Introduction to Agricultural Economics
Agricultural Economics 105
Spring 2012
Second Hour Exam – Version 1

Name____________________________

There is only ONE correct answer per multiple choice question. Please put your answer on the attached sheet. DO NOT RIP THE ANSWER SHEET FROM THE TEST.

1. Which of the following is an example of a monopolistically competitive industry?
   a. Colleges and universities
   b. The local electricity producer
   c. Wheat farming
   d. The domestic automobile producing industry
   e. All of the above

2. Who invented modern-day blue jeans and why?
   a. Bernard Lichtenstien (Wrangler) as a pant suitable for rodeo use
   b. Bernard Lichtenstien (Wrangler) as work pants to endure the rough treatment of miners
   c. Levi Strauss and Jacob Davis as work pants fit to endure the rough treatment of miners
   d. Levi Strauss and Jacob Davis as pants suitable for rodeo use
   e. Levi Strauss as pants suitable for rodeo use

3. What is the main difference between perfect competition and monopolistic competition?
   a. Perfect competition has a large number of small firms while monopolistic competition does not.
   b. In perfect competition, firms produce identical goods, while in monopolistic competition, firms produce slightly different goods.
   c. Perfect competition has no barriers to entry, while monopolistic competition does.
   d. Perfect competition has barriers to entry while monopolistic competition does not.
   e. Perfect competition has a large number of large firms, while monopolistic competition has a small number of large firms.

4. In a perfectly competitive market, the type of decision a firm has to make is different in the short run than in the long run. Which of the following is an example of a perfectly competitive firm's short-run decision?
   a. What price to charge buyers for the product?
   b. Whether or not to enter or exit an industry.
   c. The profit-maximizing level of output.
   d. How much to spend on advertising and sales promotion?
   e. All of the above.
5. Recently in a small city, building contractors lobbied the city council to pass a law requiring all people working on residential dwellings be licensed by the city. Why would the contractors lobby for this requirement?

a. To reduce the cost of building dwellings  
b. There is no good explanation for this type of lobbying.  
c. To guarantee that work on dwellings is of high quality  
d. To create a legal barrier to entry  
e. Licensing ensures quality work, this is why you see license numbers on contractor’s trucks in the state of Texas

6. The optimal level of pollution is

a. zero as pollution is a negative externality which should be avoided  
b. near zero because humans will always pollute  
c. based on property rights being well define such that a market failure occurs  
d. higher for pollutants such as lead than it is for pollutants such as CO₂ because lead is a more harmful pollutant  
e. at the point where the marginal cost of damages equals the marginal cost of control

7. There are two movie theaters in Bryan/College Station (one in Bryan and one in College Station) that are competing for movie-goers. The prices set by the Bryan theater affect the College Station theater’s profits and vice versa. This is an example of

a. monopolistic competition  
b. oligopoly  
c. the prisoner’s dilemma  
d. b and c  
e. All of the above

8. Imperfect competition within the agriculture industry may exist

a. because in the long run all costs are variable.  
b. in the farm machinery and farm chemical industries.  
c. because farmers usually have control over the prices of their commodities.  
d. because there are many large equipment sellers within the industry.  
e. because society’s net benefits are maximized

9. Which of the following forms of market competition incur social costs?

a. Monopoly  
b. Perfect competition  
c. Monopolistic competition  
d. Oligopoly  
e. All except b
The figure below shows the level of two different outputs (W and Z) that a diversified firm should produce to maximize profits given its production possibility curve and the relative prices of W and Z (iso-revenue line). Line A represents the initial conditions. Questions 10 - 11 are based on this figure. All questions assume “other things equal.”

10. If the relative prices change such that the new iso-revenue line is given by B, the price of Z relative to W

   a. increased
   b. stayed the same
   c. decreased
   d. is uncertain
   e. depends on the price elasticity of demand

11. Using the new iso-revenue line B relative to the old line A, the firms profit-maximizing level of the production of W

   a. increases
   b. stays the same
   c. decreases
   d. is uncertain
   e. depends on the price elasticity of demand

12. Total water withdrawals in the U.S. between 1950 and 2000

   a. have increased throughout the period
   b. increased until 1980 and then are fairly constant
   c. have decreased since 1975 because of technological advances
   d. are increasing at the same rate as population
   e. are mostly because of public supply of water for municipalities
Refer to the following figure for questions 13 – 16.

13. Because of a limited number of apartments, the City of New York imposes rent control on some of the city’s apartments. This situation is illustrated in the above figure. Because of the price ceiling, we would predict

a. quantity supplied would exceed quantity demanded and a shortage would exist
b. quantity supplied would exceed quantity demanded and a surplus would exist
c. quantity demanded would exceed quantity supplied and a shortage would exist
d. quantity demanded would exceed quantity supplied and a surplus would exist
e. no change in quantity supplied or quantity demanded because this is not a binding price ceiling

14. If the government imposes a price ceiling as illustrated in the figure, we would predict a deadweight loss to society relative to perfect competition in the amount of

a. area d + e
b. area e + f
c. area i + f
d. area d + b
e. area c + f

15. Which area measures the loss in consumer surplus as a result of the imposition of the price ceiling relative to perfect competition?

a. area a
b. area b
c. area c
d. area d
e. area b + d
16. Which area measures the total surplus that exists after the imposition of the price ceiling?
   a. area a + c + h
   b. area b + c + e + f
   c. area a + b + c + e + f + g
   d. area a + b + c + d - g
   e. area a + b + c + d

17. Assume that firms in an oligopoly are currently by law unable to collude. Governor Perry changes the law such that the two firms can collude. If the two oligopolists trust each other and collude, the price charged by the two oligopolists will _______ and the total output produced will ________.
   a. decrease, decrease
   b. increase, decrease
   c. decrease, increase
   d. increase, increase
   e. indeterminate with the information given

18. Texas receives a large number of cargo ships each year from throughout the world. These ships must discharge ballast water when they unload. An unintended consequence of this economic activity has been the introduction of the nonnative species, the Chinese mitten crab. This is a (an)
   a. conflict caused by high returns to cargo shipping
   b. well defined property right because ships have the right to unload ballast
   c. public good
   d. pollution of the water by petroleum products
   e. externality

19. It does not matter who gets the rights we will reach society’s efficient point as long as rights are well defined and transactions costs are low is a statement of the
   a. Coase Theorem
   b. Pigovian Theorem
   c. First Law of Property Rights
   d. Public goods
   e. Externalities

20. The first piece of legislation prohibiting restrictive business practices was the
   a. Clayton Act of 1914
   b. Packers and Stockyards Act of 1921
   c. Capper-Volstead Act of 1922
   d. Sherman Act of 1890
   e. Pigovian – Coase Act of 1934
21. At the initial price of $22 / unit, the quantity supplied is 42 units. If the price decreases to $18, the quantity supplied decreases to 38 units. Calculate the own-price elasticity of supply for the above points.

   a. -2  
   b. 0.5  
   c. -0.5  
   d. 2  
   e. 1

22. 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 no lump-sum tax is imposed?

   a. No change in the price or quantity produced would occur, only a reduction in profits.  
   b. The price would fall and the quantity produced would rise.  
   c. The price would fall and the quantity produced would fall.  
   d. The price would increase and the quantity produced would fall.  
   e. The price would increase and the quantity produced would increase.

23. Forms of government intervention in market place take on many forms. One such form is a price floor. Which of the following is true about price floors?

   a. To be binding a price floor must be above the market equilibrium  
   b. To be binding a price floor must be below the market equilibrium  
   c. Price floors have not been used in the U.S. market place because of their unpopularity by consumers  
   d. Imposition of price floors leads to excess demand or a shortage in the market  
   e. Price floors are often used to correct market failures

24. The government levying taxes on polluters is a (an)

   a. examples of Coase’s theorem  
   b. internalization of negative externality  
   c. marginal abatement cost  
   d. examples of a free rider  
   e. public good

25. Suppose a firm sells 9 units at a price of $10 per unit and 12 units at a price of $9 per unit. Marginal revenue is equal to

   a. $2  
   b. $10  
   c. $8  
   d. $6  
   e. $3
Refer to the following figure for questions 26 – 28. This figure represents the amount of natural gas and labor necessary to produce fertilizer.

26. What is changing between the three isocost lines given in the figure?
   a. price of labor relative to natural gas
   b. price of natural gas relative to labor
   c. total costs
   d. level of output
   e. operates where marginal costs equals marginal revenue

27. Which isoquant is associated with the largest output level?
   a. A
   b. B
   c. C
   d. E
   e. F

28. Assuming the price of labor is $10 / unit and natural gas is $5 / unit and the firm has $30,000 to spend, what is the least cost combination of inputs that maximizes production?
   a. use all natural gas as this input is cheaper
   b. tangency between lines C and D
   c. tangency between lines B and E
   d. tangency between lines A and F
   e. need to know MR and MC curves
29. You are spending your entire budget available to purchase natural gas and labor. If the MPP of labor to the price of labor ratio is 3.5 and the MPP of natural gas to the price of natural gas is ratio is 4, what would you suggest to this producer?

a. use more labor with the same amount of natural gas  
b. use more natural gas with the same amount of labor  
c. use more labor and less natural gas  
d. use more natural gas and less labor  
e. use more of both natural gas and labor

30. If the government were to impose a per unit 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 no tax is imposed?

a. No change in the price or quantity produced would occur, only a reduction in profits  
b. The price would fall and the quantity produced would rise  
c. The price would fall and the quantity produced would fall  
d. The price would increase and the quantity produced would fall  
e. The price would increase and the quantity produced would increase

31. Which market structure form generally has the largest deadweight loss?

a. Perfect Competition  
b. Monopoly  
c. Duopoly  
d. Monopolistic Competition  
e. Oligopoly

32. Which of the following is not a major type of water pollutant from agriculture?

a. sediment  
b. plant nutrients  
c. pesticides  
d. salt  
e. all of the above are types of water pollutants from agriculture

33. Denise values a stainless steel dishwasher for her new house at $500. The actual price of the dishwasher is $650. Denise

a. buys the dishwasher and she experiences a consumer surplus of $150  
b. buys the dishwasher and she experiences a consumer surplus of $-150  
c. does not buy the dishwasher and she experiences a consumer surplus of $150 on her non-purchase  
d. does not buy the dishwasher and she experiences a consumer surplus of $0 on her non-purchase  
e. buys the dishwasher and experiences a consumer surplus of $500
34. The rate at which a business is willing to substitute between two products in the current period is known as:

a. production possibilities curve (PPC)
b. marginal rate of product transformation (MRPT)
c. marginal rate of technical substitution (MRTS)
d. isoquant
e. marginal rate of substitution in consumption

35. Under socialism, people who think they can put resources to more valuable uses cannot do so by purchasing the resource, because the resources are not for sale at any price. This is an example of which characteristic of well-defined property rights being violated.

a. Exclusivity
b. Enforceability
c. Specificity
d. Transferability
e. All characteristics are well defined as socialism is a form of economic efficiency

36. Which area on the above graph represents total costs if the market is in equilibrium?

a. Area a + b
b. Area c + d
c. Area i + j
d. Area a + b + c + d
e. Area i + j + f

37. Well defined property rights promote efficiency because

a. misuse results in a decline in the resource value to the owner
b. the free rider problem is maximized
c. property rights pertain to land sales and purchases and not efficiency
d. they are constantly changing in response to lobbying
e. tastes and preferences define property rights
American politics is often described as a duopoly (oligopoly with only two players), because two political parties, Republicans and Democrats, dominate policy. The following table provides potential outcomes (number of senate seats and legislation passed) depending on if the parties compromise or stick to their party beliefs.

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<th>Republicans</th>
<th>Democrats</th>
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<td>Compromise</td>
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<td>Both parties equal number of seats</td>
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<td>Compromised legislation passed but favors no party</td>
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<td>Stick to their guns</td>
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<td>Both parties equal number of seats</td>
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<td>Grid lock no legislation passed</td>
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38. Given the Democrats decide to compromise, what is the Republican’s best strategy (which strategy gives them the most seats and legislation passed in their favor)?
   a. compromise
   b. stick to their guns

39. If the two parties do not collude, the most likely outcome will be (both parties want to have the most seats and legislation passed in their favor)?
   a. Both parties compromise
   b. Both parties stick to their guns,
   c. Republicans compromise, Democrats stick to their guns
   d. Republicans stick to their guns, Democrats compromise

40. For a monopoly what will be the price and quantity sold in the market place?
   a. P1, Q1
   b. P2, Q2,
   c. P3, Q3
   d. P4, Q4
   e. More information is necessary
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