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 statements is not a characteristic of perfect competition?
   a. Limited entry to markets
   b. No firm can influence market price
   c. Homogeneous product
   d. Large number of buyers and sellers

2. Which of the following statements is true?
   a. One advantage of perfect competition is that farmers can set the price in their negotiations with buyers.
   b. A firm should operate under stage 1 of production if it wishes to maximize profit.
   c. A commodity surplus or shortage will occur when the market is in equilibrium.
   d. Product differentiation is the key difference between monopolistic competition and perfect competition.

3. Which of the following statements is not true?
   a. The supply curve for a firm is its MC curve.
   b. If the change in total economic surplus is negative due to a shift in a demand and/or a supply curve, society is worse off.
   c. AFC + AVC = ATC.
   d. The law of diminishing marginal returns states that as the use of an input increases, its MPP eventually will fall.

4. Which of the following statements is (are) true?
   a. MIC refers to the change in total cost when producing one more unit of output.
   b. MIC refers to the change in total cost when using one more unit of input.
   c. The optimal level of inputs to use occurs when MVP = MIC.
   d. Both b. and c.

5. Which of the following statements is true?
   a. The social costs of monopolies are referred to as deadweight loss.
   b. When producers respond to market prices in a previous time period, adjustments to market equilibrium occur in random pattern.
   c. Firms operating as monopolistic competitors, oligopolists, or monopolies may never incur a loss.
   d. The profit maximizing level of output for any firm is determined where marginal revenue exceeds marginal costs.

6. Which of the following are common barriers to entry?
   a. Economies of scale
   b. Capital access and costs
   c. Absolute unit-cost advantages
   d. All of the above
The following diagram pertains to the quantity of snack foods produced per day by Frito Lay, using labor as an input. Using the diagram, answer questions 7 – 11.

7. The marginal physical product between points B and C is:
   a. 500 products per hour
   b. 675 products per hour
   c. 750 products per hour
   d. Can’t tell; insufficient information

8. If we are in the range of 4 to 8 hours of labor, to what stage of production does this situation correspond?
   a. Stage 1
   b. Stage 2
   c. Stage 3
   d. Can’t tell; insufficient information

9. If we are in the range of 8 to 12 hours of labor input per day, to what stage of production does this situation correspond?
   a. Stage 1
   b. Stage 2
   c. Stage 3
   d. Can’t tell; insufficient information

10. If the marginal physical product of labor is 250 products per hour and if Frito Lay can sell a snack food product for $0.10, what is the change in total revenue due to the hiring of one additional hour of labor?
    a. $0.10
    b. $25/hour
    c. $2500/hour
    d. Can’t tell; insufficient information

11. The technical name of the concept described in question 10 is known as the:
    a. MIC
    b. MVP
    c. Law of diminishing marginal returns
    d. None of the above
Use the graph below to answer questions 12 to 15.

12. The change in consumer surplus is given by:
   a. $C - B$
   b. $B - C$
   c. $A + B$
   d. $A + C$

13. The change in producer surplus is given by:
   a. $C + D + E$
   b. $E$
   c. $C + D$
   d. $-C - D$

14. The reason for this leftward shift in demand is due to:
   a. weather patterns (El Nino, drought).
   b. food safety scares (BSE, E coli, or food product recalls).
   c. biotechnology (BST).
   d. advertising and promotion campaigns (National Pork Board, Cotton Board).

15. As a consequence of this leftward shift in demand:
   a. society is better off, by area $D + B$.
   b. society is worse off, by area $-D - B$.
   c. there is no effect on society.
   d. can’t tell; insufficient information.

16. If MR were $10 per unit, and if MC = $12 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
17. Given the following diagram, what is the own-price elasticity of supply between points A and B?

a. $\frac{2}{15}$
b. $\frac{3}{11}$
c. $\frac{15}{2}$
d. Can’t tell; insufficient information

18. Which of the following combination of goods most closely fits the definition of complementary products?

a. Bounty towels and Scott towels
b. Pepsi and Coca-Cola
c. Spaghetti and spaghetti sauce
d. Tide detergent and milk

19. Assume that a retailer sells 1000 six-packs of Pepsi per day at a price of $3.25/six-pack. You as an economic analyst, estimate that the cross-price elasticity between Pepsi and Coca-Cola is 0.6. If the retailer raises the price of Coca-Cola from $3.00 to $3.30/six-pack, how would sales of Pepsi be affected, ceteris paribus?

a. Sales of Pepsi would not be affected at all
b. Sales of Pepsi would rise by 30 six-packs
c. Sales of Pepsi would rise by 60 six-packs
d. Can’t tell; insufficient information

20. Which of the four graphs below describes the impact of a successful advertising and promotional campaign for a particular agricultural commodity?

a. 

b. 

c. 

d. 
21. The cross-price elasticity between two goods is 0. Which of the following two goods best illustrates this cross-price elasticity?
   a. Borden milk and Crest toothpaste
   b. spaghetti and Newman’s Own spaghetti sauce
   c. Pepsi and Dr. Pepper
   d. Bounty towels and Scott towels

22. What assumption of perfect competition is “relaxed” in the case of monopolistic competition?
   a. large number of sellers
   b. homogenous products
   c. no barriers to entry or to exit
   d. perfect information

In the following table, “I” stands for the amount of a particular variable input. Assume the firm operates under perfect competition. Use this table to answer questions 23-27.

<table>
<thead>
<tr>
<th>I (units)</th>
<th>Output</th>
<th>TFC ($)</th>
<th>TVC ($)</th>
<th>TC ($)</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>1000</td>
<td>200</td>
<td>1000</td>
<td>x</td>
<td>---</td>
</tr>
<tr>
<td>t</td>
<td>1100</td>
<td>w</td>
<td>z</td>
<td>y</td>
<td>5</td>
</tr>
</tbody>
</table>

23. What is the value of w?
   a. $100
   b. $200
   c. $1000
   d. Can’t tell; insufficient information

24. What is the value of x?
   a. $200
   b. $1000
   c. $1200
   d. Can’t tell; insufficient information

25. What is the value of y?
   a. $150
   b. $1200
   c. $1500
   d. $1700

26. What is the value of z?
   a. $150
   b. $1200
   c. $1500
   d. $1700

27. What is the value of t?
   a. 100 units
   b. 150 units
   c. 200 units
   d. Can’t say; insufficient information
28. In an oligopoly, which of the following statements is not true?
   a. Firms will match all price decreases of another, but will not match price increases.
   b. The market demand curve is kinked.
   c. Firms will attempt to differentiate their products.
   d. Firms will match all price increases of another, but will not match price decreases.

29. Investment in biotechnology is a recommendation given to agricultural producers largely because marginal costs of production are reduced. What are the likely consequences of this investment to producers, ceteris paribus?
   a. Prices of their output will rise and quantities produced will fall.
   b. Prices of their output will rise and quantities produced will rise.
   c. Prices of their output will fall and quantities produced will rise.
   d. Prices of their output will fall and quantities produced will fall.

30. Suppose that a firm sells 10 units at a price of $12 and 15 units at a price of $20. Then marginal revenue is equal to:
   a. $36
   b. $180
   c. Neither a. nor b.
   d. Can’t tell; insufficient information

31. An outbreak of salmonella occurs in Plano, Texas, particularly affecting all foods containing peanut butter. Given this information, it is likely that:
   a. the price of peanut butter would fall and the quantity of peanut butter produced would fall.
   b. the price of peanut butter would fall but the quantity of peanut butter produced would rise.
   c. the price of peanut butter would rise and the quantity of peanut butter produced would rise.
   d. the price of peanut butter would rise but the quantity of peanut butter produced would fall.

32. Which of the following statements is (are) true?
   a. If the cross-price elasticity of demand between two goods is negative, then the commodities are substitutes.
   b. If the firm receives a price below its breakdown price but above it shutdown price, it will incur a loss.
   c. If MPP > APP, then this situation corresponds to stage 1 of production.
   d. both b. and c.

33. Suppose that a firm uses 3 units of available input at a price of $3/unit. Also, the firm uses 8 units of a variable input at a price of $6/unit. Then the marginal input cost equals:
   a. $7.8/unit
   b. $39/unit
   c. $48/unit
   d. Can’t tell; insufficient information

34. A shift in the market supply curve represents?
   a. a change in the quantity supplied
   b. a change in supply
   c. a change in the marginal costs of production
   d. b. and c.
Given the following diagram associated with cost curves for a perfectly competitive firm, answer questions 35 to 39.

35. The supply curve for this firm is given by:
   a. AF.  
   b. BF.  
   c. CF.  
   d. Can’t tell; insufficient information

36. In order for this firm to produce any output, the minimum price must be at least:
   a. $20  
   b. $22  
   c. $25  
   d. $26

37. In order for this firm to break even, it must produce:
   a. 300 units  
   b. 350 units  
   c. 425 units  
   d. 450 units

38. Suppose that the firm receives $40 per unit of output. The maximum profit this firm can expect to receive is:
   a. $7,000  
   b. $13,000  
   c. $20,000  
   d. Can’t tell; insufficient information

39. If the firm produces 350 units, total fixed costs are:
   a. $1,400  
   b. $7,700  
   c. $9,100  
   d. Can’t tell; insufficient information

40. If the own-price elasticity of demand equals -.8, then the price flexibility of demand is equal to:
   a. -.125  
   b. -.8  
   c. -1.25  
   d. Can’t tell; insufficient information

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

42. Which of the following statements is (are) true?
   a. Food-away-from-home establishments are examples of firms operating as monopolistic competitors.  
   b. In imperfect competition, P = MR.  
   c. If at a given market price, the quantity demanded by consumers exceeds the quantity supplied by producers, then a market surplus occurs.  
   d. none of the above.
43. Which of the statements is (are) true?
   a. When 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.

44. The use of “green” pesticide production practices while environmentally desirable, raises the marginal costs of production 8 percent. What are the likely consequences of “green” production practices, *ceteris paribus*?
   a. Prices of outputs will rise and quantities of produced will fall.
   b. Prices of outputs will rise and quantities of produced will rise.
   c. Prices of outputs will fall and quantities of produced will rise.
   d. Prices of outputs will fall and quantities produced will fall.

45. Which of the following ranges of own-price elasticities best characterize the supply curve for agricultural products at the farm level in the short run?
   a. 0.1 to 0.3
   b. 0.7 to 0.9
   c. 1.5 to 1.8
   d. 3.0 to 6.0

46. Which of the following graphs depicts a market shortage?
   a. ![Graph A]
   b. ![Graph B]
   c. ![Graph C]
   d. none of the above

47. Which of the following statements is (are) true?
   a. Commodity surplus or shortage are examples of market disequilibrium.
   b. The economic analysis of imperfect competition was originated by Edward Chamberlain and Joan Robinson.
   c. The market supply curve corresponds to the horizontal summation of all MC curve in the industry at various prices.
   d. All of the above.

48. Consider the following diagram to the right, which of the following statements is (are) true?
   a. producer surplus = $120 million
   b. total economic surplus = $180 million
   c. (a) and (b)
   d. none of the above
49. 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.

50. What is the price charged and the output produced by the monopolistic competitor 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

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

52. The demand curve intersects the quantity axis at:
   a. 6,000 units
   b. 7,000 units
   c. 8,000 units
   d. Can’t tell; insufficient information

53. Suppose that the income elasticity for a good is 0.6. Then we can say that:
   a. the good in question is a normal good.
   b. the good in question is an inferior good.
   c. the good in question is a necessity.
   d. a. and c.
54. Which of the following combinations of goods is in line with a cross-price elasticity of -0.4?
   a. Cheerios and Borden milk
   b. Pepsi and Dr. Pepper
   c. Subway sandwiches and Chick-Fil-A sandwiches
   d. None of the above

55. Which market structure best characterizes the following: there exists product differentiation, and there are many buyers and sellers?
   a. Oligopoly
   b. Monopolistic competition
   c. Perfect competition
   d. Monopoly

56. Which of the following is (are) true?
   a. MPP = APP, when APP = maximum
   b. MC = AVC, when AVC = minimum
   c. MC = ATC, when ATC = minimum
   d. All of the above

57. According to this diagram, the income elasticity of demand for Starbucks coffee is:
   a. less than 1 but greater than 0.
   b. equal to 1.
   c. greater than 1.
   d. less than 0.

58. According to the graph in question 57, then Starbucks coffee is a (an)?
   a. inferior good
   b. luxury good
   c. necessity
   d. can’t say; insufficient information

59. Which market structure best characterizes the situation wherein there exists product differentiation, there are few sellers, and there exist barriers to entry?
   a. oligopoly
   b. monopolistic competition
   c. perfection competition
   d. monopoly

60. Which of the following statement(s) is (are) true?
   a. The minimum point of the average variable cost curve is the breakeven point.
   b. The minimum point of the average total cost curve is the shutdown point.
   c. If the cross-price elasticity between two goods is positive, then the goods in question are said to be substitutes.
   d. All of the above.
61. According to the information below, which of the following is (are) true?

<table>
<thead>
<tr>
<th>Units of variable input (I)</th>
<th>Units of output (Q)</th>
<th>TC</th>
<th>TVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>1,000</td>
<td>$30,000</td>
<td>$25,000</td>
</tr>
</tbody>
</table>

- a. TFC = $55,000
- b. AVC = $30
- c. The price of the variable input is $125/unit
- d. a. and c.

62. Which of the following statements 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 differentiated product.
- d. a. and b.

63. What form of imperfect competition on the selling side is associated with automobile manufacturers?
- a. monopolistic competition
- b. oligopoly
- c. monopoly
- d. none of the above

64. Which of the following industries best illustrates an example of a monopoly?
- a. retail food industry
- b. airline industry
- c. the automobile industry
- d. none of the above

65. Given the graph below, which of the following statements is (are) true?

![](graph.png)

- 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.
Questions 66 and 67 pertain to the graphs below.

66. Which of the four graphs describes the impacts of excellent weather conditions which lead to improved cotton yields? A

67. Which of the four graphs describes the impacts of a drought on corn farmers in the Midwest? B

68. In the short run, a firm should shut down if:
   a. it cannot cover its minimum average total cost.
   b. it cannot cover its minimum average variable cost.
   c. it cannot cover its fixed costs.
   d. none of the above.

69. In imperfectly competitive market structures:
   a. advertising is the vehicle by which firms differentiate their products.
   b. the prices of products manufactured are higher than the corresponding prices of products manufactured under perfect competition.
   c. the quantities of products manufactured are lower than corresponding quantities manufactured under perfect competition.
   d. all of the above

70. _______________ represents the profit or economic rent realized by firms in the market for specific quantities supplied.
   a. Total economic surplus
   b. Producer surplus
   c. Consumer surplus
   d. none of the above