AGEC 105
FINAL
(70 questions)
Fall 2012 - Capps

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(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. Frito Lay has three alternatives for manufacturing snack foods:
   (1) manufacture regular corn chips alone and obtain a profit of $25 million
   (2) manufacture barbecue corn chips alone and obtain a profit of $15 million
   (3) manufacture both regular and barbecue corn chips and obtain a profit of $30 million

   The opportunity cost of this firm is:
   a. $30 million
   b. $25 million
   c. $15 million
   d. $40 million

2. Assume that exports of wheat are 30% of total wheat sales; assume that the own-price elasticity of wheat in the domestic market is -0.3; assume that the own-price elasticity of wheat in the foreign market is -0.8. The own-price elasticity of total demand for wheat is:
   a. -0.3
   b. -0.45
   c. -0.55
   d. -0.8

3. Which of the following combination of goods most closely fits the definition of complementary goods?
   a. cereal and milk
   b. shrimp and pasta
   c. spaghetti and spaghetti sauce
   d. all of the above

4. Assume that the price of soybeans is $6.00/bushel. When we apply 100 hours of labor on our field of soybeans, the total yield is 80 bushels. When we apply 120 hours of labor, the total yield is 110 bushels. What is the marginal value product per hour of labor?
   a. $4/hour
   b. $9/hour
   c. $12/hour
   d. $18/hour

   
   \[
   M\text{VP} = \frac{30\text{bu}}{20\text{hr}} = 1.5 \text{ bu/hr}
   \]

   \[
   P_s = \frac{6\text{ bu}}{M\text{VP}} = \frac{6\text{ bu}}{1.5\text{ bu/hr}} = 4\text{$/hr}
   \]

5. Suppose that the own-price elasticity for bottled water in general is -0.7. Which of the following statements is (are) true?
   a. lower the price of bottled water in order to increase revenue in the short-run
   b. raise the price of bottled water in order to increase revenue in the short-run
   c. it is likely that the own-price of Dasani bottled water (manufactured by Coca-Cola) is larger than -0.7 (in absolute value)
   d. b. and c.
6. The diagram below illustrates which of the following:

- the short-run effects of a rise in the price of a substitute, *ceteris paribus*
- the short-run effects of a fall in income, *ceteris paribus*, assuming a normal good
- the short-run effects of the termination of the set-aside program in agriculture
- all of the above

7. Assume that a retailer sells 500 six-packs of Pepsi per day at a price of $4/sixpack. You, as an economic analyst, estimate that the cross-price elasticity between Pepsi and Coca-Cola is 0.8. Which of the following statements is (are) **true**?
- Pepsi and Coca-Cola are substitutes
- If the retailer raises the price of Coca-Cola to $4.20, sales of Coca-Cola will decline due to the Law of Demand.
- If the retailer raises the price of Coca-Cola to $4.20, sales of Pepsi will rise by 20 six-packs
- all of the above

8. Assume that the given marginal utility of Dasani is 180 and the price is $2. Also, assume that the marginal utility of Gatorade is 270 and the price is $3. This consumer:
- is in equilibrium
- should buy more Dasani
- should buy more Gatorade
- should buy more of both products

9. Assume the demand for Texas A&M baseball tickets is inelastic. If ticket prices for general admission increase from $8 to $10, then the
- number of tickets sold will decrease more than 25%
- number of tickets sold will decrease by less than 25%
- revenue from Texas A&M baseball will fall
- a. and c.
Questions 10-12 pertain to the following graph:

10. Which combination of wings and hamburgers yields the same level of satisfaction as 8 wings and 4 hamburgers?
   a. 8 wings and 1 hamburger
   b. 6 wings and 7 hamburgers
   c. 2 wings and 8 hamburgers
   d. 8 wings and 2 hamburgers

11. Which combination of wings and hamburgers yields the greatest level of satisfaction?
   a. 8 wings and 1 hamburger
   b. 6 wings and 7 hamburgers
   c. 2 wings and 8 hamburgers
   d. 8 wings and 2 hamburgers

12. Between points C and D, how many wings is this consumer willing to give up in order to get one more hamburger?
   a. 6
   b. 4
   c. 3/2
   d. 2/3

13. Consider the following graph.
    The counter-clockwise rotation of this diagram may be best explained as:
    a. the price of beef fell
    b. the price of pork fell
    c. total income for consumer rose
    d. can’t tell; insufficient information
Questions 14-16 pertain to the following graph.

14. Given the diagram above, the marginal physical product between 2 and 3 hours of labor is:
   a. 7
   b. 9
   c. 10
   d. can’t tell; insufficient information

15. Given the diagram above, if we are in the range of 6 to 7 hours of labor input, to what stage of production does this situation correspond?
   a. Stage 1
   b. Stage 2
   c. Stage 3
   d. can’t say; insufficient information

16. Given the diagram above, if we are in the range of 4 to 5 hours of labor input, to what stage of production does this situation correspond?
   a. Stage 1
   b. Stage 2
   c. Stage 3
   d. can’t say; insufficient information

17. Suppose that the CPI for 2009 was 1.25 and the base year of the CPI was 1990. Then:
   a. relative to 2009, prices for consumer goods were 25% higher in 1990
   b. relative to 1990, prices for consumer goods were 25% higher in 2009
   c. relative to 1990, prices for consumer goods were 1.25% higher in 2009
   d. none of the above
Questions 18 and 19 pertain to the following graph.

18. What is the maximum level of profits for this firm?
   a. $6,000
   b. $9,000
   c. $18,000
   d. can’t tell; insufficient information
   A

19. Which of the following statements is (are) true?
   a. The firm operates in perfect competition
   b. The firm corresponds to a monopolistic competitor
   c. The firm corresponds to a monopolist
   d. b. and c.
   D

20. Which of the following diagrams describes a shortage?
   a. P
   b. P
   c. P
   d. none of the above
   C

21. Which of the graphs in question 20 describes a lump-sum tax?
   a. A
   b. B
   c. C
   d. D
   A
22. Which of the following statements is **not** true?
   a. As disposable personal income rises, the level of consumer expenditures rises
   b. The MPC is the slope of the consumption function
   c. As disposable personal income rises, the level of savings falls
   d. If the MPC = 0.8, then MPS = 0.2

   **C**

23. Consider the following table:

<table>
<thead>
<tr>
<th>I</th>
<th>Q</th>
<th>TFC</th>
<th>TVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>1000</td>
<td>$200</td>
<td>$1000</td>
</tr>
</tbody>
</table>

   Which of the following is (are) **true**:
   a. average total cost = $1.20
   b. the price of the input is $10/unit
   c. If Q = 500, the TFC = $200
   d. all of the above

   **D**

24. According to the chart below, which bundle is **least** preferred?

   a. A
   b. B
   c. C
   d. D

<table>
<thead>
<tr>
<th>Bundle</th>
<th>Quantity of Peanuts</th>
<th>Quantity of Soft Drinks</th>
<th>Total Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>B</td>
<td>7</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
</tbody>
</table>

   **C**

25. Suppose that Argentina imports $500 million worth of goods and exports $700 million worth of goods. Then:
   a. Argentina is a net importer.
   b. Argentina is a net exporter.
   c. Argentina is incurring a deficit.
   d. Argentina is incurring a surplus.

   **B**

   Suppose you have access to the following information:

<table>
<thead>
<tr>
<th>Personal Income</th>
<th>DPI</th>
<th>Consumption Expenditures</th>
<th>Investment</th>
<th>Interest Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>$90,000</td>
<td>$80,000</td>
<td>$60,000</td>
<td>$8,000</td>
<td>8%</td>
</tr>
<tr>
<td>$120,000</td>
<td>$100,000</td>
<td>$75,000</td>
<td>$12,000</td>
<td>6%</td>
</tr>
</tbody>
</table>

26. Which of the following is **not** true?
   a. when personal income = $90,000, taxes equal $10,000
   b. the MPS = 0.25
   c. the MIS = -2,000
   d. When DPI = $100,000, then saving = $20,000

   **D**
For questions 27 and 28, assume that the demand curve for crawfish is given by the graph below:

27. The own-price elasticity for crawfish is:  
   a. unitary elastic  
   b. elastic  
   c. inelastic  
   d. can't tell; insufficient information

28. The movement from point A to point B:
   a. describes Engel's Law  
   b. describes a change in quantity demanded  
   c. describes a change in demand  
   d. describes the law of diminishing marginal returns

29. Brad Williams, a hobby farmer in Oklahoma, has assets of $45 million and liabilities of $30 million. His net worth then is:
   a. $-15 million  
   b. $15 million  
   c. $75 million  
   d. can't tell; insufficient information

30. Suppose that the full employment level of aggregate output for a particular economy is $9 trillion. Suppose that the equilibrium level of GDP is $11 trillion.  
   a. this economy is experiencing an inflationary gap of $2 trillion  
   b. this economy is experiencing a recessionary gap of $2 trillion  
   c. this economy is experiencing neither an inflationary gap nor a recessionary gap  
   d. can't say; insufficient information

31. Which of the following statements is (are) true?  
   a. The agricultural sector today accounts for roughly 18% to 20% of GDP.  
   b. The demand for farm products is elastic.  
   c. The agricultural sector is not sensitive to changes in interest rates.  
   d. None of the above.
Questions 32-35 pertain to the following graph.

BAC-21 is a dangerous strain of bacteria, which is extremely harmful to humans. An outbreak of this potentially deadly strain occurs in Louisiana, particularly affecting the shrimp industry. Graphically, we may depict the situation for the shrimp industry as:

32. Before this outbreak, producers were:
   a. getting a price of $8 and producing 12,000 pounds
   b. getting a price of $6 and producing 27,000 pounds
   c. getting a price of $8 and producing 36,000 pounds
   d. none of the above

33. After this outbreak, consumers were:
   a. paying a price of $8 and consuming 12,000 pounds
   b. paying a price of $6 and consuming 27,000 pounds
   c. paying a price of $8 and consuming 36,000 pounds
   d. none of the above

34. The change in producer surplus is equal to:
   a. a gain of $63,000
   b. a loss of $63,000
   c. zero
   d. can’t tell; insufficient information

35. The change in consumer surplus is equal to:
   a. a loss of $18,000
   b. a gain of $18,000
   c. zero
   d. can’t tell; insufficient information

36. The own-price elasticity of demand for corn at the farm level is -0.2. Suppose that due to excellent weather conditions, corn production rises by 10%. Corn prices are likely to:
   a. fall by 50%
   b. fall by 10%
   c. rise by 50%
   d. can’t tell; insufficient information
Questions 37 and 38 pertain to the following graph.

37. According to this diagram, the income elasticity of demand for Blue Bell ice cream is:
   a. 15/11
   b. 11/15
   c. -11/15
   d. -15/11

38. Blue Bell ice cream is what kind of good?
   a. inferior
   b. luxury
   c. necessity
   d. can't tell; insufficient information

Use the following graph, which depicts a rightward shift in the supply curve, to answer questions 39 and 40.

39. The change in total economic surplus is given by:
   a. E-B
   b. B+C
   c. E+C
   d. can't tell; insufficient information

40. Which of the following statements is true?
   a. this diagram could describe the impact of the expanded use of soymeal and soyoil products.
   b. this diagram could describe the impact of a drought on wheat in Kansas
   c. this diagram could describe the impact of an unexpected freeze on the citrus industry in Florida
   d. this diagram could describe the impact of biotechnology to improve cotton yields in Texas
Use the following graph and the assumption of perfect competition to answer questions 41-43.

41. This firm will not produce unless the price is at or above:
   a. $16
   b. $20
   c. $30
   d. none of the above

42. If the firm produces 10,000 units, then the maximum level of profit is:
   a. $0
   b. $220,000
   c. $300,000
   d. can't tell; insufficient information

43. 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

44. The cross-price elasticity between two goods is 0. Which of the following two goods best illustrates this cross-price elasticity?
   a. Pepsi and Dr. Pepper
   b. spaghetti sauce and spaghetti
   c. Head & Shoulders shampoo and Ritz crackers
   d. none of the above

45. Suppose that the cross-price elasticity for Good A with respect to Good B is 0.3. Then:
   a. Good A and Good B are complements.
   b. Good A and Good B are substitutes.
   c. Good A and Good B are independent.
   d. Good A and Good B are normal goods.
46. According to the diagram below, which of the following statements is (are) true?

\[ \text{P}_\text{LABOR} \]

\[ \text{MIC} \]

\[ \text{MVP} \]

\[ \text{Q}_\text{LABOR} \]

(hours)

a. a monopsonist would employ 4,000 hours of labor and pay a price of $8/hour
b. under perfect competition, 5,000 hours of labor would be employed and the wage rate would be $6.25/hour
c. a monopsonist would employ 4,000 hours of labor and pay a price of $5.50/hour
d. b. and c.

Questions 47-50 pertain to the following four graphs, labeled a. through d.

47. Which of the four graphs describes the impact of the Conservation Reserve Program (CRP) initially put together in 1985?

a. b. c. d.

48. Which of the four graphs describes the effect of a food safety scare such as the cases of salmonella in the poultry industry and gastroenteritis in the seafood industry?

a. b. c. d.

49. Which of the four graphs describes the effect of less environmental restrictions on dairy production?

a. b. c. d.

50. Which of the four graphs describes the impact of the continuation of the checkoff program under the provision of the United Soybean Board?

a. b. c. d.
Question 51 pertains to the following graph.

51. The cost to taxpayers under this program is:
   a. $2 million
   b. $2.5 million
   c. $3.2 million
   d. $6 million

Questions 52 to 54 pertain to the following table that gives the output produced (in bushels) and price of corn received ($/bushel) for Farmer Smith over the period 2007 to 2009. Assume that the only source of income for Farmer Smith is from the production of corn. Also assume that all production costs are zero.

<table>
<thead>
<tr>
<th></th>
<th>Output</th>
<th>Price</th>
<th>CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>6,000</td>
<td>$2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>2008</td>
<td>8,000</td>
<td>$2.60</td>
<td>1.10</td>
</tr>
<tr>
<td>2009</td>
<td>10,000</td>
<td>$2.50</td>
<td>1.40</td>
</tr>
</tbody>
</table>

52. The best year in terms of real income for Farmer Smith was:
   a. 2007
   b. 2008
   c. 2009
   d. can’t tell; insufficient information

53. Which of the following statements is (are) true for Farmer Smith?
   a. The base year for prices is 2007.
   b. In 2008, prices were higher by 10 percent relative to 2007.
   c. In 2009, prices were higher by 40 percent relative to 2007.
   d. all of the above

54. You are to compute output indices for 2007 and 2009 for Farmer Smith with the base year of 2008. Which of the following statements is (are) true?
   a. The output index for 2007 is 0.75.
   b. The output index for 2009 is 0.80.
   c. The output index for 2009 is 1.25.
   d. a. and c.
Questions 55 to 57 pertain to the following information for the country of Mongolia.

<table>
<thead>
<tr>
<th>Exports</th>
<th>$500 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Expenditures</td>
<td>$250 million</td>
</tr>
<tr>
<td>Consumption Expenditures</td>
<td>$900 million</td>
</tr>
<tr>
<td>Gross Private Domestic Investment</td>
<td>$200 million</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$50 million</td>
</tr>
<tr>
<td>Population</td>
<td>0.5 million</td>
</tr>
<tr>
<td>Imports</td>
<td>$300 million</td>
</tr>
<tr>
<td>Tax Revenues</td>
<td>$700 million</td>
</tr>
</tbody>
</table>

55. Nominal per capita GDP is equal to:
   a. $3,100 million.  
   b. $3,100. 
   c. $1,550 million. 
   d. can’t say; insufficient information. 

56. Nominal NNP is equal to:
   a. $1,550 million. 
   b. $1,500 million. 
   c. $1,600 million. 
   d. can’t say; insufficient information. 

57. Mongolia is experiencing:
   a. a balanced budget. 
   b. a surplus. 
   c. a deficit. 
   d. none of the above 

58. The branch of economics that focuses on activities associated with individual agents, such as consumers or producers, is called:
   a. normative economics 
   b. positive economics 
   c. microeconomics 
   d. macroeconomics 

59. Which market structure best characterizes the following: there exists product differentiation, and there are many sellers?
   a. Oligopoly 
   b. Monopolistic competition 
   c. Perfect competition 
   d. Monopoly
60. According to the following graph, if the price of chicken is $3 per pound and the price of pork is $2.50 per pound, at point A:

a. the consumer is in equilibrium.
b. the consumer will allocate $30 to the purchase of pork and chicken.
c. the MU per dollar spent on pork is equal to the MU per dollar spent on chicken.
d. all of the above.

61. Which of the following statements is (are) true about oligopoly?

a. There are few sellers.
b. There are few buyers.
c. There is product differentiation.
d. a. and c.

62. Considering the diagram to the right, which of the following statements is (are) true?

a. consumer surplus = $50
b. producer surplus = $25
c. total economic surplus = $75
d. all of the above

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

a. The social costs of monopolies are known as dead weight loss.
b. The FTC was established by the Agricultural Marketing Agreement Act of 1937.
c. U.S. farmers should support legislation to eliminate the Supplemental Nutritional Assistance Program (SNAP).
d. All of the above.

64. Economists in the Obama Administration are concerned about what ought to be the tax rate imposed on wealthy Americans. The branch of economics that deals with this issue is called:

a. normative economics
b. positive economics
c. microeconomics
d. macroeconomics

65. The following diagram illustrates what kind of relationship?

a. marginal cost curve
b. supply curve
c. Engel curve
d. can’t say; insufficient information.
66. Suppose that the own-price elasticity for Newman’s Own spaghetti sauce is -1.70. In order for the manufacturer of this spaghetti sauce to increase total revenue, at least in the short run, it would be advisable to:
   a. lower the price of Newman’s Own spaghetti sauce.
   b. raise the price of Newman’s Own spaghetti sauce.
   c. do nothing.
   d. can’t say; insufficient information.

67. Which of the following statements is (are) true?
   a. For the buying side of the market, the rule to follow in order to maximize profits is MR=MC.
   b. If the target price for a commodity is $4.17/bu, the loan rate is $2.94/bu, and the market price is $3.50/bu, then the deficiency payment is $0.67/bu.
   c. The Capper-Volstead Act of 1922 prohibits the formation of agricultural cooperatives.
   d. None of the above.

68. Which of the following statements is (are) true?
   a. Engel’s Law states that as income rises, we consume more food.
   b. The Law of Demand states that as the price of a commodity rises, the change in consumer surplus is negative.
   c. The Law of Diminishing Marginal Utility states that total utility declines as more of a good is consumed during a specific period of time.
   d. None of the above.

69. The shift in the budget line in the given graph below is due to:

   Quantity of Hamburger
   15
   10
   10
   15
   Quantity of Tacos

   a. an increase in the price of hamburgers.
   b. an increase in the price of tacos.
   c. a rise in income.
   d. a fall in income.

70. The following diagram illustrates what kind of relationship?
   a. a demand curve
   b. a budget line
   c. the planned investment function
   d. can’t say; insufficient information.