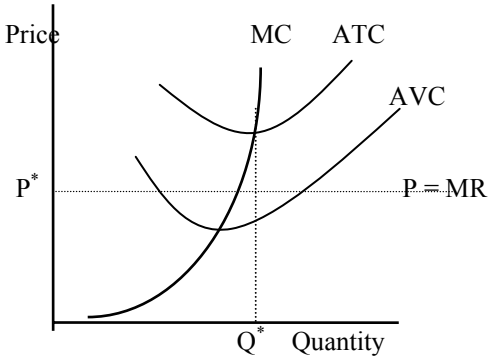
a.



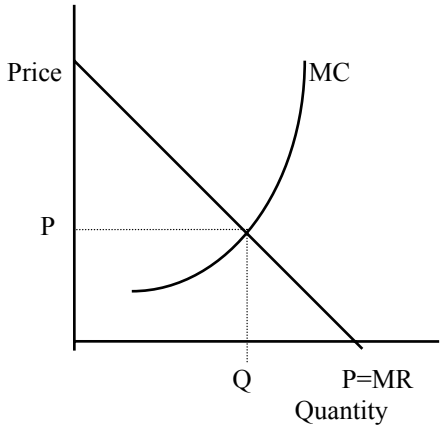
b.



c.



d.



a.

b.

c.

d.

<u>Longer Problems</u> (point value will be noted before each question)
Use the back of the page if you need more room. Be complete, but as brief as possible.

(15 points)

23. **(2 points)** Diagram a typical perfectly competitive firm and industry (on side-by-side graphs) in long-run equilibrium. Designate output and price in the industry as Q_1 and P_1 and output and price for the firm as q_1 and p_1

a. **(2 points)** Now indicate what happens if the price of a complement decreases.

b. **(2 points)** Indicate the new short run equilibrium in the market and for the firm as Q_2, P_2, and q_2 and p_2.

c. **(3 points)** Show the long run effect of the decrease in the price of a complement under the assumption of ***increasing costs.*** Label the long run equilibrium for the industry and the firm Q_3, P_3 and q_3 and p_3.

d. **(4 points)** Find the supply curve in the long run for the industry. Now describe if the supply curve is more or less elastic in the long-run than in the short-run.

e. **(2 points)** Explain *using your intuition* why an industry might have increasing costs.

(10 points)

24. Diagram a **single-price monopolist**. Label axis.

a) Choose the profit maximizing output and price(s) and explain why it is the profit maximizing output

b) Designate the welfare loss (Dead weight loss) or inefficiency of the monopolist (shade or letter with ABC). Explain why the monopolist is not efficient.

c) Designate the monopolist's profits (shade or letter with DEFG).