AGEC 105
Test #2
Fall 2013 - Capps

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Key

Please put the following pieces of information on your scantron:

(a) Name
(b) UIN #
(c) Sign the Aggie pledge on the back of your scantron.

"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this exam."

1. Which of the following statement(s) is (are) false?
   (a) Stage 3 of production corresponds to MPP < 0.
   (b) AFC + AVC = ATC
   (c) MPP = APP where APP = minimum
   (d) None of the above.

2. According to this diagram, the income elasticity of demand for salmon is:

   ![Graph showing income elasticity of demand for salmon](image)

   (a) less than 0.5
   (b) equal to 0.5
   (c) greater than 0.5
   (d) can't say; insufficient information.

3. Assume that a retailer sells 500 units of Yoplait Yogurt per day at a price of $0.40/unit. You, as an economic analyst, estimate that the cross-price elasticity between Yoplait Yogurt and Dannon Yogurt is 0.8. If the retailer raises the price of Dannon Yogurt from $0.50/unit to $0.60/unit, how would sales of Yoplait Yogurt be affected?

   (a) Sales of Yoplait Yogurt would not be affected at all.
   (b) Sales of Yoplait Yogurt would rise by 40 units.
   (c) Sales of Yoplait Yogurt would rise by 80 units.
   (d) none of the above

4. Suppose that a successful advertising and promotion campaign occurs for apples. Given this successful campaign, it is likely that:

   (a) the quantity of apples sold will fall and the price of apples will rise.
   (b) the quantity of apples sold will rise and the price of apples will rise.
   (c) the quantity of apples sold will fall and the price of apples will fall.
   (d) the quantity of apples sold will rise and the price of apples will fall.
Consider the following table pertaining to corn production on a particular farm in Iowa. Assume conditions of perfect competition. Use this table to answer questions 5 through 7.

<table>
<thead>
<tr>
<th>Labor (Hours)</th>
<th>Corn Production (Bushels)</th>
<th>MPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>80</td>
<td>XXX</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

5. When 15 hours of labor are used, corn production is equal to:
   (a) 80 bushels  
   (b) 95 bushels  
   (c) 110 bushels  
   (d) can't say; insufficient information.

6. To what stage of production can we say this situation corresponds?
   (a) Stage 1  
   (b) Stage 2  
   (c) Stage 3  
   (d) can't say; insufficient information.

7. Assume that the price of corn is $5/bushel. What is the change in total revenue received by this corn producer from Iowa when using one more hour of labor?
   (a) $5  
   (b) the minimum wage  
   (c) $15  
   (d) can't say; insufficient information.

8. Which of the following statement(s) is (are) true?
   (a) If the cross-price elasticity of demand between two goods is negative, then the two goods are complements.  
   (b) If the income elasticity of demand for a product is greater than 1, then the good is labeled a necessity.  
   (c) If the income elasticity of demand for a product is negative, then the good is labeled an inferior good.  
   (d) (a) and (c).

9. Which market structure best characterizes the following: there exists product differentiation, there are many sellers, and there are no barriers to entry?
   (a) oligopoly  
   (b) monopolistic competition  
   (c) perfect competition  
   (d) monopoly

10. Which of the following combinations of goods is in line with a cross-price elasticity equal to -0.3?
    (a) Kentucky fried chicken and Scope mouthwash.  
    (b) Pancakes and maple syrup.  
    (c) Pepsi and Dr. Pepper.  
    (d) none of the above
11. The use of more environmental restrictions on dairy production, while desirable, undoubtedly will raise the marginal costs of production. What are the likely consequences of these environmental practices, ceteris paribus?

(a) Prices of dairy outputs will rise and quantities produced will fall.
(b) Prices of dairy outputs will rise and quantities produced will rise.
(c) Prices of dairy outputs will fall and quantities produced will rise.
(d) Prices of dairy outputs will fall and quantities produced will fall.

Assume the following table corresponds to the production of avocados (thousands of pounds) using fertilizer (tons) as the variable input. Use this table to answer questions 12 through 16.

<table>
<thead>
<tr>
<th>Fertilizer (tons)</th>
<th>Output of Avocados</th>
<th>TFC ($)</th>
<th>TVC ($)</th>
<th>TC ($)</th>
<th>MC ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>10</td>
<td>100</td>
<td>200</td>
<td>x</td>
<td>—</td>
</tr>
<tr>
<td>t</td>
<td>16</td>
<td>w</td>
<td>z</td>
<td>y</td>
<td>30</td>
</tr>
</tbody>
</table>

12. What is the value of \( w \)?

(a) $100
(b) $200
(c) $300
(d) can’t tell; insufficient information

13. What is the value of \( x \)?

(a) $100
(b) $300
(c) $1,000
(d) $2,000

14. What is the value of \( y \)?

(a) $300
(b) $480
(c) $1,000
(d) can’t say; insufficient information

15. What is the value of \( z \)?

(a) $100
(b) $200
(c) $380
(d) $480

16. What is the value of \( t \)?

(a) 4 tons
(b) 7.6 tons
(c) 10 tons
(d) 16 tons
Use the following graphs to answer questions 17 through 18.

17. Which of the graphs describes the economic effects of a drought in the Midwest on corn producers?

18. Which of the graphs is consistent with the economic impacts of a food recall or food safety scare (e.g. salmonella in contaminated poultry or E.coli in contaminated beef)?

19. Which of the following statements is false?
   (a) The level of debt in the United States currently is nearly $17 trillion.
   (b) Capital access and cost of capital are common barriers to entry.
   (c) The economic analysis of imperfect competition was originated by Edward Chamberlain and Joan Robinson.
   (d) If at a given market price, the quantity demanded by consumers exceeds the quantity supplied by producers, then a market surplus occurs.

20. According to this diagram, Monterey Jack cheese is what kind of good?

   (a) Luxury
   (b) Necessity
   (c) Inferior
   (d) Can't tell, insufficient information.
Given the following diagram and given the assumption of perfect competition, answer questions 21 to 25.

21. This firm will not produce unless the price is at or above:
   (a) $16
   (b) $20
   (c) $30
   (d) None of the above

22. The "break-even" point for this firm is at a quantity of:
   (a) 8,000 units
   (b) 10,000 units
   (c) 12,000 units
   (d) 15,000 units

23. What is the maximum profit possible for the firm to achieve if the price received per unit is $40?
   (a) $72,000
   (b) $480,000
   (c) $600,000
   (d) None of the above

24. If the firm produces 12,000 units, then the total fixed costs would be:
   (a) $108,000
   (b) $300,000
   (c) $408,000
   (d) can't tell, insufficient information.

25. The firm will incur a loss if:
   (a) the price per unit of output sold is $34.
   (b) the price per unit of output sold is $30.
   (c) the price per unit of output sold is $25.
   (d) can't tell: insufficient information.
26. Which of the following statements is (are) true?
(a) In perfect competition, farmers can set the price in their negotiations with buyers.
(b) The fact that oligopolists match all price decreases of competitors but not necessarily price increases leads to a kinked market demand curve.
(c) If a firm wishes to maximize profit, then the firm should operate in stage 2 of production.
(d) (b) and (c).

The following graph depicts a rightward shift in the supply curve. Use this graph to answer questions 27 through 30. The letters A through H correspond to areas under or above the respective supply and demand curves.

27. Which of the following statement(s) is (are) true?
(a) This diagram could describe the impact of a bumper crop due to excellent weather conditions in a particular region of the United States.
(b) This diagram could describe the impact of an unexpected freeze on the citrus industry in Florida.
(c) This diagram could describe the economic effects of biotechnology, where the marginal costs of production fall by 5 percent.
(d) (a) and (c)

28. The change in consumer surplus is given by:
(a) $-B-C$
(b) $B-E$
(c) $B+C$
(d) can't tell; insufficient information.

29. The change in producer surplus is given by:
(a) $-B-C$
(b) $B-E$
(c) $E-B$
(d) can't tell; insufficient information

30. The net effect on society is given by:
(a) $-B-C$
(b) $C+E$
(c) $-C-E$
(d) $B-E$
31. Which of the following statement(s) is (are) true?
   (a) A firm in perfect competition should hire an additional worker if marginal value product is
       greater than or equal to the wage rate.
   (b) In the short run, a firm should shut down if it cannot cover minimum average variable costs of
       production.
   (c) Firms operating in a perfectly competitive market structure produce a homogenous product.
   (d) All of the above.

Use the graph below to answer questions 32 and 33.

32. The MPP of labor between points C and F is:
   (a) 12
   (b) 4
   (c) 3
   (d) can't tell; insufficient information

33. Which of the following statement(s) is (are) false?
   (a) The technical name of this relationship is the production function.
   (b) Labor is a variable input in the production of canned tomatoes.
   (c) Stage 3 of production never occurs.
   (d) none of the above

34. Which of the following statement(s) is (are) false?
   (a) Commodity surplus and commodity shortage are examples of market disequilibria.
   (b) The supply curve for a firm is its entire MC curve.
   (c) Product differentiation is the key difference between monopolistic competition and perfect
       competition.
   (d) None of the above.

35. Measures to lessen the possible adverse effects of imperfect competition are called:
   (a) capital cost barriers
   (b) countervailing actions
   (c) non-price completion
   (d) product differentiation
36. Given the following diagram, what is the own-price elasticity of supply between points A and B?

(a) 10
(b) 4/3
(c) 3/4
(d) 1/10

37. Given the graph below, which of the following statement(s) is (are) true?

(a) A shortage of 400 units exists when P=$3.
(b) The market clearing price is $2, and the market clearing quantity is 1,000.
(c) A surplus of 400 units exists when P = $3.
(d) (b) and (c)

38. Considering the diagram to the right, which of the following statement(s) is (are) false?

(a) total costs = $450
(b) producer surplus = $100
(c) total economic surplus = $150
(d) none of the above

39. In an oligopoly, which of the following is not true?

(a) firms will match all price decreases of another, but will not match price increases.
(b) there are few sellers.
(c) firms will attempt to differentiate their products.
(d) firms will match all price increases of another, but will not match price decreases.

40. The social costs of imperfect competition are known as:

(a) producer surplus.
(b) consumer surplus.
(c) dead-weight loss.
(d) none of the above
41. BAC-21 is a dangerous strain of bacteria extremely harmful to humans. An outbreak of this potentially deadly strain occurs in Florida, particularly affecting the shrimp industry. Given this information, it is likely that:
   (a) the price of shrimp would fall and the quantity of shrimp produced would fall.
   (b) the price of shrimp would fall but the quantity of shrimp produced would rise.
   (c) the price of shrimp would rise and the quantity of shrimp produced would rise.
   (d) the price of shrimp would rise but the quantity of shrimp produced would fall.

42. If MR were $15 per unit, and if MC = $13 per unit, then:
   (a) the firm should increase production.
   (b) the firm should decrease production.
   (c) profits are maximized.
   (d) can’t tell; insufficient information.

43. Suppose that a firm uses 6 units of available input at a price of $4/unit. Also, the firm uses 10 units of this input at a price of $7/unit. Then marginal input cost equals:
   (a) $11.50
   (b) $24
   (c) $70
   (d) can’t tell; insufficient information.

44. Which of the following own-price elasticities best characterize the supply curve for agricultural products at the farm level in the short run?
   (a) .1
   (b) .2
   (c) .7
   (d) 6

45. Which of the following statement(s) is (are) true?
   (a) If the MPP curve is above the APP curve, then the APP curve must be falling.
   (b) Producer surplus represents the profit or economic rent realized by firms in the market.
   (c) A commodity surplus or shortage will occur when the market is in equilibrium.
   (d) (a) and (b).

46. If the own-price elasticity of demand equals -0.2, then the price flexibility of demand is equal to:
   (a) -0.2
   (b) -0.4
   (c) -5
   (d) none of the above

47. Which of the following graphs depicts a market surplus?
   (a) [Diagram A]
   (b) [Diagram B]
   (c) [Diagram C]
   (d) none of the above
48. Which of the following industries best illustrates an example of a monopoly?
   (a) retail food industry  (c) a utility (electric) company
   (b) airline industry    (d) the automobile industry

49. Which of the following is (are) a condition(s) for imperfect competition?
   (a) few sellers  (c) barriers to enter and to exit
   (b) differentiated products (d) all of the above

50. Which of the following statement(s) is (are) true?
   (a) When 0 < MPP < APP, this situation corresponds to stage 2 of production.
   (b) APP can never be negative, but MPP can be negative.
   (c) Another term for the TPP curve is the production function.
   (d) all of the above

51. Which of the following statements is (are) true?
   (a) In imperfect competition, P=MR.
   (b) Agricultural input suppliers (e.g. John Deere) are examples of firms acting as oligopolists.
   (c) Monopolists will charge a higher price and produce more output than firms engaging in perfect competition.
   (d) None of the above

52. In a processing industry, four firms comprise roughly 75 percent of the market on the buying side of the market. This situation characterizes:
   (a) an oligopoly
   (b) an oligopsony
   (c) a monopoly
   (d) a monopsony

53. A market structure in which there are many buyers with the capacity of differentiating services (i.e. location to processing facilities; willingness to provide credit) is called:
   (a) oligopsony
   (b) monopsonistic competition
   (c) oligopoly
   (d) monopolistic competition

54. The legislative act which was the first to prohibit monopoly and other restrictive practices was the:
   (a) Clayton Act.
   (b) Packers and Stockyards.
   (c) Capper-Volstead Act.
   (d) Sherman Anti-Trust Act.

55. The Capper-Volstead Act:
   (a) reinforced anti-trust laws regarding livestock marketing.
   (b) was the principal legislation exempting cooperative from anti-trust laws.
   (c) plugged loopholes in the Sherman Anti-trust Act and created the Federal Trade Commission.
   (d) none of the above.
56. Which of the following does this graph illustrate?
   (a) monopoly in the short run
   (b) monopolistic competition in the short run
   (c) perfect competition
   (d) both (a) and (b)

57. What is the price charged and the output produced by the firm in order to maximize profits?
   (a) P = $2, Q = 3,000
   (b) P = $3, Q = 4,000
   (c) P = $4, Q = 3,000
   (d) P = $2.50, Q = 3,000

58. The maximum profit under imperfect competition is:
   (a) $1,500
   (b) $1,500
   (c) $4,500
   (d) $12,000

59. X is equal to:
   (a) 3,500
   (b) 3,600
   (c) 3,800
   (d) can’t tell; insufficient information.

60. Suppose the government imposes a price ceiling of $3. Now what is the price charged and the output produced?
   (a) P = $4, Q = 3,000
   (b) P = $3, Q = 4,000
   (c) P = $2, Q = 3,000
   (d) P = $3, Q = 3,000
61. If the government were to impose a lump-sum tax on a monopolist, what is likely to happen to the quantity produced of a commodity and the price charged relative to the situation where there is no lump-sum tax imposed?

(a) The price would fall, and the quantity would fall.
(b) The price would fall, and the quantity would rise.
(c) No change in price or quantity produced would occur, only a reduction in profit.
(d) No change in price, quantity produced, or profit would occur.

62. Which of the following statements is (are) true?

(a) Monopolists will charge a higher price and produce less output than firms engaging in perfect competition.
(b) Monopsonists will offer a lower price and buy more input than firms engaging in perfect competition.
(c) both (a) and (b)
(d) none of the above.

63. Which of the following combinations of goods is in line with a cross-price elasticity equal to 0?

(a) Kentucky fried chicken and Dove deodorant
(b) Pancakes and maple syrup
(c) Pepsi and Dr. Pepper
(d) none of the above.

64. The arrangement among producers and processors of agricultural commodities in which the chief goal is to improve income is called:

(a) collusion.
(b) a marketing order.
(c) non-price competition.
(d) a monopsony.

65. This legislative act was responsible for the creation of agricultural checkoff programs. Name the act.

(a) Clayton Act
(b) Capper-Volstead Act
(c) Agricultural Marketing Agreement Act
(d) none of the above

66. Coca-Cola may be interested in acquiring Cadbury Schweppes, a company which producers a ginger ale product. What is the name of the government agency, created in 1914 with the passage of the Clayton Act, charged with responsibility of investigating mergers and acquisitions?

(a) Federal Trade Commission
(b) Federal Reserve System
(c) Federal Competition Bureau
(d) Federal Bureau of Investigation

67. A situation designed to increase or maintain profits through price fixing and/or to restrict new firms in an industry is called:
(a) government regulations
(b) countervailing action
(c) collusion
(d) product differentiation

Use the graph below to answer questions 68 through 70.

68. What is the equilibrium quantity of input used and what is the price paid per unit under the condition of perfect competition?
   (a) \( Q_{\text{input}} = 1,600, P_{\text{input}} = 5 \)
   (b) \( Q_{\text{input}} = 1,600, P_{\text{input}} = 2.75 \)
   (c) \( Q_{\text{input}} = 2,000, P_{\text{input}} = 3.25 \)
   (d) none of the above

   C

69. What is the equilibrium quantity of input used and what is the price paid per unit under the condition of monopsony?
   (a) \( Q_{\text{input}} = 1,600, P_{\text{input}} = 5 \)
   (b) \( Q_{\text{input}} = 1,600, P_{\text{input}} = 2.75 \)
   (c) \( Q_{\text{input}} = 2,000, P_{\text{input}} = 3.25 \)
   (d) none of the above

   B

70. What is the magnitude of monopsonistic exploitation?
   (a) $2.25
   (b) $1.75
   (c) $0.50
   (d) none of the above

   C