Economics 101
Spring 2008
Professor Wallace

Economics 101 Midterm Exam #2

April 9, 2008

Instructions

Do not open the exam until you are instructed to begin. You will need a #2 lead pencil. If you do not have one you will need to borrow one from Professor Wallace or one of the TAs. Before you may began the exam everyone must take the following steps.
   (1) Use the #2 lead pencil to fill in your name on the answer sheet.
   (2) Fill in your student number on the answer sheet.
   (3) Fill in your TA Code in column A of the space allotted for "Special Codes" on the answer sheet.
         a. If your TA is Megan Ritz your TA Code is 1
         b. If your TA is Hugette Sun your TA Code is 2.
         c. If your TA is Hanquing Wang your TA Code is 3.
         d. If your TA is Rui Wang your TA code is 4.
   (4) Fill in your Exam Code in column B of the space allotted for "Special Codes" on the answer sheet
         a. If your exam is green then your Exam Code is 1.
         b. If your exam is white then your Exam Code is 2.

The exam consists of 40 multiple-choice questions. All questions are equally weighted and there is a single best answer for each question. The exam is scheduled to end at 5:15 pm. You are encouraged to hold onto the hard copy of your exam so that you can check your answers. An answer key for this exam will be made available sometime later this evening, but the tests will not be handed back until next week. In keeping with the previously state policy, we will not except early email request for exam scores.

1. Economists typically assume that the owners of firms wish to
    a. produce efficiently.
    b. maximize sales revenues.
    c. maximize profits.
    d. All of the above.

2. Efficient production occurs if a firm
    a. cannot produce its current level of output with fewer inputs.
    b. given the quantity of inputs, cannot produce more output.
    c. maximizes profit.
    d. All of the above.
    e.

3. Which of the following statements best describes a production function?
    a. the maximum profit generated from given levels of inputs
    b. the maximum level of output generated from given levels of inputs
    c. all levels of output that can be generated from given levels of inputs
    d. all levels of inputs that could produce a given level of output

4. With respect to production, the short run is best defined as a time period
    a. lasting about six months.
    b. lasting about two years.
    c. in which all inputs are fixed.
    d. in which at least one input is fixed.

5. In the long run, all factors of production are
    a. variable.
    b. fixed.
    c. materials.
    d. rented.

6. Total Physical Product is
    a. the change in total product resulting from an extra unit of labor, holding other factors constant.
    b. the ratio of output to the number of workers used to produce that output.
    c. the amount of output that can be produced by a given amount of labor.
    d. equal to the marginal product of labor when the average product is increasing.

7. The Marginal Physical Product of Labor is
    a. the change in total product resulting from an extra unit of labor, holding other factors constant.
    b. the ratio of output to the number of workers used to produce that output.
    c. the amount of output that can be produced by a given amount of labor.
   d. equal to the marginal product of labor when the average product is increasing.

8. Which of the following statements best summarizes the law of diminishing marginal returns?
    a. In the short run, as more labor is hired, output diminishes.
    b. In the short run, as more labor is hired, output increases at a diminishing rate.
    c. In the short run, the amount of labor a firm will hire diminishes as output increases.
    d. As more labor is hired, the length of time that defines the short run diminishes.

9. An isoquant represents levels of capital and labor that
    a. have constant marginal productivity.
    b. yield the same level of output.
    c. incur the same total cost.
    d. All of the above.

10. Say that when a firm doubles all of its inputs, it triples the amount of output it produces. Then this firm
    a. is experiencing increasing returns to scale.
    b. is experiencing diminishing returns to scale.
    c. is experiencing constant returns to scale.
    d. is experiencing diseconomies of scale.

11. Sarah earns $40,000 per year working for a large corporation. She is thinking of quitting this job to work full time in her own business. She will invest her savings of $50,000 (which currently has an annual 10% rate of return) into the business. Her annual opportunity cost of this new business is
    a. $0.
    b. $40,000.
    c. $45,000.
    d. $90,000.

12. A firm's marginal cost can always be thought of as the change in total cost if
    a. the firm produces one more unit of output.
    b. the firm buys one more unit of capital.
    c. the firm's average cost increases by $1.
    d. the firm moves to the next highest isoquant.

13. Fixed costs are
    a. a production expense that does not vary with output.
    b. a production expense that changes with the quantity of output produced.
    c. equal to total cost divided by the units of output produced.
    d. the amount by which a firm's cost changes if the firm produces one more unit of output.

14. Variable costs area production expense
    a. that does not vary with output.
    b. a production expense that changes with the quantity of output produced.
    c. equal to total cost divided by the units of output produced.
    d. the amount by which a firm's cost changes if the firm produces one more unit of output.

15. Which of the following statements best explains why long-run average cost is never greater than short-run average cost?
    a. In the long run, tangency of the isocost and isoquant is attainable. This is not necessarily true in the short run.
    b. In the long run, diseconomies of scale might not occur, but in the short run diminishing marginal returns do.
    c. In the long run, the cost of capital declines because the firm is able to pay down some of its debts.
    d. In the long run, the average cost curve need not be U-shaped, but in the short run it is.

16. A special license is required to operate a taxi in many cities. The number of licenses is restricted. More drivers want licenses than are issued. This describes a non-perfectly competitive market because
    a. taxi services are very different.
    b. firms cannot freely enter and exit the market.
    c. transaction costs are high.
    d. the government generates revenue from the licenses.

17. If a firm makes zero economic profit, then the firm
    a. has total revenues greater than its economic costs.
    b. must shut down.
    c. can be earning positive accounting profits.
    d. must have no fixed costs.

18. If a competitive firm maximizes short-run profits by producing some quantity of output, which of the following must be true at that level of output?
    a. $p = MC$.
    b. $MR = MC$.
    c. $p \geq AVC$.
    d. All of the above.

19. A firm will shut down in the short run if
    a. total fixed costs are too high.
    b. total revenue from operating would not cover all costs.
    c. total revenue from operating would not cover variable costs.
    d. total revenue from operating would not cover fixed costs.

20. The perfectly competitive firm's supply curve is equal to
    a. its marginal cost curve.
    b. the portion of its marginal cost curve that lies above AC.
    c. the portion of its marginal cost curve that lies above AVC.
    d. the portion of its marginal cost curve that lies above AFC.

21. If a competitive firm is in short-run equilibrium, then
    a. profits equal zero.
    b. economic profits will be positive.
    c. economic profits will be negative.
    d. All of the above are possible in the short-run.

22. In the long run, profits will equal zero in a competitive market because of
    a. constant returns to scale.
    b. identical products being produced by all firms.
    c. the availability of information.
    d. free entry and exit.

23. For a monopoly, marginal revenue is less than price because
    a. the firm is a price taker.
    b. the firm must lower price if it wishes to sell more output.
    c. the firm can sell all of its output at any price.
    d. the demand for the firm's output is perfectly elastic.

24. If the inverse demand function for a monopoly's product is $p = 100 - 2Q$, then the firm's marginal revenue function is
    a. -2.
    b. 100 - 4Q.
    c. 200 - 4Q.
    d. 200 - 2Q.

25. If the inverse demand curve a monopoly faces is $p = 100 - 2Q$, and MC is constant at 16, profits are maximized when profit maximization is achieved when
    a. 21 units are produced.
    b. the price is equal to 21.
    c. The firm shuts down.
    d. Cannot be determined on the basis of the information given

26. If the inverse demand curve a monopoly faces is $p = 100 - 2Q$, and MC is constant at 16, then profit maximization is achieved when the monopoly sets price equal to
    a. 16.
    b. 21.
    c. 25.
    d. 58.

27. If the inverse demand curve a monopoly faces is p = 100 - 2Q, and MC is constant at 16, then maximum profit
    a. equals $336.
    b. equals $882.
    c. equals $1,218.
    d. cannot be determined solely from the information provided.

p

b

a

MC

c

e f

d

h

g

D

MR

Q
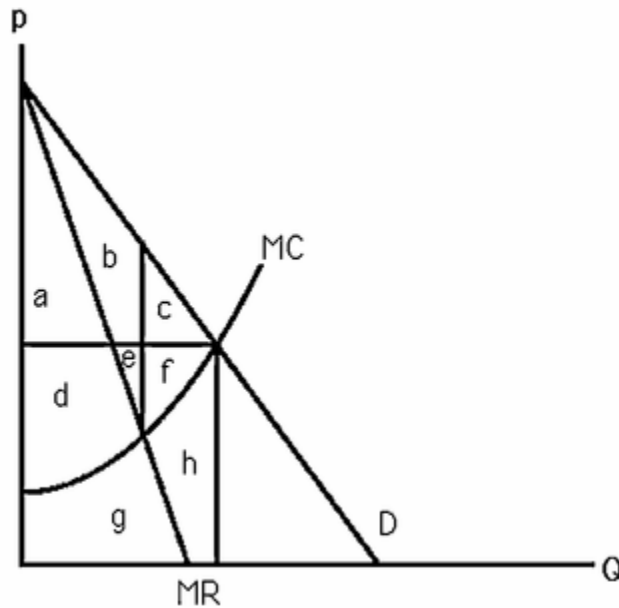
28. The above figure shows the demand and marginal cost curves for a monopoly. The deadweight loss of this monopoly equals
    a. h.
    b. c.
    c. c + f.
    d. c + d + e + f.

29. The situation in which one firm can produce the total output of the market at lower cost than several firms is called.
    a. natural monopoly.
    b. pure monopoly.
    c. ruling monopoly.
    d. cost monopoly.

30. Perfect competition and monopolistic competition are similar in that both market structures include
    a. price-taking behavior by firms.
    b. a homogeneous product.
    c. no barriers to entry.
    d. very few firms.

31. Perfect competition and monopolistic competition are similar in that firms in both types of market structure will
    a. act as price takers.
    b. produce a level of output where price equals marginal cost.
    c. earn zero profit in the long run.
    d. act as price setters.

32. Oligopoly differs from monopolistic competition in that an oligopoly includes
    a. product differentiation.
    b. barriers to entry.
    c. no barriers to entry.
    d. downward-sloping demand curves facing the firm.

33. Monopolistic competition and monopoly have all of the following in common **EXCEPT**
    a. $P > MC$.
    b. Firms are price setters.
    c. Barriers to entry.
    d. $MR = MC$.

34. Regardless of market structure, all firms
    a. consider the actions of rivals.
    b. maximize profit by setting marginal revenue equal to marginal cost.
    c. produce a differentiated product.
    d. have the ability to set price.

35. Collusion is more likely to occur when
    a. there is fear of punishment for not colluding.
    b. there is a known finite time horizon.
    c. there are large gains to be made by cheating on an agreement.
    d. the game lasts only one period.

36. If a cartel is unable to monitor its members and punish those firms that violate the agreement, then
    a. the member firms will each act as price setters.
    b. the cartel will prosper in the long run.
    c. the market will become a monopoly.
    d. the cartel will fail.

37. Mister Jones was selling his house. The asking price was $220,000, and Jones decided he would take no less than $200,000. After some negotiation, Mister Smith purchased the house for $205,000. Jones' producer surplus is
    a. $5,000.
    b. $15,000.
    c. $20,000.
    d. not able to be calculated from the information given.

38. Deadweight loss occurs when
    a. producer surplus is greater than consumer surplus.
    b. the maximum level of total welfare is not achieved.
    c. consumer surplus is reduced.
    d. an inferior good is consumed.

		Player 2	
		L	R
Player 1	U	20,30	100,20
	D	10,100	99,99

39. The equilibria of the game above are
    a. (U,L) and (D,R).
    b. (D,R) only.
    c. (U,L) only.
    d. (D,L) only.

40. In the same game matrix, which of the following are true?
    e. Player 1 has a dominant strategy.
    f. Player 2 has a dominant strategy.
    g. Player 1's best response to L is U.
    h. All of the above.