McMaster University
Department of Economics

ECON 1B03 04 and E01 VERSION 1
Midterm Test #3
Tuesday November 21, 2006

Instructor: H Holmes
Duration: 45 minutes
Total Number of Pages: 8

INSTRUCTIONS:

Answer all questions on the scan sheets. USE AN HB PENCIL ONLY. Make sure you carefully fill in the bubbles. YOU MUST FILL IN YOUR STUDENT NUMBER AND THE TEST VERSION NUMBER ON THE SCAN SHEET OR YOUR GRADE WILL NOT BE RECORDED.

You may use a non-programmable calculator.

Hand in both the scan sheet and this test copy.

TOTAL MARKS AVAILABLE: 27

NAME:_____

STUDENT #: _____

1. Both Kate and Kyle own furniture factories that produce rocking chairs. In her factory Kate uses a production process that has very low fixed costs and very high variable costs. In his factory Kyle uses a production process that has very high fixed costs and very low variable costs. Currently, each factory is producing 100 rocking chairs at the same total cost. Which of the following statements is correct? If each produces
   a. less, their costs will be equal.
   b. more, their costs will be equal.
   c. more, the costs of Kate's factory will exceed those of Kyle's factory.
   d. less, the costs of Kate's factory will exceed those of Kyle's factory.

2. If the marginal cost curve is below the average variable cost curve, then
   a. average variable costs are increasing.
   b. average variable costs are decreasing.
   c. marginal cost must be decreasing.
   d. average variable costs could either be increasing or decreasing.

3. In perfect competition, the marginal revenue curve
   a. and the demand curve facing the firm are identical.
   b. is always above the demand curve facing the firm.
   c. is always below the demand curve facing the firm.
   d. intersects the demand curve when marginal revenue is minimized.

4. If marginal revenue is greater than marginal cost, the profit-maximizing firm should
   a. increase output.
   b. do nothing since it is already maximizing profits.
   c. decrease output.
   d. exit the industry.

5. **Refer to Figure 1 on the following page.** This farmer's profit-maximizing level of output is _____ tonnes of output.
   a. 200
   b. 700
   c. 1 000
   d. 1 400

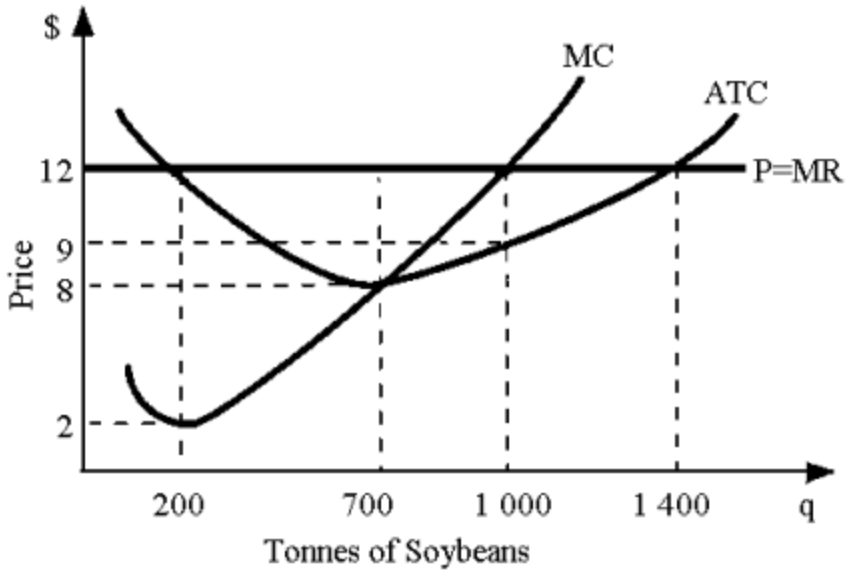


FIGURE !

6. **Refer to Figure 1.** If this farmer is producing the profit maximizing level of output her profit is
   a. $0.
   b. $2 800.
   c. $3 000.
   d. $12 000.

7. **Refer to Figure 1.** If the market price of soybeans falls to $8, then to maximize profits this farmer should produce
   a. 200 tonnes of soybeans.
   b. 700 tonnes of soybeans.
   c. 1 000 tonnes of soybeans.
   d. a level of output that is indeterminate from this information.

Number of Fruit Baskets	**TFC**	**TVC**	**TC**	**MC**
0	$50	$0	$50	--
1	50	10	60	10
2	50	15	65	5
3	50	21	71	6
4	50	31	81	10
5	50	46	96	15
6	50	68	118	22

Figure 2
Cost Schedule for Exotic Fruit

8. **Refer to Figure 2 on the previous page.** Assume that fruit baskets are sold in a perfectly competitive market. The market price of a fruit basket is $10. To maximize profits, Exotic Fruit should sell ____ fruit basket(s).
   a. zero
   b. one
   c. four
   d. either one or four

9. A firm stands to gain by operating rather than by shutting down as long as
   a. price is sufficient to cover AFC.
   b. AFC is greater than AVC.
   c. price is sufficient to cover AVC.
   d. AVC is greater than MC.

10. An increase in the number of firms will cause which of the following?
   a. No change in the industry supply curve and an outward shift in the firm's supply curve.
   b. The industry supply curve will shift to the right and the firm's supply curve will be unchanged.
   c. Both the industry supply curve and the firm's supply curve will shift to the right.
   d. Neither the industry supply curve nor the firm's supply curve will shift.

11. The owner of Tie-Dyed T-shirts, a perfectly competitive firm, has hired you to give him some economic advice. He has told you that the market price for his shirts is $20 and that he is currently producing 200 shirts at an AVC of $15 and an ATC of $25. What would you recommend to him?
   a. To continue producing in the short run, since his loss from production is less than his fixed costs, but to exit the industry in the long run, if there are no changes in economic conditions.
   b. To shut down in the short run since he is incurring a loss and to leave the industry in the long run, if there are no changes in economic conditions.
   c. To continue to produce in the short run even though he is earning a loss and to expand in the future with the hope of increasing market share and total revenue.
   d. You tell him you cannot make any recommendations until you know what his fixed costs are.

12. When an increase in the scale of production leads to higher average costs, the industry is characterized by
   a. excess capacity.
   b. increasing returns to scale.
   c. diseconomies of scale.
   d. constant returns to scale.

13. Which of the following is the set of conditions necessary for long-run equilibrium for a perfectly competitive firm?
   a. P = SRMC < SRAC = LRAC

b. P > SRMC = SRAC = LRAC
c. P = SRMC = SRAC > LRAC
d. P = SRMC = SRAC = LRAC

14. Edmonton Telephone has a monopoly over local telephone service. If Edmonton Telephone is producing where marginal revenue is less than marginal cost,
a. the firm could increase profits by reducing output.
b. the firm could increase profits by increasing output.
c. the firm is maximizing profits.
d. the firm must be earning a zero profit.

15. A monopolist's supply curve is
a. the marginal cost curve above minimum average variable cost.
b. the marginal cost curve above minimum average total cost.
c. the marginal revenue curve below the marginal cost curve.
d. nonexistent.

16. **Refer to Figure 3.** The profit maximizing level of output for this monopolist is ____ units of output.
a. 20
b. 22
c. 24
d. 26

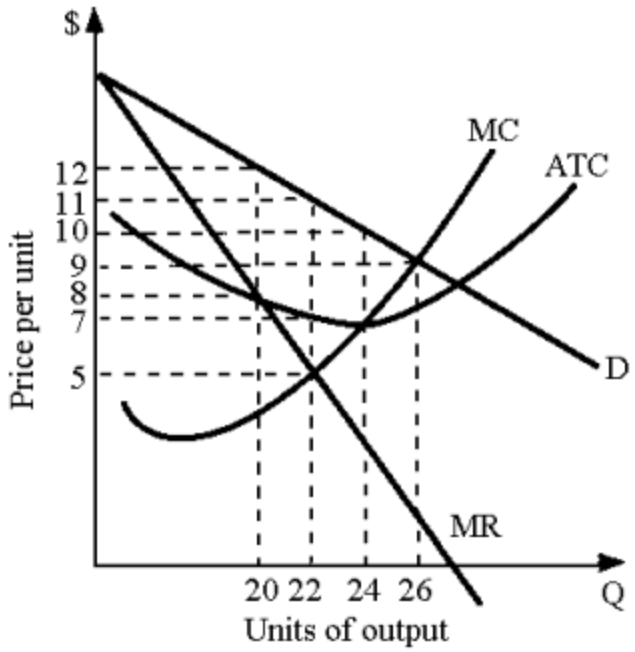
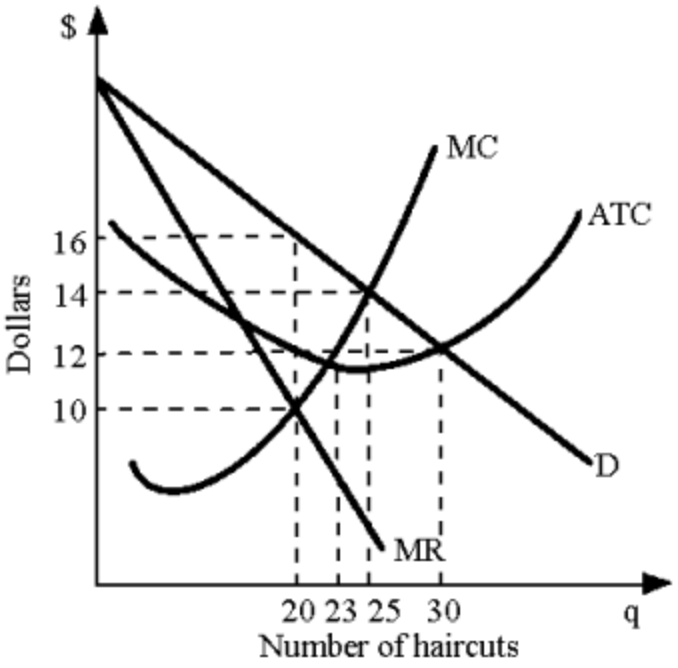


FIGURE 3

17. **Refer to Figure 3.** The profit-maximizing price for this firm is
    a. $5.
    b. $7.
    c. $9.
    d. $11.

18. **Refer to Figure 3.** If this firm is producing the profit-maximizing quantity and selling it at the profit-maximizing price, the firm's profit will be:
    a. $80.
    b. $84.
    c. $88.
    d. $132.

19. **Refer to Figure 4.** From society's point of view, the efficient level of output is
    a. 20 haircuts.
    b. 23 haircuts.
    c. 25 haircuts.
    d. 30 haircuts.



20. The deadweight loss due to monopoly is approximately
    a. $20
    b. $40
    c. $30
    d. $15.

21. **Refer to Figure 5.** If Fredric's T-shirts is in long-run equilibrium it is producing _____ silk-screened T-shirts, selling each T-shirt at a price of _____ and producing _____
    a. 20; $5; at minimum MC
    b. 50; $10; at excess capacity
    c. 50; $16; at excess capacity
    d. 60; $15; at efficient quantity.

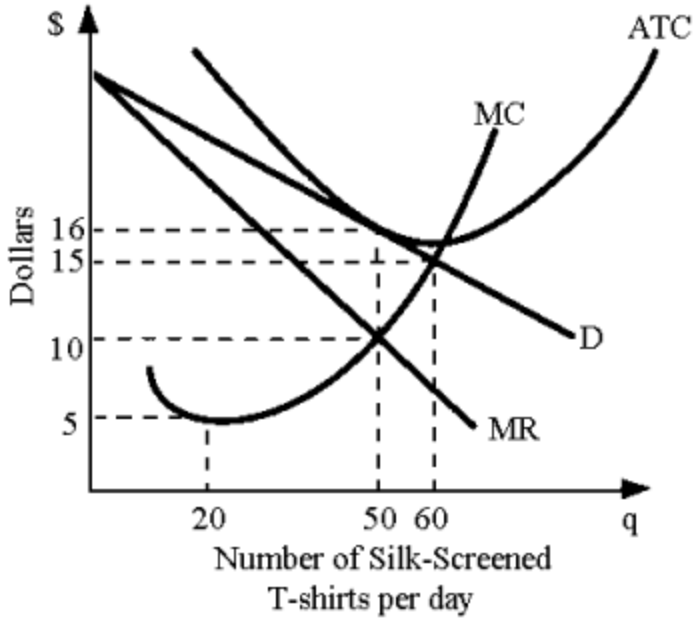


FIGURE 5

The following 6 questions – 22 through 27 - are based on the following information:

Market demand: P = 100 – Q
Marginal revenue: MR = 100 – 2Q
Marginal cost: MC = 10 + Q
Average total cost: ATC = 20

22. A monopoly will produce ___ units of output at a price equal to ___
    a. 80; $20
    b. 30; $70
    c. 45; $55
    d. insufficient information to calculate.

23. The monopolist's profit is
    a. $2100
    b. $1575
    c. $1500
    d. insufficient information to calculate.

24. Producer surplus for the monopolist is
    a. $1350
    b. $225
    c. $900
    d. insufficient information to calculate.

25. If the market was a perfectly competitive market, the quantity traded would be ___ and the selling price would be ___
    a. 45; $55
    b. 30; $70
    c. 80; $20
    d. insufficient information to calculate.

26. If the market was a perfectly competitive market and each identical firm produces 5 units of output, there are ___ firms in the industry and each firm makes profit equal to ___
    a. 16; 0
    b. 9; $175
    c. 16; $320
    d. insufficient information to calculate.

27. A monopolistically competitive market would be in long run equilibrium if price equals
    a. $40
    b. $20
    c. $70
    d. $55.

28. Who won the football game Professor Holmes went to see?
    a. Green Bay Packers
    b. Buffalo Bills.

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1. c
2. b
3. a
4. a
5. c
6. c
7. b
8. c
9. c
10. b
11. a
12. c
13. d
14. a
15. d
16. b
17. d
18. c
19. c
20. d
21. c
22. b
23. c
24. a
25. a
26. b

27. b
28. ?