Farm Information Systems and Financial Statements

Circle the best answer. Put a square around your second choice, if you wish. You will receive half credit if your second choice is correct. (4 pts. each)

1. Another name for the Net Farm Income statement is the:
   a. statement of cash flows
   b. profit and loss statement
   c. financial statement
   d. balance sheet

2. The biggest disadvantage to using generic accounting programs like “Quicken” for farm business accounting is:
   a. they do not allow you to track physical quantities such as bushels or pounds
   b. they are very expensive
   c. they are complex and hard to learn
   d. they do not provide information for income tax returns

3. Net Farm Income represents a return to all the following resources except:
   a. equity capital (net worth)
   b. borrowed capital (debt)
   c. unpaid labor
   d. management

4. The Chart of Accounts for a farm accounting system is:
   a. a list of all unpaid bills (accounts payable)
   b. a list of all the lenders from which the farm has borrowed money
   c. a list of all checking and savings accounts the farm has
   d. a list of the income and expense categories and their corresponding code numbers

5. According to Virginia Berger, the Iowa Farm Business Association offers all the following services except:
   a. short-term operating loans
   b. help with farm income tax preparation
   c. comparison of farm business performance measures with those of other farms
   d. sales of farm accounting software

6. Bovine Acres had the following sales, purchases, and inventory values for their beef cow herd last year. Based on these numbers, how much was their total value of beef produced for the year? (4 pts.)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales of calves and breeding livestock</td>
<td>$43,500</td>
</tr>
<tr>
<td>Purchases of breeding livestock</td>
<td>13,100</td>
</tr>
<tr>
<td>Beginning inventory value of the herd</td>
<td>142,000</td>
</tr>
<tr>
<td>Ending inventory value of the herd</td>
<td>151,000</td>
</tr>
<tr>
<td>Value of beef produced?</td>
<td>$________</td>
</tr>
</tbody>
</table>
7. a. Explain the difference between the cost value and the market value of a farm asset. (3 pts.)

b. Which type of valuation would you use when completing a balance sheet for a loan application, and why? (3 pts)

8. What does each of the farm business analysis values listed below measure? Indicate with the corresponding letter (one answer for each one, only). (2 pts.)

a. size or scale of the business  
b. physical efficiency  
c. economic efficiency  
d. marketing skill  
e. cost control skill  

_____ Average price per bushel received from sale of soybeans  
_____ Tons of cotton harvested per acre  
_____ Value of total farm assets  
_____ Asset turnover ratio  
_____ Average value of cash rent paid per acre  
_____ Gross farm income per year

9. Using a double-entry farm accounting system, show by how much each of the accounts shown below would increase or decrease when the following transactions are entered: (4 pts.)

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Income</th>
<th>Expense</th>
<th>Cash on Hand</th>
<th>Other Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid veterinarian for services, $500 by check</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrowed $50,000 that will be used to purchase a new tractor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. List the name of each of the four standard farm financial statements and describe briefly what it summarizes. (3 pts each)

a. 

b. 

c. 

d. 

11. Give an example of each of the following classes of farm assets: (6 pts)

a. Current _____________________________

b. Intermediate _____________________________

c. Long-term (fixed) _____________________________

12. Give the proper account code for each of the cash transactions listed below. (2 pts each)

<table>
<thead>
<tr>
<th></th>
<th>Account Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Operating income</td>
<td>600 Operating expense</td>
</tr>
<tr>
<td>200</td>
<td>Capital asset sale</td>
<td>700 Capital asset purchase</td>
</tr>
<tr>
<td>300</td>
<td>Loan received</td>
<td>800 Loan repaid</td>
</tr>
<tr>
<td>400</td>
<td>Nonfarm income</td>
<td>900 Nonfarm expense</td>
</tr>
</tbody>
</table>

_____ a. Borrowed $20,000 to buy a new farm pickup
_____ b. Made the first monthly payment on the loan, $500 principal
_____ c. Paid the interest on the loan, $200
_____ d. Paid wages of $5,000 to workers for constructing a new machine shed
_____ e. Paid tuition to ISU
_____ f. Sold 50 tons of hay for $4,000
13. Below are two financial statements from Fantastic Fruit Farm, Inc. Using this information, calculate the values below.

<table>
<thead>
<tr>
<th>Assets (market values)</th>
<th>Beginning</th>
<th>Ending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$20,000</td>
<td>$16,000</td>
</tr>
<tr>
<td>Fruit in storage</td>
<td>40,000</td>
<td>52,000</td>
</tr>
<tr>
<td>Machinery</td>
<td>50,000</td>
<td>45,000</td>
</tr>
<tr>
<td>Land</td>
<td>25,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$135,000</td>
<td>$143,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating loan balance owed</td>
<td>$20,000</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash In</th>
<th>Cash Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit sales</td>
<td>Wages, interest, supplies</td>
</tr>
<tr>
<td>$100,000</td>
<td>$70,000</td>
</tr>
<tr>
<td>Operating loan received</td>
<td>Operating loan repaid</td>
</tr>
<tr>
<td>40,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Capital assets sold</td>
<td>Capital assets purchased</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nonfarm income</td>
<td>Nonfarm expenses</td>
</tr>
<tr>
<td>0</td>
<td>$24,000</td>
</tr>
<tr>
<td></td>
<td>$144,000</td>
</tr>
</tbody>
</table>

Show the correct value for each of the following.  
(2 pts each)

a. Beginning farm net worth (market value) $ _____________  
   Ending farm net worth (market value) $ _____________  
   Change in net worth during the account period (+ or -) $ _____________

b. Cash farm income (gross revenue) $ _____________  
   Cash farm expenses $ _____________  
   Accrual adjustment for inventory change (+ or -) $ _____________  
   Machinery depreciation $ _____________  
   Net farm income (accrual) $ _____________

c. Change in net worth due to change in market valuation of land $ _____________  
   Change in net worth due to retained net farm income $ _____________
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1. B
2. A
3. B
4. D
5. A
6. +$43,500
   - 13,100
   - 142,000
   +151,000
   $ 39,400

7. a. Cost value is the original purchase price minus all depreciation claimed to date.
   Market value is what an asset would sell for today.

   b. Market value more closely reflects the asset’s value as loan collateral.

8. D, B, A, C, E, A

9. Using a double-entry farm accounting system, show by how much each of the accounts shown below would increase or decrease when the following transactions are entered: (4 pts.)

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<td>$500</td>
<td>-$500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrowed $50,000 that will be used to purchase a new tractor</td>
<td></td>
<td></td>
<td>+50,000</td>
<td></td>
<td>+50,000</td>
</tr>
</tbody>
</table>

10. Net worth statement (Balance Sheet)
    Assets, liabilities, net worth

    Net Income Statement (Profit and Loss)
    Income, expenses, net income

    Statement of cash flows (Flow of Funds)
    Cash inflows, cash outflows, net cash flow

    Statement of Owner Equity
    Beginning and ending net worth, change in equity

11. a. Cash, grain, market livestock
    b. Machinery, breeding livestock
    c. Land, buildings

12. 300,
    800,
    600,
    700,
    900,
    100
13. a. Beginning farm net worth (market value) $ 115,000
    Ending farm net worth (market value) $ 133,000
    Change in net worth during the account period (+ or -) $ +18,000

b. Cash farm income (gross revenue) + $ 100,000
    Cash farm expenses - $ 70,000
    Accrual adjustment for inventory change (+ or -)
        +$52,000 – $40,000 + $ +12,000
    Machinery depreciation
        $50,000 – $45,000 - $ -5,000
    Net farm income (accrual) = $ 37,000

c. Change in net worth due to change in market valuation of land
    $30,000 – $25,000 $ +5,000
    Change in net worth due to retained net farm income
    $37,000 – $24,000 NF expense or 18,000 (ΔNW)– 5,000 (land) $ 13,000