A. Circle the best answer. Put a box around your second choice, if you wish. (4 points each)

1. Under current USDA rules a grain farmer can receive a Loan Deficiency Payment (LDP) equal to the difference between the ___________ on each bushel of grain produced.
   a. futures price and local cash price
   b. futures price and the county loan rate
   c. posted county price (PCP) and the county loan rate
   d. actual selling price and the county loan rate

2. Some types of crop revenue insurance increase the level of gross revenue guaranteed when:
   a. the farm’s actual yield is greater than its historical proven yield
   b. the futures price is lower at harvest than it was in February
   c. the futures price is higher at harvest than it was in February
   d. the futures price at harvest is higher than the USDA loan rate

3. A forward contract for selling grain differs from a futures contract in that:
   a. it is an agreement to sell to a local elevator rather than the Chicago Board of Trade
   b. the selling price is usually higher
   c. the contract is repurchased when it is time to deliver the grain
   d. the grain is usually not actually delivered

4. The basis for a grain futures contract for early summer delivery is usually:
   a. wider at harvest than in the spring
   b. wider in eastern Iowa than in western Iowa
   c. inverted (cash higher than futures) at harvest
   d. the same every year

5. A large livestock feeder who is concerned about the risk that the price for purchased feed will go up could set a price ceiling by:
   a. buying a PUT option
   b. selling a PUT option
   c. buying a CALL option
   d. selling a CALL option

6. Since Russia changed the organization of its agriculture from all phases being centrally planned by the government to a “free market” economy, prices that the farms receive for their products have:
   a. increased significantly
   b. stayed about the same
   c. decreased significantly
   d. some have increased, some have decreased
7. When a dairy farm sells a truckload of cull cows that were raised on the farm, the revenue received will not be subject to:
   a. self-employment tax
   b. state income tax
   c. federal income tax

8. IRS Schedule F is used to report:
   a. interest and dividends income
   b. nonfarm business income
   c. capital gains income
   d. farm income

9. On a Net Worth Statement, current assets are all those that:
   a. are owned on the date of the statement
   b. have been produced or acquired within the last 12 months
   c. will probably be sold or used up within the next 12 months
   d. were sold within the last 12 months

10. The proportion in which production under a crop-share lease is divided between the landowner and the tenant should be based on:
    a. federal income tax regulations
    b. traditional customs
    c. how the variable costs of production are shared
    d. how the total costs of production are shared

11. The change in cost value net worth from the beginning of the year to the end of the year depends on all the following except:
    a. accrual net farm income
    b. change in land values
    c. withdrawals for family living expenses
    d. investments of nonfarm income into the farm

12. A banker who is considering an application for an operating line of credit from a family with a current ratio of 1.5 to 1 would probably ask them for:
    a. an enterprise budget
    b. a cash flow budget
    c. a whole farm budget
    d. a partial budget

13. Which type of budget shows both net farm income and net cash flow?
    a. an enterprise budget
    b. a cash flow budget
    c. a whole farm budget
    d. a partial budget
B. Answer the following and show your work where needed.

14. Assume the following market prices are available at harvest: (10 points)

   - Cash corn at the local elevator          $2.40
   - Futures contract price for May corn           2.80
   - Premium to buy a PUT option at a $3.00 strike price         .20

   a. If the May futures price turns out to be $2.50, and the basis in May is $.25, $__________
      what is the local cash price in May?

   b. How much would the PUT option likely be worth in May? $__________

      What would be the net price achieved from implementing each of these pricing strategies?
      Ignore storage costs. Show your work.

   c. Wait and sell for cash in May   $__________

   d. Hedge on the futures market until May, then sell for cash $__________

   e. Buy a PUT option until May, then sell for cash $__________

15. Describe the three types of farms found in Russia today. (6 points)

   a. 

   b. 

   c. 

16. A farm partnership purchased a new grain truck for $50,000. After 4 years they have claimed $30,000 of depreciation on their federal income tax returns. If they then sell it for $38,000, how many $ of the following would they have to report? (6 points)

   recaptured depreciation       $__________

   capital gain                   $__________

   capital loss                   $__________
17. Golden Grains, Inc., is considering three different crop insurance policies for their corn production:

a. MPCI yield insurance at 75% of their APH yield of 140 bu. per acre and 100% of the insurable price of $2.25 per bushel.

b. Standard revenue insurance at a fixed guarantee of 75% of their projected revenue based on their APH yield of 140 bu. per acre and the average February futures price of $2.40.

c. Revenue insurance with the same initial guarantee, but with the option for a higher guarantee if prices rise by harvest.

What would be the level of the final guarantee, the actual yield or actual revenue, and the indemnity payment received for each policy if their actual yield is only 100 bushels per acre, and the futures price at harvest is $3.00 per bushel? (12 points)

<table>
<thead>
<tr>
<th>Policy</th>
<th>Final Guarantee per Acre</th>
<th>Actual Yield or Revenue</th>
<th>Indemnity Payment per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. A farmer obtains a marketing loan from the USDA for $5.00 per bushel of soybeans, at 6% annual interest. Six months later she is ready to sell the soybeans. For each of the Posted County Prices below, how much would she have to pay the USDA to cancel the loan and interest? (6 points)

<table>
<thead>
<tr>
<th>PCP</th>
<th>Loan Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5.60</td>
<td>$_______________________ per bu.</td>
</tr>
<tr>
<td>$5.10</td>
<td>$_______________________ per bu.</td>
</tr>
<tr>
<td>$4.80</td>
<td>$_______________________ per bu.</td>
</tr>
</tbody>
</table>
A. Frank and Eileen Smith farm with their four children. Eileen also works part time as a school nurse. They are wondering how much tax they will owe to the U.S. government this year. Ignore state taxes.

Below are the Federal tax brackets, and deductions and exemptions for 2000.

<table>
<thead>
<tr>
<th>Type of Tax</th>
<th>Bracket Range</th>
<th>Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal income tax</td>
<td>$0 to $43,850</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>$43,850 to $105,950</td>
<td>28%</td>
</tr>
<tr>
<td>Self-employment tax</td>
<td>$0 to $76,200</td>
<td>15.3%</td>
</tr>
<tr>
<td></td>
<td>Over $76,200</td>
<td>2.9%</td>
</tr>
<tr>
<td>Personal exemption</td>
<td>$2,800 per dependent</td>
<td></td>
</tr>
<tr>
<td>Standard deduction</td>
<td>$7,350 for a married couple filing jointly</td>
<td></td>
</tr>
</tbody>
</table>

They had the following income to declare this year:
- Wages: $23,000
- Interest, dividends: $3,000
- Farm income: $42,000
- Capital gains from farm sales: $7,000

The family consists of the husband, wife, and four young children. They file a joint tax return.

Calculate the following values for them: (14 points)

Federal income tax
Gross income $________

Standard deduction and exemptions $________

Taxable income $________

Federal income tax due $________

Self-employment tax
Self-employment income $________

Self-employment tax due $________

Marginal tax rate ____________%
20. Prairie Valley Farms had the following cash transactions during the last accounting period:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cash In</th>
<th>Cash Out</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning balance</td>
<td></td>
<td></td>
<td>$6,500</td>
</tr>
<tr>
<td>Sold market hogs</td>
<td>18,300</td>
<td></td>
<td>24,800</td>
</tr>
<tr>
<td>Bought feed for pigs</td>
<td></td>
<td>4,100</td>
<td>20,700</td>
</tr>
<tr>
<td>Bought new feeders (equipment)</td>
<td></td>
<td>6,500</td>
<td>14,200</td>
</tr>
<tr>
<td>Borrowed money from bank for pigs</td>
<td>30,000</td>
<td></td>
<td>44,200</td>
</tr>
<tr>
<td>Bought 400 feeder pigs</td>
<td></td>
<td>20,000</td>
<td>24,200</td>
</tr>
<tr>
<td>Paid wages to farm employee</td>
<td></td>
<td>3,000</td>
<td>21,200</td>
</tr>
<tr>
<td>Made loan payment: principal</td>
<td></td>
<td>5,000</td>
<td>16,200</td>
</tr>
<tr>
<td>Made loan payment: interest</td>
<td></td>
<td>1,500</td>
<td>14,700</td>
</tr>
<tr>
<td>Sold a used stock trailer</td>
<td>3,000</td>
<td></td>
<td>17,700</td>
</tr>
<tr>
<td>Paid college tuition for children</td>
<td>5,000</td>
<td></td>
<td>12,700</td>
</tr>
</tbody>
</table>

Use the blanks on the right hand side to label each transaction as: (10 points)

- OP  - operating (income and expenses)
- CA  - capital assets (purchases and sales)
- FN  - financing (loans)
- NF  - nonfarm (income or expenses)

21. List the four standard farm financial statements recommended by the Farm Financial Standards Council. (4 points)

a. 

b. 

c. 

d. 

Happy Holidays!
Grades should be on the class home page by Friday at 5:00 pm.
ANSWERS

1. C
2. C
3. A
4. A
5. C
6. C
7. A
8. D
9. C
10. D
11. B
12. B
13. C

14. 
   a. futures price $2.50 – basis $.25 = cash price $2.25 
   b. Original value of PUT $.20 – (May futures $2.50 – harvest futures $2.80) = $.50
   c. May cash price $2.25
   d. Sell futures $2.80 – buy back futures $2.50 + sell cash $2.25 = $2.55
   e. Buy PUT -.20 + sell PUT $.50 + sell cash $2.25 = $2.55

15. 
   a. Large cooperative farms, formerly state collective farms
   b. Small, privately owned farms
   c. Small family garden plots

16. 
   recaptured depreciation = selling price $38,000 minus adjusted basis ($50,000 -$30,000) = $18,000
   capital gain = $0 (only if selling price exceeds original purchase price)
   capital loss = $0 (only if selling price is less than the adjusted basis)

17. 

<table>
<thead>
<tr>
<th>Final Guarantee per acre</th>
<th>Actual Yield or Revenue</th>
<th>Indemnity Pmt. Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 140 bu. x 75% = 105 bu.</td>
<td>100 bu.</td>
<td>(105 bu. – 100 bu.) x $2.25 = $11.25</td>
</tr>
<tr>
<td>b. 140 bu. x $2.40 x 75% = $252</td>
<td>100 bu. x $3.00 = $300</td>
<td>$0</td>
</tr>
<tr>
<td>c. 140 bu. x $3.00 x 75% = $315</td>
<td>100 bu. x $3.00 = $300</td>
<td>($315 – 300) = $15.00</td>
</tr>
</tbody>
</table>

18. 
   Interest on loan = $5.00 x 6% x 6/12 yr. = .15
   If PCP = $5.60, payment = $5.15 ($5.00 original loan + .15 interest)
   If PCP = $5.10, payment = $5.10
   If PCP = $4.80, payment = $4.80

   Pay back lower of PCP or loan + interest.

19. 
   Gross income = $23,000 + 3,000 + 42,000 + 7,000 = $75,000
   Standard deduction and exemptions = $7,350 + (6 x $2,800) = $24,150
   Taxable income = $75,000 - $24,150 = $50, 850
   Federal income tax due = (15% x $43,850) + (28% x ($50,850 - $43,850)) = $8537.50
   Self-employment income = $42,000 (farm income only)
   Self-employment tax = $42,000 x 15.3% = $6,426
   Marginal tax rate = 28% + 15.3% = 43.3%
20.  
OP
OP
CA
FN
OP
OP
FN
OP
CA
NF

21.  
   a. Net worth statement (or balance sheet)
   b. Net farm income statement (or profit and loss statement)
   c. Statement of cash flows
   d. Statement of owner equity