Farm Information Systems

Circle the best answer. Put a square around your second choice if you want. (4 points each)

1. Which of the following would be classified as an intermediate farm asset?
   a. dairy cow
   b. 80 acres of farmland
   c. 1,000 gallons of diesel fuel
   d. Harvestore silo

2. The Internal Revenue Service requires farmers to report __________ each year.
   a. assets, liabilities and net worth
   b. all cash receipts and expenditures
   c. income and expenses based on accrual accounting
   d. income and expenses based on either cash or accrual accounting

3. Funds deposited in a farm account from a loan obtained to purchase a new chisel plow would be included as a receipt under the _________ section of a Statement of Cash Flows.
   a. operating (production)
   b. financing
   c. investing
   d. nonfarm

4. The accounting year for a farm business record system:
   a. is required by the IRS to match the calendar year
   b. should vary each year according to when grain is sold
   c. should match the production cycle of the major enterprises on the farm
   d. usually runs from July 1 to June 30 in the United States

5. Which of these is a measure of physical efficiency?
   a. net farm income
   b. pounds of feed used per pound of gain
   c. value of crops produced per acre
   d. number of crop acres owned and rented

6. “Enterprise” accounting shows the income and expenses from:
   a. each major type of crop or livestock on the farm
   b. each major asset on the farm
   c. each tract of land operated by the farm
   d. the entire farm business
7. “Prepaid expenses” on a farm balance sheet refers to:
   a. expenses owed to an input supplier for materials that have been delivered but not paid for yet
   b. inputs such as seed or feed that have been delivered but not used yet
   c. inputs that were paid for with funds obtained through an operating loan
   d. money paid to an input supplier for items such as feed or seed that will be purchased in the next accounting year

8. A cash grain farm that rents 90% of its cropland would most likely have an above average value for its:
   a. asset turnover ratio
   b. crop value per acre
   c. gross income per person
   d. bushels per acre

B. Answer as indicated.

9. Indicate with the appropriate letter which financial statement is described by each of the statements below. (2 points each)
   A. net worth statement
   B. net income statement
   C. statement of cash flows
   D. statement of owner equity
   a. _____ also called a Profit and Loss Statement
   b. _____ corresponds to a point in time
   c. _____ lists all the debts owed by the farm
   d. _____ shows how net worth (equity) changed during the year
   e. _____ includes purchases and sales of capital assets
   f. _____ summarizes all receipts and expenditures

10. Show both the cost and market values for the following assets. (12 points)
    | Cost | Market |
    |------|--------|
    a. 20,000 bushels of wheat that cost $2.50 per bushel to produce. Current price at the local elevator is $3.00, but half of it has been contracted for delivery at $3.20. Ignore delivery costs. |
    |      |        |
    b. A silage chopper was purchased 5 years ago for $80,000 and has been depreciated on a 10-year straight line rate. The dealer has offered you $50,000 for it on trade. |
    |      |        |
    c. 40 acres purchased in 1980 for $3,500 per acre, worth only $3,000 if you sold it today. |
    |      |        |
11. What accounts for the difference between “Net Farm Income from Operations” and “Net Farm Income?” (4 points)

12. Describe three types of actions a farmer who files his income taxes using cash accounting methods could take in order to postpone taxes for another year. (6 points)
   a. 
   b. 
   c. 

13. A farm family who operates a sole proprietorship received their latest tax return from their CPA. They had $60,000 of ordinary farm income and $5,000 of capital gains income. They are eligible for:
   - standard deduction of $10,000
   - 3 personal exemptions of $3,000 each
   - 1 child tax credit of $1,000

Given the following income tax rates, calculate their taxable income, federal income tax, self-employment tax, and capital gains tax. Show your work. (12 points)

<table>
<thead>
<tr>
<th>Taxable Income</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal income tax</td>
<td></td>
</tr>
<tr>
<td>$0 to $15,000</td>
<td>10%</td>
</tr>
<tr>
<td>$15,000 to $50,000</td>
<td>15%</td>
</tr>
<tr>
<td>$50,000 or more</td>
<td>25%</td>
</tr>
<tr>
<td>Capital gains tax</td>
<td></td>
</tr>
<tr>
<td>On any amount</td>
<td>12%</td>
</tr>
<tr>
<td>Self-employment tax</td>
<td></td>
</tr>
<tr>
<td>$0 to $87,000</td>
<td>15%</td>
</tr>
<tr>
<td>Over $87,000</td>
<td>3%</td>
</tr>
</tbody>
</table>

a. Taxable income (for federal income tax) $__________________

b. Federal income tax $__________________

c. Capital gains tax $__________________

d. Self-employment tax $__________________

14. Below are two financial statements from Fantastic Fruit Farm. Using this information, calculate the values below.
**Net Worth Statements**

<table>
<thead>
<tr>
<th>Assets (market values)</th>
<th>Beginning</th>
<th>Ending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash on hand</td>
<td>$20,000</td>
<td>$36,000</td>
</tr>
<tr>
<td>Fruit in storage</td>
<td>60,000</td>
<td>52,000</td>
</tr>
<tr>
<td>Machinery</td>
<td>50,000</td>
<td>63,000</td>
</tr>
<tr>
<td>Land</td>
<td>25,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$155,000</td>
<td>$181,000</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>$50,000</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

**Statement of Cash Flows**

<table>
<thead>
<tr>
<th>Cash In</th>
<th>Cash Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit sales</td>
<td>$140,000</td>
</tr>
<tr>
<td>Operating loans received</td>
<td>40,000</td>
</tr>
<tr>
<td>Capital assets sold</td>
<td>0</td>
</tr>
<tr>
<td>Nonfarm income</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>$180,000</td>
</tr>
</tbody>
</table>

**Show the correct value for each of the following:**

- **(2 points each)**
- **Show your work where necessary.**

a. Beginning farm net worth (market value) $________________

b. Ending current assets $________________

c. Net cash flow $________________

d. Cash farm income (gross) $________________

e. Cash farm expenses $________________

f. Accrual adjustment for inventory change (+ or -) $________________

Machinery depreciation $ 7,000

g. Net farm income (accrual) $________________

h. Change in net worth due to retained net farm income, if no land was purchased or sold. $________________
Farm Information Systems

A.
1. a
2. d
3. b
4. c
5. b
6. a
7. d
8. a

B.
9a. b
9b. a
9c. a
9d. d
9e. c
9f. c

10a. (10,000 bu. @ $3.00) + (10,000 bu. @ $3.20) = $62,000
    Cost: $62,000  Market: $62,000

10b. 80,000 x 5/10 = $40,000
    Cost: $40,000  Market: $50,000

10c. 40 a. x $3,500 = $140,000
    Cost: $140,000  Market: $120,000

11. Capital gains or losses.
12a. Sell grain or livestock later (next year).
12b. Pay expenses early.
12c. Use fast depreciation allowances.

13a. $60,000 – 10,000 – (3 x 3,000) = $41,000
13b. ($15,000 x 10%) + (41,000 – 15,000) x 15% - 1,000 = $4,400
13c. $5,000 x 12% = $600
13d. $60,000 x 15% = $9,000

14a. $155,000 (A) – 50,000 (L) = $105,000
14b. $36,000 (cash) + 52,000 (fruit) = $88,000
14c. $180,000 (in) – 164,000 (out) = $16,000
14d. Sales = $140,000
14e. Wage, interest, supplies = $70,000
14f. $52,000 (end) – 60,000 (begin) = $-8,000
14g. $140,000 (cash income) – 70,000 (cash expense) – 8,000 - 7,000 (mach deprec) =$55,000
14h. (141,000 (beg nw) – 105,000 (end now)) – 5000 = $31,000
    or $55,000 (NFI) – 24,000 (nonfarm expense) = $31,000