

Econ 333
Fall 2010
Exam 1
October 21, 2010

Name: Key
Lab Day: Tues. _____ Thurs. _____

Part I. Multiple choice (4 pts ea). Select the best answer.

1. Which of the following can you get from a properly prepared profit and loss statement that reflects the farm business?
- a. a measure of crops in inventory at the beginning of the year
 - b. a measure of business debt
 - c. your increase in net worth
 - d. the change in crop inventory on hand from the beginning of the year to the end of the year
 - e. all of the above
 - f. none of the above

2. For farm business analysis (management appraisal) purposes, not accounting for accounts receivable will:
- a. cause rate earned on equity (ROE) to be overstated
 - b. reduce your assets because asset values are lower
 - c. will not impact your rate earned on assets (ROA)
 - d. cause liabilities to be understated
 - e. overstate the level of equity
 - f. a and b above

3. Examples of accounting principles for business analysis include:
- a. objectivity, minimize taxes, evaluate inventory at conservative values
 - b. consistency, always use the cash method, minimize values
 - c. materiality, consistency, conservative
 - d. conservative, objectivity, soundness
 - e. consistency, soundness, disclosure
 - f. none of the above

4. Which of the following can you get from a properly prepared balance sheet?
- a. information to calculate your debt/asset ratio
 - b. a measure of business equity
 - c. your level of current assets
 - d. your level of deferred liabilities
 - e. all of the above
 - f. none of the above

5. Reasons for keeping farm records would include:
- a. farm business analysis
 - b. basis for farm planning
 - c. means of controlling financial affairs
 - d. All The Above

- d. all of the above
6. Three types of farm business analysis include:
- a. with other farms, with farm plan, over time within the farm
 - b. with other farms, with your neighbors' goals, with farm plan
 - c. with farm plan, over time within the farm, with non-similar farms
 - d. none of the above
7. In strategic planning, examples of external scanning would include:
- a. physical assets, the economy, history
 - b. the industry, the economy, culture of your business
 - c. the competition, financial structure, economic performance
 - d. management skills of operator, decision-making structure, physical assets
 - e. all of the above are part of external scanning
 - f. none of the above
8. There are different types of planning. With strategic planning, the focus is on:
- a. Am I doing a good job?
 - b. How do I get there or where I want to be?
 - c. Where am I going?
 - d. All of the above.
9. In strategic planning we are looking for a strategic fit. A strategic fit is where:
- a. we force the firm to be
 - b. we determine what the environment needs and what the firm has to offer
 - c. we minimize our cost of production
 - d. we generate the most revenue
 - e. All of the above.
10. A mission statement is:
- a. a short statement on the amount of profit you plan to generate
 - b. a short statement on how you plan to reduce your production costs
 - c. a short statement on why the business exists
 - d. a short statement on the types of crops you will produce
 - e. None of the above.
11. Some steps in business decision making would include:
- a. analyze the alternatives
 - b. establish goals and objectives
 - c. identify potential alternatives
 - d. decide on which alternative(s) to select
 - e. all of the above are steps in decision making

12. According to Dr. Edwards, the cash rent as a percent of crop value over the 2000 to 2009 time period has:
- a. increased
 - b. decreased
 - c. not changed much
 - d. decreased from 2000-2004 and then increased
 - e. increased from 2000-2004 and then decreased
13. According to Dr. Edwards the level of cash rent as a percent of land value from 1994-2008 has:
- a. increased
 - b. decreased
 - c. decreased from 1994-2000 and then increased from 1995-2008
 - d. increased from 1994-2000 and then decreased from 1995-2008

The following four questions are based on the attached herbicide tolerant soybeans following corn budget shown as file A1-20, pg 5.

14. If you crop share the land on a 55-45 arrangement (55% tenant), what is the tenant's production costs? The costs are shared like a typical 55-45 crop share arrangement. Additional information for clarity is as follows: lime, crop insurance, miscellaneous, and interest on preharvest variable costs are shared similar to seed and fertilizer costs. The tenant will pay all grain hauling and handling costs. Given this, what are the tenant's production costs per acre?
- a. \$400.33
 - b. \$169.88
 - c. \$230.45
 - d. \$165.63
 - e. None of the above.
15. If the soybean price is \$11.00 per bushel, what is the gross (total) revenue per acre for the tenant?
- a. \$495.00
 - b. \$272.25
 - c. \$605.00
 - d. \$222.75
 - e. None of the above.
16. How much potash was applied per acre of soybeans?
- a. 140 pounds
 - b. 36 pounds
 - c. 68 pounds
 - d. Can't determine with information provided.
 - e. None of the above.

17. How low does the price of soybeans need to go before you would not grow soybeans in the short run? Evaluate this question as though you are an owner-operator and you only have two options; grow soybeans or leave the land idle?
- a. \$3.77 per bushel or lower
 - b. \$8.90 per bushel or lower
 - c. \$5.12 per bushel or lower
 - d. \$4.32 per bushel or lower
 - e. None of the above.

The next **three** questions are based on the attached graph which shows the season price index for market cattle (Iowa-S. Minn).

18. In November you will be evaluating if you will place feeder cattle on feed. They will be ready for market in six months (May 2011). The average market price for market cattle in Iowa-Southern Minnesota this November (2010) is expected to be \$95.00 per hundred pounds. Given this, what do you expect the market cattle price (Iowa-Southern Minnesota) to be in six months (May 2011)?
- a. \$95.00
 - b. \$95.94
 - c. \$94.07
 - d. \$96.90
 - e. \$93.14
 - f. None of the above
19. Given the marketing month for the previous question (May 2011) and a market price of \$95.00 for market cattle in November 2010, what price range (or window) would you expect the price to be 95 percent of the time for May 2011?
- a. \$83.82 to \$104.31
 - b. \$85.05 to \$116.85
 - c. \$85.50 to \$106.40
 - d. \$73.58 to \$114.56
 - e. None of the above.
20. Of the months provided below, which one has the highest relative level of price risk?
- a. January
 - b. February
 - c. March
 - d. June

The next four questions are based on the attached crop share lease for 'Big Jim's Cyclone Farm'.

21. With the information as presented, what is the breakeven corn price per bushel for the tenant?
- a. \$3.52
 - b. \$3.92
 - c. \$3.20
 - d. \$2.75
 - e. None of the above.
22. Based on the information as provided, how should the crop be shared to be equitable?
- a. a 50-50 crop share
 - b. a 40-60 (40% tenant – 60% landlord) crop share
 - c. a 60-40 (60% tenant – 40% landlord) crop share
 - d. None of the above.
23. With the information as presented, what is the level of profit or loss per acre for the tenant?
- a. \$30.81
 - b. \$28.40
 - c. profit of \$45.49
 - d. loss of \$1.56
 - e. None of the above.
24. Is this lease fair and equitable?
- a. No
 - b. Yes
 - c. Can't determine with information provided.

Accept either

Attached you will find a cash flow budget and supporting information for Coasting Farms for the year 2005. It is used for the next ten questions (25-34). There are five pages for Coasting Farms.

25. With the information provided, what will be the projected annual operating loan that Coasting will need to take out in November 2005 to cover the cash shortfall in November? This is the additional loan for that month.
- a. \$9,908
 - b. \$4,161
 - c. \$14,069
 - d. \$14,156
 - e. Can't tell with the information provided.
 - f. None of the above.

26. If Coasting projected a hay price of \$85.00 per ton, what is the value of hay fed in October 2005?
- a. \$28,560
 - b. \$2,550
 - c. \$2,295
 - d. \$3,240
 - e. None of the above.
27. With the information provided, what is the projected ending operating (AO) loan balance at the end of October, 2005 for Coasting?
- a. \$8370.00
 - b. \$75.00
 - c. \$9,908
 - d. \$14,069
 - e. Can't tell with the information provided.
 - f. None of the above.
28. How much silage was fed in August 2005?
- a. 16 tons
 - b. 26 tons
 - c. 360 tons
 - d. Can't determine with information provided.
 - e. None of the above.
29. What is the bushels of corn in inventory in August 2005?
- a. 5381 bushels
 - b. 3459 bushels
 - c. 4593 bushels
 - d. 14,566 bushels
 - e. Can't determine with information provided.
 - f. None of the above.
30. What would the projected level of accrued interest that would be paid on the annual operating (AO borrowing) loan for the month of February 2005? Note: This is the total accrued interest that would be paid with the February payment. (The interest rate is 7.25 percent.)
- a. \$163.00
 - b. \$34.50
 - c. \$88.18
 - d. \$54.79
 - e. \$220.49
 - f. Can't calculate with the information provided.

31. What is the projected cash surplus or deficit (surpl. or def.) for the month of December 2005?
- a. \$11,340
 - b. \$11,923
 - c. \$14,156
 - d. \$500
 - e. None of the above.
32. What is the projected change in corn inventory from January 1, 2005 to December 31, 2005?
- a. \$0
 - b. \$11,376
 - c. 14,566 bushels
 - d. \$-7,650
 - e. None of the above.
33. What is the projected net farm income for Coasting Farms for 2005?
- a. \$7,369
 - b. \$261,257
 - c. \$124,583
 - d. \$17,000
 - e. \$81,154
 - f. \$42,957
34. If soybeans are valued at \$10.00 per bushel, what is the value of the projected number of bushels to be produced in 2005?
- a. \$15,960
 - b. \$10,480
 - c. \$21,972
 - d. \$19,625
 - e. None of the above.

The following four questions are based on attached enterprise budgets for I.M. Coasting.

35. If the silage value is \$40.00 per ton, what is the corn silage value fed per beef yearling steer fed?
- a. \$40.00
 - b. \$16.00
 - c. \$169.00
 - d. \$80.00
 - e. None of the above.

36. Given the corn production budget and the hog farrow to finish budget, how many litters of pigs can you feed out if you have 100 acres of corn? (You are going to use all the corn for hog feeding and you will not sell or purchase any corn.)
- a. 200-201 litters
 - b. 123-124 litters
 - c. 150-151 litters
 - d. Can't determine with the information provided.
 - e. None of the above.
37. Given the information provided in the silage budget, the projected level of profit (income over all production costs) per silage is?
- a. \$155.15
 - b. \$12.79
 - c. \$805.00
 - d. \$120.80
 - e. Can't calculate with the information provided in the steer budget.
38. If hogs, farrow to finish budget had 9 pigs sold per litter, how much does product income increase over the level shown?
- a. \$128.13
 - b. \$135.76
 - c. \$110.96
 - d. \$120.24
 - e. None of the above.

You are provided information as shown on 'Feeder Pig Worksheet' which is attached. There are two pages. They are used for the next five questions.

39. What is the supplement cost per pig?
- a. \$72.76
 - b. \$32.00
 - c. \$54.05
 - d. \$18.71
 - e. None of the above.
40. What is the estimated profit and return to management per pig (use the information provided in the example)?
- a. in the -\$3.59 range
 - b. in the -\$4.87 range
 - c. in the \$5.02 range
 - d. in the \$1.33 range
 - e. None of the above

41. If the market hog price is \$50.00 rather than \$47.00 as in the budget, what is the estimated profit and return to management per?
- a. \$5,450
 - b. -\$2435
 - c. \$3,062
 - d. \$2,079
 - e. None of the above.
42. What is the necessary revenue per market hog to produce hogs in the short run?
- a. \$41.76
 - b. \$50.13
 - c. \$45.13
 - d. \$48.33
 - e. None of the above.
43. What is the labor cost per pig in this example?
- a. \$7.00 per pig
 - b. \$14.00 per pig
 - c. \$9.50 per pig
 - d. \$4.50 per pig
 - e. It cannot be determined with the information provided.

Attached find a Balance Sheet for I.M. Coasting dated January 1, 2010. This will be used for the next six questions.

44. What is the current ratio for Coasting farm business? (The way we discussed in class.)
- a. 2.00
 - b. 1.31
 - c. 1.98
 - d. 2.52
 - e. 1.57
 - f. None of the above.
45. What is the working capital for Coasting farm business?
- a. \$104,769
 - b. \$307,982
 - c. \$25,023
 - d. \$90,948
 - e. None of the above.
46. What is the debt-to-asset ratio for Coasting farm business? (You are preparing the ratio for your banker.)
- a. .6943
 - b. .3676
 - c. .5120
 - d. .5438
 - e. None of the above.

47. What is the market valuation equity for Coasting farm business?

- a. \$60,598
- b. \$159,001
- c. \$307,982
- d. \$72,478
- e. Can't determine with the information provided.
- f. None of the above.

$$\begin{array}{r}
 632,354 \\
 - 473,353 \\
 \hline
 159,001 \\
 - 98,403 \\
 \hline
 60,598
 \end{array}$$

48. What is the level of retained earnings/contributed capital for Coasting?

- a. \$159,001
- b. \$251,202
- c. \$247,348
- d. \$325,470
- e. \$238,836
- f. Can't determine with the information provided.

\$247,384

$$\begin{array}{r}
 492,885 \\
 - 245,541 \\
 \hline
 247,344
 \end{array}$$

*Business Cost Value Asset
- Business Cost Value Liab.*

OR

49. How much has the land on the home farm increased in value since Coasting purchased the farm?

- a. \$104,000
- b. \$184,000
- c. \$80,000
- d. \$134,593
- e. None of the above.

The following information may be useful for the following four questions. It is for CY Acres.

Average equity (net worth)	\$300,000
Average asset value (investment)	\$500,000
Interest expense	\$45,000
Family living cost	\$40,000
Operating expense	\$400,000
Cash receipts	\$350,000
Gross revenue	\$450,000
Depreciation	\$30,000
Value unpaid labor and management	\$40,000
Net farm income from operation	\$80,000

50. Given this information, what is the return to farm assets?

- a. \$35,000
- b. \$85,000
- c. \$40,000
- d. \$80,000
- e. None of the above.

51. If the return to farm assets is \$60,000 (not the correct answer), what is the rate of return on farm assets?
- a. 20.0%
 - b. 7.50%
 - c. 12.00%
 - d. 5.63%
 - e. None of the above.
52. If the return to farm equity was \$70,000 (not the correct answer), what is the rate of return on farm equity?
- a. 8.75%
 - b. 14.00%
 - c. 23.30%
 - d. 6.75%
 - e. None of the above.
53. What is the interest expense ratio?
- a. .100
 - b. .050
 - c. .417
 - d. .063
 - e. None of the above.

BONUS Questions

(2 pts.) 1. What is the name of the person sitting next to you in this class (you can pick the day)?

(2 pts.) 2. The score of the game this weekend will be:
Iowa State _____
Texas _____