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Accounting 15. 501/516
Spring 2004
Midterm 2

## Exam Guidelines

1. Fill in your name above. Exams without names will not be graded. If you do not have an ID number, leave the corresponding space blank.
2. You are not allowed to refer to any material in answering this exam.
3. The exam has to be completed in 80 minutes. The total number of points is also $\mathbf{8 0}$, so you have approximately 1 point / minute. Budget your time accordingly.
4. Work in a clear, readable manner. Ample space is provided for every answer.
5. Write answers in the space provided. Unreadable answers will not be graded.
6. Show computations for partial credit.
7. If you feel assumptions are necessary to answer a question, state all assumptions clearly.
8. Laptops and computers are prohibited. You may use calculators.
9. Do not fill in the following table.

| Question | Total points | Points lost |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1: Long-Lived assets | 20 |  |  |  |  |
| 2: Marketable Securities | 20 |  |  |  |  |
| 3: Long-Term Debt | 20 |  |  |  |  |
| 4: Lease | 20 |  |  |  |  |
| Total |  |  |  | $\mathbf{8 0}$ |  |

## QUESTION I: PP\&E, DEPRECIATION, AND DEFERRED TAXES (20 POINTS)

Fabercombie \& Itch (F\&I) Inc. is a growing retail chain of 57 stores in the U.S. You discover from looking at F\&I's footnotes on long-lived assets that there were new investments in PP\&E during 2003 for $\$ 100,000$. Additional information is available in the company's December 31, 2003 annual report. The company's fiscal year ends on December $31^{\text {st }}$ every year.

|  | 2002 | 2003 |
| :---: | :---: | :---: |
| Deferred tax liabilities related to PP\&E | 3,341 | 4,341 |
| Corporate tax rate | 50.0\% | 50.0\% |
| Information from Indirect Statement of Cash Flows |  |  |
| Operating activities section: Depreciation expense |  | 30,000 |
| Investing activities section: Net cash outflow from |  | -97,205 |

A. What is the value of cash inflow from asset sales for $\mathbf{F} \& I$ in 2003?

3 points

Note: There should be no confusion about the sign of net cash outflow. The information is from the Cash Flow Statement. On the Cash Flow Statement, outflows are reported as negative numbers.
B. Assume asset sales in 2003 comprised entirely of the sale of a single piece of equipment on Dec 31 ${ }^{\text {st }}, 2003$. This equipment had been bought on Jan $1^{\text {st }}$, 1993 for a price of $\$ 33,330$. The estimated useful life of this equipment is twelve years and the estimated salvage value is $\$ 930$. What is the book value of this equipment right before it is sold on Dec 31 ${ }^{\text {st }}, 2003$ ?

6 points
C. Using the information provided in Parts $A$ and $B$, what is the journal entry to record the sale of PP\&E on Dec 31 ${ }^{\text {st }}$, 2003? Assume the sale occurs for cash.
D. What is F\&I's tax depreciation for 2003?

5 points

## Question II: Marketable Securities (20 Points)

F\&I Inc. makes an investment in two marketable securities on Jan 1 ${ }^{\text {st }}$, 2003: Macrotough Industries and Specific Motors. F\&I intends to sell both securities on January $15^{\text {th }}, 2004$. The company's fiscal year ends on Dec $31^{\text {st }}$ and the company makes adjusting entries at the end of every year.

Right after the investment, the CFO of F\&I consults the auditors on the classification of these securities. The auditors give F\&I two choices.
Choice (1): Classify Macrotough as "Trading" and Specific Motors as "AFS".
Choice (2): Classify Macrotough as "AFS" and Specific Motors as "Trading".
The CFO prepares the following chart that includes forecasts of market values of the two investments, along with the cost at which the investments were made:

| Security | Actual <br> investment on <br> $\mathbf{0 1 / 0 1 / 2 0 0 3}$ | Value of investment <br> forecasted for <br> $\mathbf{1 2 / 3 1 / 2 0 0 3}$ | Value of investment <br> forecasted for <br> $\mathbf{0 1 / 1 5 / 2 0 0 4}$ |
| :--- | :---: | :---: | :---: |
| Macrotough Industries | 11,150 | 14,151 | 17,019 |
| Specific Motors | 14,266 | 20,001 | 26,661 |

Assume these are F\&I's only two security investments and the corporate tax rate is $50 \%$.
A. If the CFO's security price forecasts turn out to be exactly correct and F\&I sells both securities on Jan $15^{\text {th }}, 2004$, under which classification scheme will reported pre-tax Net Income in 2004 be higher? Use the tables provided below to arrive at your answer. Ignore tax effects for this question.

14 points
Choice (1): Classify Macrotough as Trading, Specific Motors as AFS

|  | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ |
| :--- | :---: | :---: |
| Gain/(loss) in Income Statement on <br> Macrotough | 3,001 | 2,868 |
| Gain/(loss) in Income Statement on <br> Specific Motors | 0 | 12,395 |
| Total | 3,001 | 15,263 |

Choice (2): Classify Macrotough as $A F S$, Specific Motors as Trading

|  | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ |
| :--- | :---: | :---: |
| Gain/(loss) in Income Statement on <br> Macrotough | 0 | 5,869 |
| Gain/(loss) in Income Statement on <br> Specific Motors | 5,735 | 6,660 |
| Total | 5,735 | 12,529 |

B. If the forecasts turn out to be correct, and F\&I sells both securities on Jan $15^{\text {th }}$, 2004, what is the balance in the Deferred Tax Liability account related to Marketable Securities at the end of 2003 under each classification scheme?

6 points

## QUESTION III: LONG-TERM DEBT 20 POINTS)

F\&I Inc., on January $1^{\text {st }}$, 2004, makes a coupon bond issue (Bond A) with the following terms: Face value: $\$ 100,000$
Coupon rate: $12 \%$ per year, to be paid at the end of every year
Maturity: 10 years
The market rate of interest at the time of the issue is $10 \%$. F\&I makes adjusting entries at the end of every year.
A. What is the dollar amount $F \& I$ raises with Bond A? Report the journal entries for recording the bond issue.

3+3 points
B. At the end of the fourth year, on December 31 ${ }^{\text {st }}$, 2007, F\&I retires Bond A early. The prevailing market interest rate on Bond $A$ on December 31 ${ }^{\text {st }}, \mathbf{2 0 0 7}$, is $\mathbf{1 2 \%}$. What is the gain or loss on retirement of bonds? Provide the journal entries for recording the retirement.

6+3 points
C. On Jan $1^{\text {st }}, \mathbf{2 0 0 8}$, F\&I makes another bond issue, Bond X. Bond $X$ is a zero-coupon bond with a face value of $\$ \mathbf{1 1 2 , 0 0 0}$ and a maturity of ten years. The market interest rate on the date of issue is $\mathbf{1 2 \%}$. What is the interest expense on Bond $X$ in Year 2013?

## QUESTION IV: LEASES (20 POINTS)

On Jan $1^{\text {st }}, 2006$, F\&I Inc. enters into its first and only capital lease for some store property. The contract calls for 10 equal payments at the end of every year, with the first payment on December $31^{\text {st }}$, 2006. The leased equipment is depreciated over ten years using straight line method and has zero estimated salvage value. If you solve for an interest rate at any point, use the value of the rate rounded to the nearest integer.

The present value of lease obligation recorded on Jan $1^{\text {st }}, 2007$ is $\$ 62,469$. The value of the lease obligation on Jan $1^{\text {st }}, 2008$ is $\$ 57,467$. The interest expense recorded in Year 2007 is $\$ 4,998$.
A. What is the annual lease payment on the leased property?

5 points
B. Provide the journal entries for recording the lease interest expense on December $31{ }^{\text {st }}, 2007$.

3 points
C. In the property lease above, what is the effective lease interest rate?

3 points
D. What is the present value of the lease obligation as on Jan $\mathbf{1}^{\text {st }}, \mathbf{2 0 0 6}$ ?
[Hint: You may find it useful to solve Parts A \& C first]
4 points
E. Instead of the capital lease, if F\&I had entered into an operating lease of the property on Jan $1^{\text {st }}, 2006$ for five years, it would have to pay $\$ 10,500$ as operating lease rent at the end of every year. Would total reported expenses in Year $\underline{2007}$ on account of the lease be higher with the operating lease structure than with the current capital lease structure that F\&I has? Justify your answer.

5 points

Space for calculations

