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."
Consider the information below for a farm in the Rio Grande Valley in answering questions 1 and 2.

- Cash receipts from farm marketings: $600,000
- Receipts of government payments: $100,000
- Other income from farm sources: $75,000
- Production expenses: $400,000
- Value of real estate assets: $12,000,000
- Value of non-real estate assets: $2,000,000
- Financial assets: $5,000,000
- Liabilities: $9,000,000

1. The equity for this operation is:
   (a) $1,175,000
   (b) $10,000,000
   (c) $28,000,000
   (d) $375,000

2. Net farm income for this operation is:
   (a) $1,175,000
   (b) $10,000,000
   (c) $28,000,000
   (d) $375,000

3. The output and price associated with a particular crop for a farming operation in Stephenville, Texas for 2010 and 2011 are given as:

<table>
<thead>
<tr>
<th></th>
<th>OUTPUT (bushels)</th>
<th>PRICE ($/bushel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>75,000</td>
<td>$3.00</td>
</tr>
<tr>
<td>2011</td>
<td>80,000</td>
<td>$3.50</td>
</tr>
</tbody>
</table>

Letting 2010 be the base year, the output index for 2011 is:
   (a) 1.1667
   (b) 1.0667
   (c) 0.9375
   (d) Can’t tell; insufficient information.

4. According to the data exhibited in Question 3, letting 2011 be the base year, the price index for 2010 is:
   (a) 0.8571
   (b) 0.9375
   (c) 1.1667
   (d) Can’t tell; insufficient information.
5. Suppose that the interest rate for a savings account is 5%. A rancher takes $10,000 from his/her savings account to buy new farm equipment. The “full” cost associated with this purchase this year amounts to:

\[ \begin{align*}
A & \quad (a) \quad $10,500 \\
& \quad (b) \quad $500 \\
(c) \quad $10,000 \\
& \quad (d) \quad Can’t \ tell; \ insufficient \ information.
\end{align*} \]

6. According to the chart below, which bundle is least preferred, assuming total utility is the product of the quantity of tacos and the quantity of hamburgers?

<table>
<thead>
<tr>
<th>Bundle</th>
<th>Quantity of Tacos</th>
<th>Quantity of Hamburgers</th>
<th>Total Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
<td>7</td>
<td>42</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>D</td>
<td>7</td>
<td>5</td>
<td>35</td>
</tr>
</tbody>
</table>

7. According to the chart given in Question 6, which of the following statements is (are) true?

\[ \begin{align*}
T & \quad (a) \quad The \ consumer \ is \ indifferent \ to \ bundle \ B \ and \ bundle \ C. \\
T & \quad (b) \quad When \ total \ utility \ is \ equal \ to \ 40 \ utils, \ this \ consumer \ will \ give \ up \ 2 \ hamburgers \ to \ get \ 1 \ more \ taco. \\
T & \quad (c) \quad When \ total \ utility \ is \ equal \ to \ 40 \ utils, \ this \ consumer \ will \ give \ up \ 2 \ tacos \ to \ get \ 1 \ more \ hamburger. \\
T & \quad (d) \quad (a) \ and \ (b).
\end{align*} \]

8. Based on the chart given in Question 6, we can complete:

\[ \begin{align*}
B & \quad (a) \quad the \ MRS \ from \ point \ A \ to \ point \ B. \\
& \quad (b) \quad the \ MRS \ from \ point \ B \ to \ point \ C. \\
& \quad (c) \quad the \ MRS \ from \ point \ C \ to \ point \ D. \\
& \quad (d) \quad all \ of \ the \ above.
\end{align*} \]

9. The demand curve for a product shifts to the left. Which of the following statements is (are) a plausible explanation for this situation?

\[ \begin{align*}
D & \quad (a) \quad The \ price \ of \ a \ substitute \ product \ decreased. \\
D & \quad (b) \quad Income \ rose \ and \ the \ product \ is \ an \ inferior \ good. \\
D & \quad (c) \quad The \ price \ of \ a \ substitute \ product \ increased. \\
D & \quad (d) \quad (a) \ and \ (b).
\end{align*} \]

10. We do not need to actually measure the level of satisfaction derived by a consumer from the consumption of goods. We only need a ranking among the alternative consumption bundles. Thus utility is a(n) __________________________ concept.

\[ \begin{align*}
B & \quad (a) \quad cardinal \\
B & \quad (b) \quad ordinal \\
B & \quad (c) \quad mathematical \\
B & \quad (d) \quad none \ of \ the \ above.
\end{align*} \]

11. Suppose that the index of prices received by farmers for 2011 was 0.97 and the base year of this index was 1990. Then:

\[ \begin{align*}
B & \quad (a) \quad Relative \ to \ 1990, \ farm \ prices \ were \ 97\% \ lower \ in \ 2011. \\
B & \quad (b) \quad Relative \ to \ 1990, \ farm \ prices \ were \ 3\% \ lower \ in \ 2011. \\
B & \quad (c) \quad Relative \ to \ 1990, \ farm \ prices \ were \ 3\% \ higher \ in \ 2011. \\
B & \quad (d) \quad Relative \ to \ 1990, \ farm \ prices \ were \ 97\% \ higher \ in \ 2011.
\end{align*} \]
12. The clockwise rotation of the diagram to the right may be best explained as:
   (a) The price of apples rose.
   (b) The price of bananas rose.
   (c) Total income for the consumer fell.
   (d) The price of bananas fell.

13. Which of the following statements is (are) true?
   (a) If the own-price elasticity of demand is -1, then the demand for this product is unitary elastic.
   (b) The concept of the elasticity of demand was originated by Alfred Marshall.
   (c) Economists do not actually need to measure the level of satisfaction to discern preferences for alternative combinations of goods.
   (d) all of the above.

14. The output produced in bushels and price of corn received ($/bushel) for Farmer Johnson over the last three years are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Output</th>
<th>Price</th>
<th>Consumer Price Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>5,000</td>
<td>$3.40</td>
<td>1.10</td>
</tr>
<tr>
<td>2010</td>
<td>7,000</td>
<td>$2.80</td>
<td>1.20</td>
</tr>
<tr>
<td>2011</td>
<td>8,000</td>
<td>$2.60</td>
<td>1.15</td>
</tr>
</tbody>
</table>

Assume that the only source of income for Farmer Johnson is from the production of corn. The best year in terms of real income for Farmer Johnson was:
   (a) 2009
   (b) 2010
   (c) 2011
   (d) Can’t tell; insufficient information

15. RJR Nabisco has three alternatives for manufacturing snack foods:
   i. Manufacture cookies alone and obtain a profit of $30 million.
   ii. Manufacture chips alone and obtain a profit of $25 million.
   iii. Manufacture both cookies and chips and obtain a profit of $35 million.

   The opportunity cost of this firm is:
   (a) $25 million
   (b) $30 million
   (c) $35 million
   (d) Can’t tell; insufficient information.
Question 16 and 17 pertain to the following graph:

16. The marginal rate of substitution between points C and D is:
   (a) -1.5
   (b) -4
   (c) -6
   (d) -0.67

17. Given the indifference curves in the graph above, which combination of wings and hamburgers yields the highest level of satisfaction?
   (a) 6 wings, 7 hamburgers
   (b) 8 wings, 1 hamburger
   (c) 2 wings, 8 hamburgers
   (d) 8 wings, 4 hamburgers

18. The graph to the right depicts:
   (a) a perfectly elastic demand curve
   (b) an Engel curve
   (c) a perfectly inelastic demand curve
   (d) a budget line

19. In a recent article in USA Today, the price of gasoline rose over the past year from $2.20 to $3.00, a price hike of about 36 percent. Gasoline consumption over the past year declined by 9 percent. So on the basis of this article, we can conclude that
   (a) the demand for gasoline is elastic.
   (b) the demand for gasoline is inelastic.
   (c) the demand for gasoline is unitary elastic.
   (d) Can't tell; insufficient information

20. Which of the following statement(s) is (are) true?
   (a) The current GDP for the U.S. economy is $10 trillion.
   (b) The current debt level for the U.S. economy is $16 trillion.
   (c) (a) and (b)
   (d) none of the above
21. Suppose that the own-price elasticity for Canada Dry ginger ale is -1.75. In order for Canada Dry to increase total revenue, at least in the short run, it would be advisable to:

(a) do nothing.
(b) lower the price of the ginger ale.
(c) raise the price of the ginger ale.
(d) Can’t tell; insufficient information

Questions 22 and 23 are in reference to the following diagram:

22. If the budget for this consumer is $96, then

(a) at point A, the consumer is said to be in equilibrium.
(b) the price per taco is $3.
(c) the price per wing is $4.
(d) all of the above.

23. At point A, which of the following statements is (are) false?

(a) \(\frac{MU_{Tacos}}{P_{Tacos}} = \frac{MU_{Wings}}{P_{Wings}}\)
(b) 12 tacos and 16 wings are the optimal levels of consumption.
(c) the MRS = -4/3.
(d) none of the above.

24. The shift in the budget line in the following graph is due to:

(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.

25. Which of the choices listed below is the best example of an inferior good?

(a) steak

(b) hamburger

(c) lobster

(d) prime rib
26. Concern is expressed on the part of the current administration about what should be the optimal tax rate for those households who make more than $250,000 per year. This issue corresponds to what branch of economics?
   (a) positive economics
   (b) microeconomics
   (c) macroeconomics
   (d) normative economics

27. Which of the following statements is (are) true?
   (a) Marginal utility may never be negative.
   (b) Indifference curves never intersect.
   (c) The own-price elasticity is negative.
   (d) (b) and (c)

28. Not too long ago, the price of gasoline went up about $0.50/gallon. Economic analysts currently are focusing on questions concerning the likely impacts of this price hike on the demand for gasoline. The branch of economics that deals with these questions is called:
   (a) positive economics.
   (b) normative economics.
   (c) microeconomics.
   (d) macroeconomics.

29. Assume that for a given customer, the marginal utility of Ben & Jerry's Ice Cream is 160, and the price of Ben & Jerry's is $5 per gallon. Also assume that the marginal utility of Blue Bell Ice Cream is 120, and the price of Blue Bell is $4 per gallon. This consumer:
   (a) is in equilibrium.
   (b) should buy more Ben & Jerry's.
   (c) should buy more Blue Bell.
   (d) Can't tell; insufficient information.

30. Which of the following statements is (are) true?
   (a) The Law of Demand states that as the price of a commodity falls, all other factors held constant, we purchase more of that good.
   (b) Engel's Law states that as incomes rise, the share of the budget allocated to food declines.
   (c) The Law of Diminishing Marginal Utility states that our additional satisfaction declines as more of a good is consumed.
   (d) all of the above.

31. On average, consumers spend what portion of each dollar of disposable personal income on food?
   (a) 10 cents
   (b) 15 cents
   (c) 20 cents
   (d) none of the above
Questions 32 to 35 pertain to the following market demand curve for bananas.

32. The own-price elasticity of demand for bananas between points A and B is:
   (a) -4,000.
   (b) -1.2.
   (c) -0.83.
   (d) -1/4000

33. When the market price is $3 per pound, the consumer surplus is:
   (a) $55,000.
   (b) $30,000.
   (c) $25,000.
   (d) $12,500.

34. When the market price falls to $2 per pound:
   (a) consumers are better off by $12,000.
   (b) consumers are worse off by $12,000.
   (c) consumers are better off by $24,000.
   (d) consumers are worse off by $24,000.

35. The fall in the market price from $3 to $2 corresponds to:
   (a) a change in demand.
   (b) a change in quantity demanded.
   (c) the law of demand.
   (d) (b) and (c).

36. Suppose your nominal income in 1990 was $24,000. Suppose too that the consumer price index for 2011 was 1.5, and the base year for this index was 1990. How much nominal income would you need in 2011 in order to match the spending power of your $24,000 in 1990?
   (a) $16,000
   (b) $24,000
   (c) $36,000
   (d) $48,000

37. Which of the following statements is (are) true?
   (a) If the change in total utility for beer is 40 utils and the change in consumption of beer is 5 units, then marginal utility is 8.
   (b) All food and beverage products are normal goods.
   (c) The own-price elasticity depends on the units of measurement of prices and quantities.
   (d) all of the above
38. The major component of all activities once a crop, livestock, or fiber product leaves the farm is:
   (a) packaging and transportation
   (b) interest charges
   (c) advertising
   (d) none of the above

39. Which of the following statements is (are) true?
   (a) Agricultural economics is an applied social science.
   (b) The Latin phrase *ceteris paribus* means, everything else the same, or holding all other factors constant.
   (c) The current U.S. Secretary of Agriculture is Tom Vilsack.
   (d) all of the above

40. Suppose a college student can spend $50 on entertainment. This student derives satisfaction only from watching movies and playing video games. The price of a movie is $5 and the price of a video game is $1. Which of the following diagrams describes the correct budget line for this student?

41. The branch of economics which deals with the behavior of agricultural producers is:
   (a) Microeconomics.
   (b) Macroeconomics.
   (c) Positive economics.
   (d) Normative economics.

42. The demand curve for a product shifts to the right. Which of the following is a plausible explanation for this situation?
   (a) The price of a substitute product increased.
   (b) A successful television advertising campaign was launched by the manufacturer of the product.
   (c) Income rose and the good in question is a normal good.
   (d) all of the above
43. The own-price elasticity for oranges at the farm level is -0.40. Because of the recent freeze in Florida, orange production will fall by 8 percent. Orange prices are likely to:
   (a) rise by 20%.
   (b) rise by 8%.
   (c) fall by 20%.
   (d) fall by 8%.

\[ \frac{\% \Delta Q}{\% \Delta P} = -0.4 \]
\[ \frac{\% \Delta P}{\% \Delta Q} = \frac{-0.4}{-0.4} = 1 \]

44. Given the diagram to the right, what can you conclude?
   (a) The diagram pertains to an indifference curve.
   (b) The diagram pertains to a demand curve.
   (c) Both (a) and (b).
   (d) Can't say; insufficient information.

45. Given the diagram below, what can you conclude?

\[ I \quad Q \]

   (a) The diagram pertains to an Engel curve for a normal good.
   (b) The diagram pertains to a budget line.
   (c) The diagram pertains to an Engel curve for an inferior good.
   (d) None of the above.

46. Which of the following is not part of the agribusiness (food and fiber) sector?
   (a) wholesalers, retailers, and food service purveyors
   (b) farm input suppliers
   (c) processors and manufacturers
   (d) None of the above

47. Which of the following diagrams best illustrates the immediate impact of a food safety scare due to Mad Cow's Disease? (Note: \( D_0 \) is the original relationship and \( D_1 \) is the new relationship.)

(a) \[ P_{\text{beef}} \]
   \[ D_1 \]
   \[ D_0 \]
   \[ Q_{\text{beef}} \]

(b) \[ P_{\text{beef}} \]
   \[ A \]
   \[ B \]
   \[ D_0 \]
   \[ Q_{\text{beef}} \]

(c) \[ P_{\text{beef}} \]
   \[ A \]
   \[ B \]
   \[ D_0 \]
   \[ Q_{\text{beef}} \]

(d) \[ P_{\text{beef}} \]
   \[ A \]
   \[ B \]
   \[ D_0 \]
   \[ Q_{\text{beef}} \]
48. Which of the following statements is (are) false?
   (a) The slope of any budget line is negative and equal to the ratio of the prices of the goods in question.
   (b) The slope of any indifference curve is the MRS.
   (c) The slope of any linear demand curve is the own-price elasticity.
   (d) none of the above

49. Which of the following statements is (are) true?
   (a) The food and fiber industry is responsible for 1 out of every 10 jobs.
   (b) Productivity in the farm sector has increased dramatically over the past 50 years.
   (c) The debt-to-asset ratio and the debt-to-equity ratio associated with the farm sector have been relatively stable over the past 10 years.
   (d) (b) and (c).

50. Which of the following statements is (are) false?
   (a) U.S. farms organized as partnerships and corporations account for roughly 40 percent of the value of production in the agricultural sector.
   (b) U.S. farms tend to be diversified rather than specialized.
   (c) The number of U.S. farms has declined from roughly 6 million in 1950 to about 2 million today.
   (d) none of the above.

51. Individual demand schedules for three customers from the local H-E-B store in the purchase of ice cream are given below:

<table>
<thead>
<tr>
<th>Price/Quart</th>
<th>Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>$1.50</td>
<td>5</td>
</tr>
<tr>
<td>$1.75</td>
<td>4</td>
</tr>
<tr>
<td>$2.00</td>
<td>2</td>
</tr>
</tbody>
</table>

What is the market demand for ice cream at a price of $2.00 assuming that the only consumers in this market are customers A, B, and C?
   (a) 16
   (b) 22
   (c) 25
   (d) Can't tell; insufficient information

52. If the own-price elasticity is equal to -0.9, then:
   (a) a 1% change in quantity demanded gives rise to a -0.9% change in price.
   (b) a 10% increase in price gives rise to a 9% decrease in quantity demanded.
   (c) a 1% increase in price leads to a 9% decrease in quantity demanded.
   (d) none of the above.
53. The American Medical Association reported that the consumption of broccoli would lower cholesterol levels by 20%. Which of the following diagrams best illustrates the impact of this medical announcement? (Note: $D_0$ is the original relationship and $D_1$ is the new relationship.)

54. Which of the following statements is (are) true?
(a) The word marginal means change.
(b) On the basis of net farm income, 2012 is projected to be an exceptional year for U.S. agriculture.
(c) Total utility may never be negative.
(d) all of the above.

55. What branch of economics is concerned with the rate of inflation and the unemployment rate?
(a) positive economics
(b) microeconomics
(c) macroeconomics
(d) normative economics

56. The marginal utility associated with drinking coffee is:

<table>
<thead>
<tr>
<th>Total Utility</th>
<th>Cups of Coffee</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>28</td>
<td>7</td>
</tr>
</tbody>
</table>

(a) 2
(b) 5
(c) 10
(d) Can't tell; insufficient information

57. Which of the following statements is (are) true?
(a) The rational consumer maximizes satisfaction subject to a budget constraint.
(b) The index most frequently used by economists to measure inflation is the Consumer Price Index.
(c) The value of any index for the base period is 1.
(d) all of the above.
58. Which of the following statements is (are) true?
   (a) The current Commissioner of Agriculture of Texas is Todd Staples.
   (b) The U.S. economy is best characterized as a capitalistic system.
   (c) Concentration is not particularly high in industries manufacturing products such as breakfast cereals, beer, and soft drinks.
   (d) All of the above.

   [Answer: A]

59. The mathematical representation of the satisfaction a consumer derives from a bundle of goods is called the __________.
   (a) demand curve
   (b) Engel curve
   (c) utility function
   (d) indifference (or iso-utility) curve

   [Answer: C]

60. Economic reasoning that is true for one individual but not for society as a whole is referred to as:
   (a) Fallacy of composition
   (b) Specialization
   (c) Opportunity cost
   (d) Normative economics

   [Answer: A]

61. The connection of all tangency points between budget lines and indifference curves is called the __________.
   (a) Engel curve.
   (b) price-consumption curve.
   (c) demand curve.
   (d) none of the above.

   [Answer: B]

62. The marginal utility of Dr. Pepper is the same as the marginal utility of Pepsi. Suppose that the price of Dr. Pepper is $2/glass. In order for a rational consumer to buy more glasses of Pepsi than Dr. Pepper, the price of Pepsi must be:
   (a) less than $2
   (b) equal to $2
   (c) greater than $2
   (d) Can't tell; insufficient information.

   [Answer: A]

63. Assume that for Charlie Daniels, a wheat producer in Kansas, the only source of farm income is from the production of wheat. Daniels is interested in his real net farm income for 2011. He produced 50,000 bushels of wheat in 2011 and received $4 per bushel. Assume Daniels has production expenses of $60,000. The CPI for 2011 was 1.75. The real net farm income for Daniels in 2011 was:
   (a) $200,000
   (b) $140,000
   (c) $80,000
   (d) Can’t tell; insufficient information.

   [Answer: C]

64. The food and fiber industry today accounts for roughly what percent of gross domestic product (GDP) in the United States?
   (a) 4 to 7 percent
   (b) 8 to 11 percent
   (c) 12 to 15 percent
   (d) 16 to 20 percent

   [Answer: C]
65. Most resources are best suited for a particular use. For example, climate and other conditions in Florida allow resources to be used in orange production in lieu of wheat or potato production. What economic concept deals with this issue?
   (a) Fallacy of composition  
   (b) Opportunity cost  
   (c) Demand  
   (d) Specialization

66. The portion of food expenditures associated with activities of firms beyond the farm gate is known as:
   (a) consumer surplus  
   (b) the marketing bill  
   (c) value added  
   (d) none of the above

67. Given the diagram depicted to the right, which of the following statements is true?
   (a) The MRS from point A to point B must be lower (in absolute value) than the MRS from point B to point C.
   (b) The level of satisfaction associated with point A is greater than the level of satisfaction associated with either points B or C.
   (c) The MRS from point A to point B must be greater (in absolute value) than the MRS from point B to point C.
   (d) This consumer prefers environmental quality over energy.

68. Scarce resources like land, labor, and capital can be categorized as:
   (a) human resources  
   (b) natural and biological resources  
   (c) manufactured resources  
   (d) all of the above

69. The term “real” as opposed to “nominal” means that economists are making adjustments for
   (a) resource scarcity  
   (b) opportunity cost  
   (c) utility  
   (d) inflation

70. Suppose that Hungry Howie’s is currently selling 1,000 pizzas for $5. Suppose too that the own-price elasticity for this product is -0.6. If Hungry Howie’s wishes to raise the price to $6, you predict that, all other factors held constant, the number of pizzas sold at this price will be:
   (a) 600  
   (b) 880  
   (c) 1,120  
   (d) Can’t tell; insufficient information.