

**AGRIBUSINESS MANAGEMENT**  
**2012 Career Development Events in Agriculture**  
Kansas State University, Manhattan, Kansas

**Multiple Choice Section (50 Points)**

Select the best response for each question and mark that answer on the answer card by using a No. 2 pencil. Each question is worth one (1) point. Be sure to shade the whole circle on the answer card.

1. The law of demand states that, holding other things constant:
  - A. As price rises, demand will rise
  - B. As price rises, demand will decline
  - C. As price falls, quantity demanded rises
  - D. As price falls, quantity demanded declines
  
2. An interest payment on a loan is normally included as:
  - A. An expense on an income statement
  - B. An asset on a net worth statement
  - C. A source of cash on a cash flow statement
  - D. All of the above
  - E. None of the above
  
3. Crop insurance products that key off revenue:
  - A. Can pay a loss based on either low yields or low prices
  - B. Are too expensive on average compared to the benefits
  - C. Are not subsidized by government programs since farmers pay premiums for the insurance
  - D. All of the above
  - E. None of the above

4. Return on assets is one measure of:
- A. Profitability
  - B. Solvency
  - C. Liquidity
  - D. All of the above
  - E. None of the above
5. A \_\_\_\_\_ gives the buyer the right, but not the obligation to sell the underlying futures at the \_\_\_\_\_.
- A. Hedge-to-arrive contract, strike price.
  - B. Put option, strike price
  - C. Put option, opening bell
  - D. Call option, daily closing price
  - E. Call option, strike price
6. A farmer purchases 525 pound feeder steers for \$1.20 per pound and plans to sell the steers at 800 pounds. The farmer estimates the total cost of gain to be \$0.50 per pound. The nearest breakeven price when the steers are sold at 800 pounds is:
- A. \$1.02 per pound
  - B. \$0.60 per pound
  - C. \$1.20 per pound
  - D. \$0.96 per pound
  - E. \$0.72 per pound
7. A farmer has a debt-to-asset ratio of 0.30. The current liabilities total \$60,000 and the non-current liabilities total \$120,000. What is the value of the assets?
- A. \$300,000
  - B. \$150,000
  - C. \$600,000
  - D. \$450,000
  - E. None of the above
8. For purposes of deducting expenses when preparing income taxes, which assets are normally depreciated?
- A. Raised breeding livestock
  - B. Crops in the field
  - C. Livestock purchased for resale
  - D. Machinery
  - E. All of the above

9. Futures contracts are:
- A. The same as forward contracts
  - B. Standardized contracts to make or take delivery of a commodity at a predetermined place and time
  - C. Contracts with standardized price terms
  - D. All of the above
  - E. None of the above
10. If the price of a commodity is below equilibrium, the quantity supplied will be less than the quantity demanded resulting in a:
- A. Surplus
  - B. Boycott
  - C. Monopoly
  - D. Shortage
11. As the price of nitrogen fertilizer decreases relative to the price of wheat, the most profitable level of fertilization most likely:
- A. Increases
  - B. Stays the same
  - C. Decreases
  - D. Becomes negative
12. If I produce more corn, allowing me to produce more hogs, then those two enterprises are \_\_\_\_\_ on my farm.
- A. Competitive
  - B. Supplementary
  - C. Complementary
  - D. All of the above
  - E. None of the above
13. Accrual income increases if:
- A. Crops in inventory are sold at inventory
  - B. Breeding stock is sold for less than inventory value
  - C. Expenses are paid
  - D. Crops are produced and stored in inventory
  - E. None of the above

14. The role of price in a free market is to serve as a guide:
- A. To shifting the supply curve
  - B. To shifting the demand curve
  - C. To deciding how productive inputs are
  - D. In deciding what, when and how much to produce
  - E. All of the above
15. Soybean meal and distillers grains are substitutes for each other in many livestock feed rations. Assuming that they are substitutes, a decrease in the price of distillers grain would cause the demand for soybean meal to:
- A. Shift to the left
  - B. Shift to the right
  - C. Decrease
  - D. Remain unchanged
16. Which of the following is **not** included in an accrual basis income statement?
- A. Operating expenses
  - B. Interest expense
  - C. Principal payments
  - D. Depreciation
  - E. All of the above
17. A farmer is purchasing a new tractor at a cost of \$150,000. His dealer will finance the tractor under the following terms: 25% down payment with the balance repaid in equal principal payments over the next 5 years at 7% APR. The farmer expects the tractor to last for 10 years and have a salvage value of \$20,000. How much interest will the farmer pay the first year of the loan?
- A. \$7,875.00
  - B. \$5,600.00
  - C. \$10,000.00
  - D. \$5,250.00
  - E. None of the above

18. Increasing interest rates may have the following impacts:
- A. Increase the cost of borrowed money
  - B. Decrease the present value of investments
  - C. Decrease the value of land
  - D. All of the above
  - E. None of the above
19. Hedging involves:
- A. Taking a futures position opposite to one's current cash market position
  - B. Taking a futures position identical to one's current cash position
  - C. Holding only a futures market position
  - D. Holding only a cash market position
  - E. None of the above
20. The premise that makes hedging possible is cash and futures prices:
- A. Move in opposite directions
  - B. Move upward and downward by identical amounts
  - C. Generally change in the same direction by similar amounts
  - D. Are regulated by the exchange
  - E. None of the above
21. You are considering the purchase of a combine, rather than continuing to hire a custom operator at \$22.00 per acre. If you purchase the machine, the annual fixed costs (interest, depreciation, etc.) will be \$24,000.00. The variable cost is \$16.00 per acre including the extra labor. There will be no other changes in costs and other returns associated with ownership, and no savings other than the customer charges. How many acres must be harvested each year in order to justify (on a breakeven basis) purchasing the combine?
- A. 1,091
  - B. 3,000
  - C. 1,200
  - D. 4,000
  - E. None of the above

22. What is the present value of a \$10,000 payment to be received 5 years from now if the interest rate is 8% compounded annually?
- A. \$10,000.00
  - B. \$8,573.39
  - C. \$9,259.26
  - D. \$7,364.19
  - E. \$6,805.83
23. What is the future value 5 years from now of \$10,000 invested today in an investment that earns 8% compounded annually?
- A. \$10,000.00
  - B. \$12,963.14
  - C. \$13,219.21
  - D. \$14,693.28
  - E. \$11,664.00
24. When conducting a capital budgeting investment analysis, a lower discount rate will:
- A. Increase the NPV of the investment
  - B. Decrease the NPV of the investment
  - C. Make the investment less profitable
  - D. Not change the results of the analysis
  - E. None of the above
25. A feedlot operator purchases a pen of 100 feeder steers with an average weight of 765 pounds and sells them at an average weight of 1223 pounds. Total feed cost for the pen is \$30,228.00. Feed cost per pound of gain is equal to:
- A. \$0.660
  - B. \$0.560
  - C. \$0.755
  - D. \$0.770
  - E. None of the above
26. The term basis is:
- A. The difference between cash market prices in different locations
  - B. The difference between prices for different delivery months
  - C. The difference between the local cash price and a futures price
  - D. Relevant only to speculation
  - E. None of the above

27. Which of the following is normally referred to as the “leverage ratio?”
- A. Debt/Asset ratio
  - B. Debt/Equity ratio
  - C. Equity/Asset ratio
  - D. Operating/Expense ratio
  - E. None of the above
28. Economies of scale means that:
- A. Total costs increase as the enterprise gets larger
  - B. Large farms are less profitable
  - C. Per unit cost of production decreases as the enterprise gets larger
  - D. Per unit cost of production increases as the enterprise gets larger
29. Discounting is used to:
- A. Calculate a present value
  - B. Calculate a future value
  - C. Calculate a loan payment
  - D. Amortizing a loan
  - E. None of the above
30. Price elasticity of supply measures:
- A. The responsiveness of quantity demanded to price
  - B. The responsiveness of price to quantity demanded
  - C. The responsiveness of supply to demand
  - D. The responsiveness of quantity supplied to price
  - E. None of the above
31. Which ratio measures solvency?
- A. Debt to Asset Ratio
  - B. Current Ratio
  - C. Operating profit margin ratio
  - D. Interest expense ratio
  - E. None of the above

32. Which of the following is normally included on a cash flow statement?
- A. Equity in crops growing in the field
  - B. Remaining value of purchased depreciable assets
  - C. Value of unpaid labor
  - D. Depreciation on machinery
  - E. None of the above
33. A balance sheet includes:
- A. Net income from the previous year
  - B. Family living expenses already paid
  - C. Cash expenses paid last year
  - D. Long term debts owed
  - E. None of the above
34. Why might cash basis schedule F income be greater than accrual management income for the same farm?
- A. Accelerated depreciation on the schedule F
  - B. Accumulation of unsold grain inventory during the year
  - C. Selling off of last year's grain
  - D. Both A and B
  - E. Both A and C
35. In 2010, Fred Farmer had net farm income of \$140,000. Fred had total business assets of \$850,000, total business liabilities of \$250,000, and a value of farm production of \$300,000. Fred paid \$20,000 in interest and had unpaid labor of \$50,000. The operating profit margin for 2010 would be:
- A. 18.3%
  - B. 25.8%
  - C. 36.7%
  - D. 42.5%
  - E. None of the above
36. For a normal good, an increase in income will lead to:
- A. A movement up the demand curve
  - B. A leftward shift of the demand curve
  - C. A rightward shift of the demand curve
  - D. A movement down the demand curve



37. Leverage is:
- A. Always a good thing
  - B. Never a good thing
  - C. A good thing when interest rates on debt are high
  - D. A good thing when rates earned are greater than rates paid
  - E. None of the above
38. Accelerated depreciation may be a good management choice because:
- A. It shifts after tax income into future years
  - B. It reduces the total tax bill over time
  - C. Machinery wears out faster now than it used to
  - D. It shifts after tax income into earlier years
  - E. None of the above
39. The Internal Rate of Return is:
- A. The return on investments internal to a bank
  - B. The return on assets internal to a farming operation
  - C. The return on internal equity
  - D. The discount rate that makes net present value zero
  - E. None of the above
40. If the price of wheat goes down relative to the price of corn:
- A. Farmers will not change planting intentions
  - B. Farmers will plant more wheat and less corn
  - C. Farmers will plant more corn and less wheat
  - D. Feeders will use more corn for feed
  - E. Both B and C
41. Assume a farmer hedged the sale price of his corn for harvest delivery at \$6.00 using the December corn futures? The basis at harvest is \$0.60 under December corn futures and the local corn cash price is \$5.00. What price would the farmer receive?
- A. \$5.00
  - B. \$5.40
  - C. \$6.00
  - D. \$.60
  - E. None of the above

42. A business is solvent if:
- A. Value of total assets exceeds value of total liabilities
  - B. Cash flow is enough to cover family living expenses
  - C. Cash flow covers depreciation expenses
  - D. All the above
  - E. None of the above
43. The present value of \$10,000 you expect to receive 15 years from now, if the interest rate is 7% is:
- A. More than \$10,000
  - B. Increases if you wait longer to get the money
  - C. Less than \$10,000
  - D. Increases if the interest rate increases
  - E. None of the above
44. A high “asset turnover” ratio could be a result of:
- A. High fertilizer prices
  - B. Exceptionally high yields
  - C. Owning lots of low productivity land
  - D. Over investment in machinery
  - E. None of the above
45. When doing some analysis, Farmer Joe values his equity at its opportunity cost. This is the amount that:
- A. Joe pays himself in cash for his labor
  - B. His equity could earn if it was used elsewhere
  - C. Is added to net profit as a result of using the resource
  - D. His labor could earn if it was used elsewhere, either within or outside the farm business
  - E. None of the above
46. Which of the following is (are) strategy(ies) for reducing “marketing” risk:
- A. Using forward contracts to sell grain before harvest at attractive prices
  - B. Applying insecticide to growing crops
  - C. Purchasing property loss insurance to protect against such events as wind damage to farm buildings
  - D. Maintaining a low debt/equity ratio for the farm
  - E. All of the above

47. A certain wheat farm has had yields of 42, 47, 39, 43, 45, 49, 43, 41, 48, and 46 bushels per acre over the past 10 years, respectively. The current local forward contract wheat bid is \$6.00/bushel for harvest delivery. Assuming past yields are a good indicator of the future, what is the “expected dollar value” of the farm’s wheat production per acre?
- A. 44.3 bushels
  - B. \$265.80
  - C. \$350.00
  - D. \$185.75
  - E. \$221.50
48. Assume the goal is to maximize after tax profit. An appropriate tax management strategy for the farm business over time is:
- A. Minimize tax obligations each year
  - B. Even out income from year to year
  - C. Shift as much income as possible to the current year
  - D. Not consider tax implications when making management decisions
  - E. None of the above
49. The present value of future incomes will:
- A. Decrease if interest rates increase
  - B. Increase if interest rates increase
  - C. Decrease if the future incomes are shifted closer to the present
  - D. Increase if the future incomes are shifted further in the future
  - E. None of the above
50. Increasing costs of production for wheat should:
- A. Shift the demand for wheat to the left
  - B. Shift the demand for wheat to the right
  - C. Shift the supply for wheat to the right
  - D. Shift the supply for wheat to the left
  - E. None of the above