Michigan Farm Business Management Test bank #2

Section A. Principles of Economics and Management (Questions #1-#25)

- 1. Which of the following is the best 'economic' description of money?
 - a. a resource
 - b. a good
 - c. a medium of exchange
 - d. a luxury
- 2. Assume Joan is in a 15% federal income tax bracket. If Joan gets a \$1,000 bonus, what is the after-tax value of that bonus (ignoring state and other taxes)?
 - a. \$1,000
 - b. \$1,150
 - c. \$150
 - d. \$850
- 3. In the market for grapefruit, what determines the market price?
 - a. the quantity of grapefruit produced
 - b. the quantity of grapefruit bought
 - c. the price of oranges
 - d. grapefruit supply and grapefruit demand
- 4. Gary owns a house with an assessed value of \$150,000 and an estimated market value of \$160,000. If the property tax rate on his house is 2%, how much will Gary have to pay in property tax on his house for this year?
 - a. (.02)(160,000 150,000)
 - b. (.02)(160,000 + 150,000)
 - c. (.02)(160,000)
 - d. (.02)(150,000)
- 5. A tax-deductible expense?
 - a. reduces taxable income
 - b. increases taxable income
 - c. has no impact on taxable income
 - d. increases taxes owed

| 6. | If r (= the annual interest rate) is 6%, what is the present value of \$1,200 to be received 5 years from the present? a. $(1,200)/5$ b. $(1,200)(1.06)^5$ c. $(1,200)/(1.06)^5$ d. $(1,200)/(1.05)^6$ |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7. | Fred paid \$50 for a ticket to a football game that is sold out. He has been offered \$120 for the ticket by Paul which is the highest offer for the ticket Fred had received. What is the opportunity cost of going to the game for Fred? a. \$170 b. \$120 c. \$70 d. \$50 |
| 8. | In economics, the term 'risk taker' is often used to describe what? a. an irrational person b. an entrepreneur c. a hedger d. anyone who buys a product in a market |
| 9. | The part of a loan that is repaid during a year is what type of payment? a. principal b. interest c. mortgage d. installment |
| 10. | Net worth on a balance sheet = total assets less? a. equity b. debt c. total liabilities d. accrued expenses |
| 11. | What are the two general types of inputs used in a production process? a. fixed and variable b. liquid and non-liquid c. short-run and long-run d. those supplied and those demanded |
| 12. | A current asset is one that: a. is currently being used by a business firm b. can be converted into cash fairly easily within one year c. has been paid for by the business owner d. has been purchased within the past year by the business owner |

- 13. The ability to convert assets into cash is known as:
 - a. liquidity
 - b. solvency
 - c. profitability
 - d. elasticity
- 14. A monthly bank statement is?
 - a. an income statement
 - b. a cash flow statement
 - c. a net worth statement
 - d. NOT a basic, business firm financial statement
- 15. If a diversified farming operation raises and sells hogs, among other commodities, a detailed listing of revenues and expenses for just the part of the farming operation dealing with the hogs would be called what?
 - a. a cash flow budget
 - b. an enterprise budget
 - c. a whole farm budget
 - d. an income statement
- 16. The main objective of income tax management is to do what?
 - a. hide taxable income from the IRS
 - b. reduce taxes payable to zero
 - c. maximize after-tax income
 - d. maximize taxable income
- 17. Postponing the reporting of taxable income to next year is most likely to be economically advantageous for Ellen if she:
 - a. expects to be in a lower income tax bracket next year
 - b. does not have the time to file her income taxes this year
 - c. wants to remodel the kitchen in her house
 - d. all of the above
- 18. What is the general name of federal benefits paid to people who retire:
 - a. welfare
 - b. Medicare
 - c. Social Security
 - d. Obamacare
- 19. The relationship between quantity of an output and quantity of an input for a firm is called what?
 - a. a production function
 - b. a production possibility curve
 - c. a supply curve
 - d. diminishing marginal product

- 20. Prorating the cost of a capital asset over the useful life of that asset is called:
 - a. capital budgeting
 - b. figuring out depreciation
 - c. itemizing expenses
 - d. spreading fixed costs over larger units of output
- 21. What is another term for interest expense owed?
 - a. accrued interest expense
 - b. a current asset
 - c. a long-term liability
 - d. a non-current liability
- 22. If a firm is maximizing its profits, it will most likely be doing which of the following?
 - a. maximizing output
 - b. using the least costly combination of resources for producing the desired level of output
 - c. minimizing total costs
 - d. paying no income taxes
- 23. Planning, organizing, and directing are often noted as examples of what?
 - a. economic activities
 - b. marketing activities
 - c. functions of management
 - d. stages of new product development
- 24. Orange juice prices are historically high despite the fact that per capita consumption of orange juice has been decreasing for many years. What is the most likely 'economic' explanation of the higher orange juice prices?
 - a. the demand for orange juice has decreased
 - b. the supply of orange juice has decreased
 - c. the supply of orange juice has increased
 - d. there are more substitutes to orange juice available
- 25. Which of the following is a tax-deductible expense?
 - a. loan principal repayments
 - b. interest payments on a credit card used for personal expenses
 - c. machinery rental fees
 - d. all of the above

Section B. Financial Statements, Records Analysis, Marketing, Risk Management. (Questions #26-#75)

Use the attached <u>net worth statement</u> (balance sheet) and <u>net farm income statement</u> to answer questions #26-37.

| 26. | Of the following, which is the most liquid asset? a. farm machinery b. balance in checking account c. breeding livestock d. account payable |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 27. | Which of the following best describes a balance sheet? a. it shows changes in assets and liabilities over the last accounting period b. it shows the sources and uses of cash over the last accounting period c. it shows assets and liabilities at a point in time d. it shows profit for the last accounting period |
| 28. | What was this farm's <u>current ratio</u> on January 1, 2015? a. 0.26 b. 0.41 c. 2.44 d. \$409,182 |
| 29. | The farm's cost value net worth changed by% from a year ago. a. +11 % b. +13% c13% d. it stayed the same |
| 30. | What percent of the farm's total liabilities are due and payable beyond the next 12 months? a. 18% b. 30% c. 44% d. 70% |
| 31. | Which of the following is <u>not</u> a source of owner equity for a farm business? a. loans received to purchase land b. increases in the value of owned land c. profit retained in the business d. assets contributed to the business by the owner(s) |

| 32. | From the Net Farm Income Statement, how much did this farm's gross farm revenue change as a result of an increase or decrease in market livestock inventory value? a. \$29,360 b. +\$72,490 c\$72,490 d\$93,320 |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 33. | At the end of the year a farmer has an unpaid bill at the local machinery repair shop. It would be shown in an accrual accounting system as a(n) a. prepaid expense b. account receivable c. account payable d. accrued expense |
| 34. | How much was FFA Farms' net farm income from operations in 2014? a. \$95,067 b. \$98,349 c. \$103,349 d. \$729,516 |
| 35. | A major advantage of accrual accounting over cash accounting is: a. a more accurate estimate of annual profit b. simplicity c. always shows a higher profit d. can use single entry instead of double entry |
| 36. | What expense category is not found on a cash flow budget but is included in a net farm income statement? a. cash rent payments b. pesticide purchases c. hired labor wages d. depreciation |
| 37. | FFA Farm's rent/lease payments accounted for what percent of their total cash expenses in 2014? a. 17 % b. 19 % c. 22 % d. 25 % |

Use the attached <u>cash flow budget</u> projection to answer questions #38-45.

| 38. | How many dollars' worth of crops does FFA Farm plan to sell in March and April? | | | | | | | |
|-----|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|
| | a. | \$46,545 | | | | | | |
| | b. | \$130,909 | | | | | | |
| | c. | \$182,709 | | | | | | |
| | d. | \$409,036 | | | | | | |
| 39. | In wh | ich period does this farm expect to have its largest net cash flow deficit? | | | | | | |
| | a. | January - February | | | | | | |
| | b. | March-April | | | | | | |
| | c. | May-June | | | | | | |
| | d. | July-August | | | | | | |
| 40. | | much operating capital does FFA Farm need to borrow in January-February in order we a cash balance of \$2,000 at the end of February? | | | | | | |
| | a. | \$ 55,770 | | | | | | |
| | b. | \$ 57,770 | | | | | | |
| | c. | \$ 59,770 | | | | | | |
| | d. | \$ 59,425 | | | | | | |
| 41. | In w | hich period does this farm expect to have its largest need for cash? | | | | | | |
| | a. | January - February | | | | | | |
| | b. | March-April | | | | | | |
| | c. | May-June | | | | | | |
| | d. | July-August | | | | | | |
| 42. | What | is FFA Farm's projected total cash inflows for all of 2015? | | | | | | |
| | a. | \$923,676 | | | | | | |
| | b. | \$1,019,245 | | | | | | |
| | c. | \$30,554 | | | | | | |
| | d. | \$3,655 | | | | | | |
| 43. | When | n does FFA farm expect to pay cash rent? | | | | | | |
| | a. | March-April and September-October | | | | | | |
| | b. | March-April and November-December | | | | | | |
| | c. | May-June and November-December | | | | | | |
| | d. | May-June | | | | | | |
| 44. | In ho | w many periods does FFA farm expect to have a negative net cash flow? | | | | | | |
| | a. | none | | | | | | |
| | b. | two | | | | | | |
| | c. | three | | | | | | |
| | d. | six | | | | | | |
| | | | | | | | | |

- 45. Which of the following would <u>not appear on a cash flow budget?</u> feed purchases a. inventory change b. c. family living expenses cost of new tractor d. Refer to the attached "Grade A Dairy" budget to answer questions #46-50. 46. How much income over all costs (profit) for one dairy cow is projected? \$4,860.40 a. b. \$898.11 c. \$490.40 d. \$-48.09
 - 47. What is the selling price of milk needed to cover variable costs after allowing for income from the sale of cull cows and calves?
 - a. \$ 14.00 per cwt.
 - b. \$15.10 per cwt.
 - c. \$19.00 per cwt.
 - d. \$19.21 per cwt.
 - 48. What is the expected profit per hundredweight (cwt) of milk sold?
 - a. \$ 19.00 per cwt
 - b. \$ -0.21 per cwt
 - c. \$ 3.90 per cwt
 - d. \$15.10 per cwt
 - 49. What are projected milk sales per \$ of feed fed in this budget, to the nearest cent?
 - a. \$ 0.44 per \$ of feed
 - b. \$ 1.86 per \$ of feed
 - c. \$ 2.07 per \$ of feed
 - d. \$11.06 per \$ of feed
 - 50. For this budget, what is the minimum gross income needed to justify continuing to produce in the short-run?
 - a. \$3,962.29
 - b. \$4,908.49
 - c. \$4860.40
 - d. \$898.11

Refer to the attached budget for corn following soybeans to answer questions 51-55.

- 51. How much is the expected gross margin (i.e. return over variable costs per acre)?
 - a. \$ -23.87
 - b. \$ 382.21
 - c. \$453.92
 - d. \$860.00
- 52. What selling price for corn grain is needed to just cover total costs after accounting for income received from sale of stover bales?
 - a. \$ 5.69 per bu.
 - b. \$ 4.78 per bu.
 - c. \$4.91 per bu.
 - d. \$4.13 per bu.
- 53. How much are total costs for machinery (including drying)?
 - a. \$37.70 per acre
 - b. \$227.45 per acre
 - c. \$265.15 per acre
 - d. \$ 273.00 per acre
- 54. How much cash rent could be paid and just break even?
 - a. \$73.13 per acre
 - b. \$ 249.13 per acre
 - c. \$ 270.00 per acre
 - d. \$883.87 per acre
- 55. If output increases with no change in total cost, breakeven selling price will:
 - a. increase
 - b. decrease
 - c. remain constant
 - d. initially decrease and then begin to increase

Questions #56-75 deal mainly with marketing and risk management.

- 56. Liability insurance provides protection against which of the following?
 - a. lawsuits
 - b. creditors
 - c. predators
 - d. property loss
- 57. In marketing, 'basis' is the difference between what?
 - a. a futures price and a cash price
 - b. a projected price and an actual price
 - c. two current cash prices
 - d. two current futures prices

- 58. Which of the following actions is intended to limit the price paid for corn fed to feeder cattle?
 - a. buy a put option
 - b. sell a call option
 - c. sell a futures contract
 - d. buy a call option
- 59. In studying consumer purchasing behavior in economics, utility means:
 - a. sources of energy
 - b. satisfaction
 - c. practicality
 - d. dependability
- 60. Spreading and reducing risk by a farmer would most likely be associated with which of the following:
 - a. expanding the size of their specialty operation
 - b. hiring more labor
 - c. adding a new enterprise to the operation
 - d. purchasing more inputs
- 61. Which of the following is a hedger most likely doing?
 - a. increasing their risk
 - b. transferring risk to someone else
 - c. taking out a loan
 - d. paying off a loan
- 62. A strike price is what?
 - a. the market equilibrium price
 - b. the premium paid for the purchase of an option
 - c. the price at which an option buyer can sell the underlying futures contract
 - d. the desired wage by workers who are on strike
- 63. If a corn farmer has hedged some future corn sales with the futures market, what should they do if they are a true hedger when they sell their corn in the cash market in the future?
 - a. let the corn futures contract expire
 - b. buy back the futures contracts sold
 - c. sell the futures contracts initially bought
 - d. purchase an offsetting call option
- 64. A commodity market described as 'highly volatile' is one with what?
 - a. unstable interest rates
 - b. high inventory turnover
 - c. highly variable prices
 - d. high profitability

- 65. A person who helps you buy and sell things like stocks, bonds, futures contracts, and options is called what?
 - a. an investor
 - b. a speculator
 - c. a broker
 - d. a trader
- 66. A cooperative patronage refund is what?
 - a. the same as a stock dividend
 - b. a return of company profits to owners based on their use of the business
 - c. a return of company profits to owners based on the length of time of their membership with the business
 - d. money paid back to a dissatisfied customer
- 67. If a corn farmer has total fixed costs per acre of \$200, variable costs of \$3 per bushel, and the price of corn is \$4 per bushel, what is the farmer's breakeven yield per acre (in bushels)?
 - a. 50
 - b. 66.67
 - c. 28.57
 - d. 200
- 68. Which of the following is most likely true for the 'average fixed cost' for a farmer who produces fed cattle?
 - a. it does NOT change with changes in the number of fed cattle produced
 - b. it decreases with increases in the number of fed cattle produced
 - c. it increases with increases in the number of fed cattle produced
 - d. it decreases with decreases in the number of fed cattle produced
- 69. If a corn farmer can gain 10 cents per bushel by doing a better job marketing corn from their 2,000-acre corn operation that yields 200 bushels per acre, how much will they add to their total income?
 - a. \$2,000
 - b. \$4,000
 - c. \$40,000
 - d. \$400,000
- 70. A soybean farmer has soybeans stored in on-arm storage bins. The farmer has two pricing options (per bushel): A = sell today for \$8.75 or B = sell in two years for \$9.00. Which of the following is true about the farmer's 'best' pricing and marketing strategy?
 - a. it depends on storage costs and interest rates
 - b. it depends on what is cost to produce those soybeans
 - c. sell in two years because the price is higher
 - d. sell today if the farmer needs the storage space for a new crop to be harvested soon

- 71. The "Law of Demand" in economics states that consumers will buy more of a product if what?
 - a. they want it
 - b. they need it
 - c. the price of the product is reduced
 - d. there is an improvement made in the quality of the product
- 72. What market position does a hog farmer have who will be selling market hogs in two months?
 - a. long cash
 - b. short cash
 - c. intermediate
 - d. vulnerable
- 73. Misty has agreed to sell 5,000 bushels of soybeans to her local grain elevator on Nov. 1 of this year at a price = \$9.25 per bushel. What type of contractual arrangement is this for Misty?
 - a. futures
 - b. basis
 - c. forward cash
 - d. hedge to arrive
- 74. Crop insurance substitutes what for what?
 - a. an asset for a liability
 - b. physical crop loss risk for price risk
 - c. a certain cost for an uncertain loss
 - d. an uncertain cost for a certain loss
- 75. The profit-maximizing output rule is to produce a level of output where the marginal revenue of the last unit produce is equal to what?
 - a.0
 - b. total cost
 - c. average cost
 - d. marginal cost

EXAM KEY

Section A. Principles of Economics and Management

- 1. C
- 2. D
- 3. D
- 4. D
- 5. A
- 6. C
- 7. B
- 8. B
- 9. A
- 10. C
- 11. A
- 12. B
- 13. A
- 14. D
- 15. B
- 16. C
- 17. A
- 18. C
- 19. A 20. B
- 21. A
- 21. A B
- 23. C
- 24. B
- 25. C

Section B. Financial Statements, Records Analysis, Marketing, Risk Management

- 26. B Can easily be converted to cash
- 27. C Shows what we own and what we owe
- 28. C Current ratio = (current assets / current liabilities) = \$693,663 / \$284,481 = 2.44
- 29. B Percent change in cost value net worth = (Farm Net Worth this year Farm Net Worth Last Year) / Farm net Worth Last Year = (\$1,809,189 \$1,605,826)/ \$1,605,826 = 13%

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30. D (Fixed liabilities / total liabilities) = $655,927 / $940,408 = 70%
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- 31. A Loans are a liability not a source of owner equity.
- 32. B Change in market livestock revenue = ending market livestock value beginning market livestock value = \$277,100 \$204,610= \$72,490
- 33. C
- 34. B Net farm income from operations = Gross farm revenue gross farm expenses \$729,516 \$631,167 = \$98,349
- 35. A
- 36. D Depreciation is a non-cash expense.
- 37. B Rent or lease payments / total cash expenses (\$140,500 / \$727,769) x 100 = 19%
- 38. C
- 39. D -\$68,274 during the July-August period.
- 40. B Net operating loans needed in January-February = (negative net cash flow Jan. and Feb.) (beg. Cash balance) (ending cash balance) \$59,425 - \$3,655 + \$2,000 = \$57,770
- 41. B The projected cash expenses are largest at \$265,318 for March-April.
- 42. A Total cash inflows for the whole year = \$923,676.
- 43. B \$75,000 in March-April and \$75,000 in November-December.
- 44. C There is a projected negative net cash flow in Jan-Feb, Mar-April and July-August.
- 45. B Inventory change would be a non-cash change in revenue.
- 46. D Profit = total income total all costs \$4,806.40 \$4,908.49 = \$-48.09
- 47. B Needed selling price = (variable costs-other income) / cwt. milk sold (\$3,962.29 \$490.40) / 230 cwt. = \$15.10 per cwt.

- 48. B Profit per cwt = Profit / cwt sold = \$-48.09 / 230 = \$-0.21 per cwt
 Or, you can find this as selling price per cwt breakeven price = \$19.00 \$19.21
- 49. B \$\\$\text{milk sales/total feed costs}\$\$4,370.00 \(\frac{\\$2,350.77}{\} = \\$1.86\$\$
- 50. A Income to just cover variable costs. \$3,962.29
- 51. B Gross margin = gross revenue variable costs = \$860.00 \$477.79 = \$382.21.
- 52. D (Total cost other income) / bushels to sell = \$883.87 \$140.00 / 180 bu. = \$4.13 per bu.
- 53. C Pre-harvest machinery costs + Harvest machinery cost = \$37.70 + \$227.45 = \$265.15.
- 54. B Gross income (Total Costs excluding cash rent) = \$860 (883.87 \$273) = \$249.13
- 55. B
- 56. A
- 57. A
- 58. D
- 59. B
- 60. C
- 61. B
- 62. C
- 63. B
- 64. C
- 65. C
- 66. E
- 67. D = TFC/(P-AVC) = 200/(4-3) = 200
- 68. B
- 69. C = (2000)(200)(0.10) = 40,000
- 70. A
- 71. C
- 72. A
- 73. C
- 74. C
- 75. D

ATTACHMENTS

Ending Net Worth Statement

| Name FFA FARM | | | Date | 01/01/15 |
|---------------------------------------|-------------|--------------|-------------------------------------------|--------------|
| Farm Assets | Cost Value | Market Value | Farm Liabilities | Market Value |
| Current Assets | | | Current Liabilities | |
| Checking and savings accounts | \$31,963 | \$31,963 | Accounts payable (Sched. N) | \$18,654 |
| Crops held for sale/feed (Sched. A) | \$354,550 | \$354,550 | Farm taxes due (Sched. O) | \$4,490 |
| Investment in growing crops(Sch. B) | | | Current notes and credit lines (Sched. P) | \$109,232 |
| Commercial feed on hand (Sch. C) | \$11,300 | \$11,300 | | |
| Prepaid expenses (Sched. D) | \$18,750 | \$18,750 | Accrued interest - short (Sched. P) | \$4,772 |
| Market livestock (Sched. E) Supplies | \$277,100 | \$277,100 | - fixed (Sched. Q) | \$73,275 |
| on hand (Sched. F) Accounts | | | Due in 12 months - fixed (Sched. Q) | \$74,059 |
| receivable (Sched. G) Other current | | | | |
| assets | | | Other current liabilities | |
| A) Total Current Assets | \$693,663 | \$693,663 | C) Total Current Liabilities | \$284,481 |
| Fixed Assets | | | Fixed Liabilities | |
| Unpaid coop. distributions (Sch. H) | \$14,435 | \$14,435 | Notes and contracts remainder (Sched. Q) | \$655,927 |
| Breeding livestock (Sched. I) | \$59,750 | \$59,750 | Other fixed liabilities | |
| Machinery & equipment (Sched. J) | \$331,932 | \$455,600 | Total Fixed Liabilities | \$655,927 |
| Buildings/improvements (Sched. K) | \$489,817 | \$617,000 | | |
| Farmland (Sched. L) | \$1,160,000 | \$1,720,000 | | |
| Farm securities, certificates (Sch.M) | | | | |
| Other fixed assets | | | | |
| Total Fixed Assets | \$2,055,934 | \$2,866,785 | | T |
| B) Total Farm Assets | \$2,749,597 | \$3,560,448 | D) Total Farm Liabilities | \$940,408 |
| E) Farm Net Worth (B - D) | \$1,809,189 | \$2,620,040 | | |
| F) Farm Net Worth Last Year | \$1,605,826 | \$2,338,637 | Working Capital (A - C) | |
| G) Change in Farm Net Worth (E - F) | | | Current Asset-to-Debt Ratio (A / C) | |
| Percent Change in Net Worth (G / F) | | | Total Debt-to-Asset Ratio (D / B) | |

| Name FFA FARM | | | Year | 201 |
|----------------------------------------|-----------|-----------------------------------------------|-----------|-----------|
| | | Income | • | |
| Cash Income | | Income Adjustments | Ending | Beginning |
| Sales of livestock bought for resale | | Crops held for sale or feed (Sched. A) | \$354,550 | \$518,46 |
| Sales of market livestock, grain, etc. | \$764,328 | Market livestock (Sched. E) | \$277,100 | \$204,61 |
| Cooperative distributions paid | | Accounts receivable (Sched. G) | | |
| Agricultural program payments Crop | \$18,790 | Other current assets | | |
| insurance proceeds | | Unpaid cooperative distributions (Sched. H) | \$14,435 | \$14,43 |
| Custom hire income | | Breeding livestock (Sched. I) | \$59,750 | \$61,65 |
| Other cash income | \$10,358 | Subtotal of adjustments | \$705,835 | \$799,15 |
| Sales of breeding livestock | \$29,360 | (b) Net adjustment (ending - beginning) | (\$93 | ,320) |
| (a) Total Cash Income | \$822,836 | (c) Value of home used production | | |
| | | (d) Gross Farm Revenue (a + b + c) | \$729 | 9,516 |
| | | _ | | |
| | | Expenses | | |
| Cash Expenses | 1 | Expense Adjustments | Ending | Beginning |
| Car and truck expenses | \$1,894 | 5 5 , | | \$8,21 |
| Chemicals | \$30,760 | ` ' | \$11,300 | \$8,75 |
| Conservation expenses | | Prepaid expenses (Sched. D) | \$18,750 | |
| Custom hire | | Supplies on hand (Sched. F) | | |
| Employee benefits | \$2,400 | (, , , , , , , , , , , , , , , , , , , | · · · · · | ,088) |
| Feed purchased | \$137,210 | | Ending | Beginning |
| Fertilizer and lime | \$105,500 | , | \$18,654 | \$24,25 |
| Freight, trucking | \$12,290 | Farm taxes due (Sched. O) | \$4,490 | \$4,49 |
| Gasoline, fuel, oil | \$23,650 | , , | \$78,046 | \$218,62 |
| Insurance | \$7,000 | (g) Net adjustment (ending - beginning) | (\$146 | 6,176) |
| Interest paid | \$85,511 | (h) Depreciation (Sched. J, K) | | \$62,66 |
| Labor hired | \$36,000 | (i) Gross Farm Expenses | | \$631,16 |
| Pension and profit-share plans | | | | |
| Rent or lease payments | \$140,500 | (j) Net Farm Income from Operations | | |
| Repairs, maintenance | \$12,333 | | | |
| Seeds, plants | \$64,925 | (k) Sales of farm capital assets | | \$5,00 |
| Storage, warehousing | | (I) Cost value of items sold (Sched. J, K, L) | | |
| Supplies purchased | \$3,675 | (m) Capital gains or losses (k - l) | | \$5,00 |
| Taxes (farm) | \$8,980 | | | |
| Utilities | \$17,358 | Net Farm Income (accrual) (j + m) | | \$103,34 |
| Vet. fees, medicine, breeding | \$11,623 | | - | |
| Other cash expenses | \$4,560 | | | |
| Livestock purchased | \$21,600 | Net Farm Income (cash) | | \$95,067 |
| (e) Total Cash Expenses | \$727,769 | | | \$570,706 |

Cash Flow Budget
Name:
FFA FARM

Year: 2015

| CASH INFLOWS | Total for | January | March | May | July | September | November |
|---------------------------------------|-----------|----------|---------|---------|--------|-----------|----------|
| Operating | Year | February | April | June | August | October | December |
| Livestock income | 438,240 | 73,040 | 73,040 | 73,040 | 73,040 | 73,040 | 73,040 |
| Sales of crops | 409,036 | 46,545 | 182,709 | 48,873 | 0 | 0 | 130,909 |
| Other crop income | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| USDA payments | 18,000 | 9,000 | 0 | 0 | 0 | 9,000 | 0 |
| Custom hire income | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Farm rents, interest | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 6,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Sales of Capital Assets | 20,000 | 0 | 0 | 0 | 0 | 20,000 | 0 |
| Financing | | | | | | | |
| Total new short-term loans to receive | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New term loans to receive | 20,000 | 0 | 0 | 20,000 | 0 | 0 | 0 |
| Non-farm Income | 12,400 | 400 | 400 | 5,400 | 400 | 400 | 5,400 |
| Total Cash Inflows | 923,676 | 129,985 | 257,149 | 148,313 | 74,440 | 103,440 | 210,349 |

| CASH OUTFLOWS | Total for | January | March | May | July | September | November |
|-------------------------------|-----------|----------|---------|---------|---------|-----------|----------|
| Operating | Year | February | April | June | August | October | December |
| Seed | 78,000 | 26,000 | 13,000 | 0 | 0 | 0 | 39,000 |
| Fertilizer and lime | 103,200 | 34,400 | 34,400 | 0 | 0 | 0 | 34,400 |
| Pesticides | 23,520 | 0 | 23,520 | 0 | 0 | 0 | 0 |
| Crop insurance | 11,940 | 0 | 0 | 0 | 0 | 11,940 | 0 |
| Drying fuel | 17,640 | 0 | 0 | 0 | 0 | 17,640 | 0 |
| Custom hire or machine rental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other cash costs per acre | 10,200 | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 |
| Purchased crops | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Purchased livestock | 22,000 | 3,667 | 3,667 | 3,667 | 3,667 | 3,667 | 3,667 |
| Purchased feed | 154,000 | 25,667 | 25,667 | 25,667 | 25,667 | 25,667 | 25,667 |
| Health and veterinary | 11,000 | 1,833 | 1,833 | 1,833 | 1,833 | 1,833 | 1,833 |
| Marketing | 13,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 |
| Other cash costs per head | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Real estate taxes | 16,000 | 0 | 8,000 | 0 | 0 | 8,000 | 0 |
| Cash rent | 150,000 | 0 | 75,000 | 0 | 0 | 0 | 75,000 |
| Hired labor | 36,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| Repairs and upkeep | 13,000 | 2,889 | 1,444 | 1,444 | 1,444 | 2,889 | 2,889 |
| Fuel and lubrication | 25,000 | 2,500 | 5,000 | 5,000 | 2,500 | 5,000 | 5,000 |
| Other fixed expenses | 6,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Equipment lease payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Purchases of Capital Assets | 45,000 | 0 | 0 | 45,000 | 0 | 0 | 0 |
| Financing | | | | | | | |
| Accounts payable | 29,540 | 29,540 | 0 | 0 | 0 | 0 | 0 |
| Short term notes due | 22,500 | 22,500 | 0 | 0 | 0 | 0 | 0 |
| Term loan payments | 153,505 | 20,015 | 42,387 | 1,300 | 87,203 | 1,300 | 1,300 |
| Non-farm Expenditures | | | | | | | |
| Family living expenses | 45,000 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 |
| Non-farm investments | 33,000 | 2,000 | 13,000 | 12,000 | 2,000 | 2,000 | 2,000 |
| Total Cash Outflows | 1,019,245 | 189,411 | 265,318 | 114,311 | 142,714 | 98,336 | 209,156 |

| SUMMARY | Total for | January | March | May | July | September | November |
|-------------------------------------|-----------|----------|----------|----------|----------|-----------|----------|
| | Year | February | April | June | August | October | December |
| Net Cash Flow | (95,568) | (59,425) | (8,169) | 34,002 | (68,274) | 5,104 | 1,194 |
| Beginning cash balance New | 3,655 | 3,655 | (55,770) | (63,939) | (29,938) | (98,211) | (93,107) |
| operating loan received | 0 | | | | | | |
| Repayment of operating loan | 0 | | | | | | |
| Interest paid on oper. loan balance | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ending cash balance | (91,913) | (55,770) | (63,939) | (29,938) | (98,211) | (93,107) | (91,913) |
| Operating Loan Balance | | | | | | | |
| Beginning Balance | 30,554 | 30,554 | 30,554 | 30,554 | 30,554 | 30,554 | 30,554 |
| Ending Balance | 30,554 | 30,554 | 30,554 | 30,554 | 30,554 | 30,554 | 30,554 |

Grade A Dairy - One Cow Unit

| Income Milk sales* Cull cow Dairy calf Gross Income | 0.4 | head x | \$0.60 | Unit per cwt per lb per head | X X X | 1350 | cwt | = = = | Total \$4,370.00 \$324.00 \$166.40 \$4,860.40 | |
|---------------------------------------------------------------------------------|---------|--------|----------|---------------------------------------|-------------|----------|-------|-------------|------------------------------------------------------|--------------------|
| Variable Costs | | | Price | Unit | | Quantity | Unit | | Total | |
| Feed Costs | | | | | | • | | | | |
| Corn equivalents | | | \$3.50 | per bu | Х | 113 | bu | = | \$395.50 | |
| Corn Silage | | | \$35.00 | per ton | Х | 8 | tons | = | 280.00 | |
| Hay equivalents | | | \$180.00 | per ton | Х | 6 | tons | = | 1,080.00 | |
| Salts and minerals | | | \$0.14 | per lb | Х | 323 | lbs | = | 45.22 | |
| Protein supplement | | | \$0.12 | per lb | Х | 1855 | lbs | = | 222.60 | |
| Cottonseed | | | \$0.15 | per lb | Х | 1361 | lbs | = | 204.15 | |
| Fat | | | \$0.30 | per lb | Х | 111 | lbs | = | 33.30 | |
| Milk replacer, calf starter | | | | • | | | | | 90.00 | |
| Other | | | | | | | | | 0.00 | |
| Total Feed Costs | | | | | | | | | \$2,350.77 | |
| Veterinary and health | | | | | | | | | \$118.00 | |
| Fuel, utilities and repairs | | | | | | | | | 160.00 | |
| DHIA & accounting | | | | | | | | | 30.00 | |
| Breeding fees | | | | | | | | | 50.00 | |
| Bedding, supplies and miscellaned | nie. | | | | | | | | 170.00 | |
| beduing, supplies and miscellaned | Jus | | | | | | | | 170.00 | |
| Hauling | | | \$0.29 | per cw | ⁄t | | | | 66.70 | |
| Interest on variable costs | | | 5% | | | 3 | month | | 36.82 | |
| Labor | | | \$14.00 | per hou | r | 70 | hours | | 980.00 | |
| Total Variable Costs | | | | | | | | | \$3,962.29 | |
| Income over Variable Costs | | | | | | | | | \$898.11 | |
| Fixed Costs | | | | | | | | | | |
| Machinery, equipment, facilities | | | | | | | | | \$620.00 | |
| Interest, insurance on herd | | | | | | | | | <u>326.20</u> | |
| Total Fixed Costs | | | | | | | | | \$946.20 | |
| Total of All Costs | | | | | | | | | \$4,908.49 | |
| Income over All Costs | | | | | | | | [| | |
| Income from cull cows, calves, and h | neifers | S | | | | | | | \$490.40 | |
| Break-even selling price for variable Break-even selling price for all costs | | ; | | | | | | | | per cwt per cwt |

Corn following Soybeans

| Gross returns | Price | Yield | | | |
|--------------------------------------|---------|------------------|---------------------------------|----------------|----------|
| Grain | \$4.00 | 180 | | \$720.00 | bu./acre |
| Stover bales | \$35.00 | 4 | | \$140.00 | |
| Gross income | | | | \$860.00 | |
| | | C | -at man Aana | | |
| Preharvest machinery | | <u>Fixed</u> | ost per Acre <u>Variable</u> | Total | |
| Tandem disk | | \$3.60 | \$3.10 | \$6.70 | |
| Apply nitrogen | | \$4.70 | \$5.30 | \$10.00 | |
| Field cultivate | | \$2.50 | \$3.10 | \$5.60 | |
| Plant | | \$6.00 | \$5.40 | \$11.40 | |
| Spray | | \$2.00 | \$2.00 | \$4.00 | |
| Custom hire | | \$0.00 | \$0.00 | \$0.00 | |
| Other | | \$0.00 | \$0.00 | \$0.00 | |
| Other | | \$0.00 | \$0.00 | \$0.00 | |
| Total per acre | | \$18.80 | \$18.90 | \$37.70 | |
| Sand chamicals ato | | | | | |
| Seed, chemicals, etc. Seed | | | \$115.80 | \$115.80 | |
| cost per 1000 kernels | \$3.86 | | ψ113.00 | ψ113.00 | |
| kernels per acre | 30,000 | | | | |
| Nitrogen | 00,000 | | \$61.57 | \$61.57 | |
| price per pound | \$0.47 | | φοι.σι | φσ1.σ1 | |
| pounds per acre | 131 | | | | |
| Phosphate | | | \$32.64 | \$32.64 | |
| price per pound | \$0.48 | | ψοΞ.σ. | ψοΞ.σ . | |
| pounds per acre | 68 | | | | |
| Potash | | | \$22.14 | \$22.14 | |
| price per pound | \$0.41 | | · | • | |
| pounds per acre | 54 | | | | |
| Lime (annual cost) | | | \$10.00 | \$10.00 | |
| Herbicide | | | \$35.50 | \$35.50 | |
| Crop insurance | | | \$13.60 | \$13.60 | |
| Miscellaneous | | | \$10.00 | \$10.00 | |
| Interest on preharvest variable cost | S | | \$10.67 | \$10.67 | |
| length of period (months) | 8 | | | | |
| interest rate | 5.0% | | | | |
| Total | | | \$311.92 | \$311.92 | |
| Harvest machinery | | | | | |
| Combine | | \$19.00 | \$10.90 | \$29.90 | |
| Grain Cart | | \$5.90 | \$3.20 | \$9.10 | |
| Haul | | \$7.34 | \$6.87 | \$14.21 | |
| Fixed- price per bushel | \$0.04 | | | | |
| Variable- price per bushel | \$0.04 | | | | |
| Drying | | \$36.00 | \$108.00 | \$144.00 | |
| Fixed- price per bushel | \$0.05 | | | | |
| Variable- price per bushel | \$0.15 | | | <u>.</u> . | |
| Handling | 4 | \$12.24 | \$18.00 | \$30.24 | |
| Fixed- price per bushel | \$0.02 | | | | |
| Variable- price per bushel | \$0.03 | # 0.00 | # 0.00 | # 0.00 | |
| Custom hire | | \$0.00 \$0.00 | \$0.00 \$4.46.07 | \$0.00 | |
| Total per acre | | \$80.48 | \$146.97 | \$227.45 | |
| Labor | | | | | |
| Hours | 2.6 | \$33.80 | | \$33.80 | |
| Rate per hour | \$13.00 | | | | |
| Land | | | | | |
| Land Cook root | | #070.00 | | #070.00 | |
| Cash rent | | \$273.00 | | \$273.00 | |
| Total fixed, variable and all costs | | <u>Fixed</u> | <u>Variable</u> | <u>Total</u> | |
| Per acre | | \$406.08 | \$477.79 | \$883.87 | |
| | | + . 30.00 | Ŧ ······ | +-00.01 | |
| | | | | | - |
| Profit | | | | -\$23.87 | |