1. When a farmer “places a hedge” for a commodity that he/she is selling, he/she does so by ________________.
   a. buying a futures contract on the Chicago Board of Trade
   b. selling a futures contract on the Chicago Board of Trade
   c. buying a PUT option on Chicago Board of Trade
   d. signing a contract to sell to a local elevator

2. Which type of pricing tool cannot be reversed or offset by the seller?
   a. forward contract
   b. hedge
   c. buy CALL option
   d. buy PUT option

3. A grain producer buys a PUT option for a premium of $.18 per bushel. The futures market then decreases by $.40 per bushel. The value of the PUT would be expected to:
   a. go up by about $.40
   b. go down by about $.40
   c. go down by about $.18
   d. not change

4. Under crop revenue insurance, the producer’s “actual” revenue at harvest is calculated using the actual yield and:
   a. the February futures price
   b. the October futures price
   c. the average futures price from February through October
   d. the local cash price in October

5. Which of the following is not included in a cash flow budget?
   a. loan principal payments
   b. opportunity cost of the operator’s own labor
   c. family living expenses
   d. government payment to be received

6. Which of the following does not affect Net Farm Income?
   a. sale of a capital asset for more than its cost value
   b. depreciation on a capital asset
   c. interest payment on a loan used to purchase a capital asset
   d. principal payment on a loan used to purchase a capital asset
7. “External Scanning” of a farm business consists of:
   a. identifying future trends that could create opportunities or threats to the business
   b. identifying possible sites of hazardous waste materials on the farm
   c. identifying outside resources that could be acquired by the farm
   d. identifying the particular strengths and weaknesses of the farm

8. The degree to which a farm business has enough assets to serve as collateral for its debts is called:
   a. liquidity
   b. solvency
   c. profitability
   d. efficiency

9. When you are interviewing a potential farm employee, you should ask questions:
   a. that can be answered by “yes” or “no”
   b. that require some explanation by the employee (open-ended)
   c. about the candidate’s religion and marital status
   d. that you already know the answer to

10. On a Net Worth Statement, current liabilities are all those that:
    a. are owed on the date of the statement
    b. have been acquired within the last 12 months
    c. are due to be paid within the next 12 months
    d. are not past due

11. Enterprise accounting shows the revenue and expenses earned from:
    a. each major tract of land on the farm
    b. each employee on the farm
    c. each major production activity on the farm
    d. the entire farm business for the past year

12. Which of the following is not a type of payment that can be received by grain farmers under the 2002 Farm Bill commodity programs title?
    a. Market Relief Payment (MRP)
    b. Loan Deficiency Payment (LDP)
    c. Direct Payment (DP)
    d. Counter Cyclical Payment (CCP)
B. Answer As Directed.

13. Which type of budget would be most useful for analyzing each of the following questions? (10 pts)

A. Partial budget
B. Enterprise budget
C. Whole farm budget
D. Cash flow budget

a. ________ What is my break-even cost of production for producing milk?
b. ________ How much operating capital will I need to borrow this spring?
c. ________ How much is my projected net farm income for the coming year?
d. ________ Would it be profitable to switch from conventional seed beans and herbicide to “Roundup Ready” seed and Roundup herbicide?
e. ________ Which crop would be most profitable to produce on irrigated river bottom land?

14. Assume the following market prices are available today (June):
Cash corn at the local elevator today $2.45
Forward contract for October delivery to elevator $2.65
Future contract price for October corn $2.80
Premium to buy a PUT option at a $2.90 strike price $.22

What would the net price achieved from implementing each of these pricing strategies today be if the local cash price dropped to $2.10 in October, the Futures price fell to $2.50, and the PUT option premium rose to $.48? Show your work. (10 pts)

a. wait and sell for the cash price in October $_____________

b. forward contract locally $_____________

c. hedge on the futures market $_____________

d. buy PUT option for a futures contract $_____________
15. Golden Grains, Inc., is considering three different crop insurance policies for their wheat production:

a) MPCI yield insurance at 75% of their APH yield of 80 bu. per acre. The MPCI indemnity price is $3.00/bushel this year.

b) Revenue insurance at a fixed guarantee of 75% of their projected revenue based on their APH yield of 80 bu. per acre and the average February futures price of $3.60 (standard RA).

c) Revenue insurance with the same initial guarantee, as in (b), but with the option for a higher guarantee if prices rise by harvest (CRC, optional RA).

What would be the level of the final guarantee the actual yield or revenue, and the indemnity payment (if any) for each policy if their actual yield is only 50 bushels per acre, and the harvest futures price is $4.00 per bushel? (12 pts.)

<table>
<thead>
<tr>
<th>Final Guarantee Per Acre</th>
<th>Actual</th>
<th>Indemnity Payment Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) _____________________ bu.  ________ bu.  $________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) $________________    $________  $________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) $________________    $________  $________________________</td>
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16. Bob and Julie’s banker has offered to finance 100% of the cost of constructing a new swine finishing building on their farm. Capacity is 1,250 purchased pigs finished per year. (20 pts.)

Develop an enterprise budget for the long-run economic costs of finishing one feeder pig, using the following information:

1) Total investment for the building and equipment is $125,000
   Life of the building and equipment is 20 years, with a zero salvage value
   Their capital cost (interest rate) is 7% annually, on the average building value
   Annual insurance, repairs and taxes will cost 3% of the average building investment

2) Pigs will be purchased at a weight of 50 lb. for $40 each (per head).

3) The pigs will be sold 4 months later at 260 lb. for an expected price of $.45 per lb. Expected death loss is 3%.

4) Feed will be purchased. Feed requirements per head are expected to be:
   10 bu. of corn @ $2.25 per bu.
   140 lb. of protein supplement and minerals @ $.12 per lb.
5) Health and marketing costs should average about $5 per head. Utilities should average about $2,500 per year.

6) Bob and Julie expect that they will have to work an average of 2 hours per day between them to care for the pigs, 350 days per year. They value their labor at $8.00 per hour. They will not have to hire any extra labor.

LABEL AND SHOW YOUR WORK

Enterprise: Finishing Feeder Pigs

Budgeting Unit: 1 head (pig) Time period: 4 months

Gross Revenue

Operating (variable) Costs

$______________

Ownership (fixed) Costs

$______________

Total Costs

$______________

Profit and Return to Management

$______________
17. Bob and Julie’s banker offers to set up the $125,000 loan on a 10-year even total payment schedule, one payment per year. The amortization factor for a 10-year, 7% loan is .1434. 

(10 pts.)

How much is their annual payment? $______________

Below develop a cash flow budget for one year, for their feeder pig enterprise, for 1,250 pigs purchased per year. Use the appropriate values from your enterprise budget in the previous question. Do not include the initial loan funds received as an inflow, or the initial building investment as an outflow. They don’t plan to take out any funds for living expenses or income taxes. Label each item.

Cash Inflow

Total $______________

Cash Outflows

Total $__________

Net Cash Flow (annual) $__________
18. Which cumulative distribution function (CDF) shown below would represent each of the following types of farm lease arrangements? (6 pts.)

_____ custom farming agreement

_____ fixed cash rent

_____ 50-50 crop share
1. B
2. A
3. A
4. B
5. B
6. D
7. A
8. B
9. B
10. C
11. C
12. A
13. B, D, C, A, B
14. a. $2.10
   b. $2.65
   c. $2.40
   d. $2.36
15. Final Guarantee Per Acre | Actual | Indemnity Payment Per Acre
   a) 75% x 80 bu. = 60 bu. | 50 bu. | $10 bu. x $3 = $30
   b) 75% x 80 bu. x $3.60 = $216 | $200 | $216 – 200 = $16
   c) 75% x 80 bu. x $4.00 = $240 | $200 | $240 – 200 = $40
16. LABEL AND SHOW YOUR WORK

Gross Revenue
260 lb. x $.45/lb. = $117.00
- death loss 3% x $117 = $3.51
$113.49 GR

Operating (variable) Costs
Feeder pig $40.00
Feed: corn 10 bu. @ $2.25 = 22.50
   protein 140 lb. @ $.12 = 16.80
Health and marketing = 5.00
Utilities: $2,500/1,250 pigs/yr. = 2.00
Labor: 2 hr/day x 350 days x $8/hr./1,250 pigs/yr. = $90.78 VC

Ownership (fixed) Costs
Depreciation $125,000 – 0 / 1,250 pigs/yr. / 20 years = $5.00
($125,000 / 2) = $62,500 average value = 3.50
Interest: 7% x $62,500/1,250 pigs/yr. = 1.50
Insurance, rep., taxes: 3% x $62,500 / 1,250 pigs/yr. = $10.00 FC

Total Costs $100.78 TC

Profit and Return to Management $12.91 P
17. $125,000 x .1434 = $17,925
Cash Inflow
$113.49 x 1,250 pigs/yr. = $141,862.50

Cash Outflow
Operating cost – labor = $90.78 – 4.48 = $86.30 x 1,250 pigs/yr. = $107,875
Loan payment 17,925
Insurance, repairs, taxes 1,875
Total $127,675

Net Cash Flow (annual) $14,187.50

18.  C, A, B

19.  D, B, C, A, B