Financial Accounting
Professional MBA Program, Fall 1996
Test II

On my honor, I have neither given nor received assistance on this test.

__________________________
Signature

CODE:

______________________________
PRINTED NAME

All questions count 5 points unless otherwise noted. Total 100 points is very roughly a point a minute. So show your work in the body of the paper.
1. The Castle Company uses a periodic inventory system. Beginning inventory and inventory purchases for the year were as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Quantity</th>
<th>Price per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01</td>
<td>Beginning inventory</td>
<td>20 units</td>
<td>$170 per unit</td>
</tr>
<tr>
<td>05/23</td>
<td>Purchased</td>
<td>20 units</td>
<td>$125 per unit</td>
</tr>
<tr>
<td>11/05</td>
<td>Purchased</td>
<td>400 units</td>
<td>$160 per unit</td>
</tr>
<tr>
<td>11/18</td>
<td>Purchased</td>
<td>100 units</td>
<td>$175 per unit</td>
</tr>
</tbody>
</table>

At year-end, 50 units remain in inventory. What is the cost of inventory on a LIFO basis?

a. $7,500  
b. 7,100  
c. 8,750  
d. 8,450  
e. 8,000

2. Using the numbers in the previous problem, what answer would you have selected if Castle Company had used a perpetual inventory system and sales had been:

<table>
<thead>
<tr>
<th>Date</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/31</td>
<td>40</td>
</tr>
<tr>
<td>11/11</td>
<td>300</td>
</tr>
<tr>
<td>12/15</td>
<td>150</td>
</tr>
</tbody>
</table>

3. Assuming the periodic method, what would the LIFO reserve have been at the end of the year? Fill your numerical answer in on the answer sheet.
4. Kelly Company exchanged copies of Word 6.0 that cost $8,000 and normally sold for $12,000 for a new delivery truck with a list price of $13,000. The delivery truck should be recorded on Kelly’s books at

$8,000
$8,667
$12,000
$13,000

5. What answer would you record if the copies of Word 6.0 were exchanged for copies of WordPerfect 6.0 which had a list price of $13,000 and normally sold at a discount for $12,000?
6. Sherman Company purchased a new machine on May 1, 1983 for $25,000. At the time of acquisition, the machine was estimated to have a useful life of 10 years and an estimated salvage value of $1,000. The company has recorded monthly depreciation using the straight-line method. On March 1, 1992, the machine was sold for $800. What loss should be recognized from the sale of the machine?

   a. 0
   b. 2,000
   c. 3,000
   d. 3,400

7. Which should not be capitalized?

   a. rearrangements
   b. repairs
   c. replacements
   d. additions

8. Which of the following is a necessary condition for recognizing an accounting liability.

   a. a firm will sacrifice future resources at a specified determinable date
   b. a firm has little or no discretion to avoid the transfer of future resources
   c. a transaction or event giving rise to the firm's obligation has already occurred
   d. all of the above
9. The New Boston Company issued $300,000 of 6% bonds on January 1, 1994 payable semiannually. The bonds were sold for $275,678, and they were expected to yield 8% interest per year. The maturity date of the bonds is December 31, 2003. What is the interest expense for 1994. (You are not required to recompute the sale price.)

a. $18,000
b. $22,054
c. $16,540
d. $22,135
e. None of the above: State your answer in this case

10. Continue to consider the facts in question 11. At June 30, 1995, and after payment of the coupon, the market rate went to 6%, what gain or loss would Boston Company incur if it repurchased the bonds?
11. Taft Co. sells Lee Co. a machine, the usual cash price of which is $10,000, in exchange for an $11,800 noninterest-bearing note due three years from the date. If Taft records the note at $10,000, the overall effect will be:

a. a correct sales price and correct interest revenue over the three years
b. a correct sales price and understated interest revenue over the three years
c. an understated sales price and understated interest revenue over the three years
d. an overstated sales price and understated interest revenue over the three years
e. (Interest revenue and interest income are the same terms.)

12. The Fairbanks Company leased a machine at the beginning of 1989. The machine, which had cost the lessor $85,000, was properly capitalized by Fairbanks at $73,734.84. A lease payment of $12,000 is due at the start of each year. The expected life of the machine is 12 years, and the term of the lease is 10 years. At the beginning of 1999 the machine will be returned to the lessor. Both Fairbanks and the lessor use the straight-line method of depreciation. What amount of depreciation should Fairbanks record in 1989 for the machine?

a. $7,373.84
b. $8,500.00
c. $7,300.00
d. $6,173.84
13. If a company constructs a laboratory building to be used as a research and development facility, the cost of the laboratory building is matched against earnings as:

   a. research and development expense in the period(s) of construction
   b. depreciation deducted as part of research and development costs
   c. depreciation or immediate write-off depending on company policy
   d. an expense at such time as productive research and development has been obtained from the facility

14. [10] Fill in the effects of the following transactions on your answer sheet showing their impact on cash, quick assets, current assets, working capital, and net income.

   a. A company borrowed $1 million dollars to finance the building of a new manufacturing facility.

   b. At the end of the year interest at 12% was due, but not paid.

   c. The new facility required depreciating. The life of the building was estimated at 20 years.

   d. The company paid $30,000 to Johnson Transportation for bringing building materials to the site.

   e. The company undertook $400,000 of Research & Development in the new building int he first year after it was built.
15. [10] A company invests $24,000 into a project that is expected to yield a cash from operations of $7,000 per year for 5 years. The project is depreciated using the double declining balance method. Shareholders estimate that they can earn 10% in alternative projects. What is the residual income, or equivalently their EVA, in the second year of the project?
1. 2.

3. 4.

5. 6.

7. 8.

9. 10.

11. 12.

13.

14.

<table>
<thead>
<tr>
<th>Cash</th>
<th>Quick Assets</th>
<th>Current Assets</th>
<th>Working Capital</th>
<th>Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15.
1. Use a periodic inventory system so compute closing inventory. LIFO means oldest stuff left in
inventory ie $7,500

2. Use a perpetual and computing cost of goods sold en route with just bought being sold:
   c1 = 5,900
   c2 = 48,000
   c3 = 79,400

   Available for sale = 87,400 less cost of goods sold of 79,400 leaves closing inventory of 8,000

3. FIFO periodic’s closing inventory = 8,750
   LIFO’s from part 1 = 7,500
   LIFO reserve = 1,250

4. Dissimilar transaction — record a gain by entering truck at $12,000 (ignore list)

5. Similar transaction — no gain, enter new software at book of old ie $8,000 (ignore list)

6. Annual depreciation is (25,000 - 1,000)/10 = 2,400 After 8 years and 10 months accumulated
depreciation is 21,200 (2,400 x 8 + 2,400 x 10/12). Net book value is 3,800. Loss is 800.

7. All except repairs add benefits.

8. All of the above

9. Bonds sold for 275,678 — enter at that number
   275,678 + 11,027 - 9,000 = 277,705
   277,705 + 11,108 - 9,000 = 279,813

   Interest expense for year is 11,027 + 11,108 = 22,135

10. One more period of amortization
    279,813 + 11,192 - 9,000 = 282,005

   New bond is at par ie 300,000 so they would register a loss of 17,995

11. This is entered correctly at its present value.

12. The machine will be returned at the end of 10 years so depreciate over the life of the lease and
take 7,373.48 each year.
11. The use of the building is charged to R&D expense ie depreciation, not the acquisition cost.

14.

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>QA</th>
<th>CA</th>
<th>WC</th>
<th>NI</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. dr Cash</td>
<td>cr LT liabilities</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>b. dr Building</td>
<td>cr Interest payable</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>dr Expense</td>
<td>cr Interest payable</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>c. dr Inventory</td>
<td>cr Building</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>d. dr Inventory</td>
<td>cr Cash</td>
<td>-</td>
<td>-</td>
<td>w</td>
<td>w</td>
</tr>
<tr>
<td>dr Building</td>
<td>cr Cash</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>e. dr R&amp;D expense</td>
<td>cr Cash</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

15.  

<table>
<thead>
<tr>
<th></th>
<th>Op inc</th>
<th>7,000</th>
<th>7,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deprec</td>
<td>(9,600)</td>
<td>(5,760)</td>
<td></td>
</tr>
<tr>
<td>Int inc</td>
<td>0</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>Opp cost</td>
<td>(2,400)</td>
<td>(2,640)</td>
<td></td>
</tr>
<tr>
<td>RI</td>
<td>(5,000)</td>
<td>(700)</td>
<td></td>
</tr>
</tbody>
</table>