Name:________________________

Grain Market Short Course
Mid-Term Examination
(Due February 3, 2003)

Part I. Multiple Choice Questions: (Circle the letter associated with the best answer. Each question is worth 3 points.)

1) If cash price falls by less than futures then basis:
   a) strengthened.
   b) remained constant.
   c) weakened.
   d) none of the above.

2) Basis contracts contain no price risk.
   a) True
   b) False

3) A call option provides the owner the right to:
   a) buy a futures contract at the strike price.
   b) sell a futures contract at the strike price.
   c) buy a futures contract at the current futures price.
   d) sell a futures contract at the current futures price.

4) Delayed price contracts are one of the less risky market strategies.
   a) True
   b) False

5) If I want the right to hedge corn production later, I would:
   a) buy a futures contract.
   b) sell a futures contract.
   c) buy call option corn.
   d) buy a put option.

6) A put option has intrinsic value when:
   a) the strike price is below the futures price.
   b) the strike price is above the futures price.
   c) the premium is greater then zero.
   d) call options never have intrinsic value.

7) An option's strike price is usually the same as the current futures price.
   a) True
   b) False

8) Basis usually gets weaker after harvest.
   a) True
   b) False

9) Prices are less volatile than basis.:
   a) true
   b) false

10) The expected minimum price from a put option does not change regardless of what happens to basis.
   a) True
   b) False

11) Most producers hedge in the futures market:
   a) True.
   b) False.

12) A harvest basis which is stronger than normal provides an incentive to:
   a) Sell at harvest.
   b) Buy a put option.
   c) Store grain.
   d) None of the above.

13) If the futures price for soybeans is $5.65, and a put option with a $5.60 strike price is selling for 4 cents:
   a) The time value of the option is 4 cents.
   b) The intrinsic value of the option is 4 cents.
   c) The option is in the money.
   d) This option could not sell for 4 cents.

14) Prices can usually be accurately forecast based on their level the last three years.
   a) True
   b) False

15) A function of futures markets is to:
   a) facilitate price discovery.
   b) provide a location where rich people can quickly and easily get rid of all their money.
   c) make dumb people poor.
   d) none of the above.

16) If I expect to get $2.90 from a hedge, and basis turns out 8 cents weaker than I expected, the actual price I get is:
    - a) $2.90
    - b) $2.98
    - c) $3.00
    - d) $2.82

17) Grain elevators almost never hedge.
    - a) true
    - b) false

18) If I hedge and then do not make a crop, the grain elevator can sue me for not fulfilling my delivery obligation.
    - a) true
    - b) false

19) Margin calls only happen when futures prices rise.
    - a) True
    - b) False

20) Basis risk is less then price risk.
    - a) True
    - b) False

Part II. Use the information below to answer the following questions. Each question is worth 5 points. Write out any formulas you might use to insure partial credit should you make a math error.

It is currently April 20. You are growing soybeans which you expect to harvest on October 20. You have the following information about the markets:

1) The local elevator is offering a forward cash contract for October delivery at
2) November futures for soybeans are trading for $6.75 per bushel.
3) Futures for March of next year are trading for $7.15 per bushel.
4) Basis in October last year was -$0.21, and two years ago it was -$0.25. Three years ago the October basis was -0.22.
5) Basis in February of the last three years was $-.15, -$.19, and -$.13
6) It will costs you 3.5 cents per month to store soybeans after they are harvested.

Questions:

1) Which of the six pieces of information above is irrelevant to your marketing decision?

2) If you hedge today, and in October the November futures price is $6.05 per bushel, and the cash price is $5.90, will you be better off or worse off than you expected? Why?

3) Based on the information available to you on April 20, does it look like you should store soybeans until February? How much money per bushel would you expect to make or lose if you do?

4) You call the Psychic Friends Network (for most people this happens after bar time) and they tell you that November soybean prices will fall $0.82 per bushel by October and that basis will be $0.31 stronger than expected. If they are right, what will be the cash price in October?

5) The initial margin requirement for soybeans is $1000. Maintenance margin is $750. If you hedge today (April 20) and November soybeans are $6.85 per bushel on May 1, how much money do you need to send your broker?

6) You call the local elevator (remember it is April 20) and they offer you a forward cash contract for October delivery of $5.55 per bushel. Is this a good deal? Why?

7) If you hedge for October delivery, and basis turns out to be 8 cents stronger than you expected, what will be your net selling price at harvest?

8) If the basis in October ends up being -5 cents and you decide to store soybeans, what would you need to have happen to make money (be specific).?

9) Describe how to forecast the basis for next year.