Name ________________________

ID #________________________

ACCOUNTING 15.501/516
FALL 2003
MIDTERM II

EXAM GUIDELINES

1. Please detach the last (blank) page, fold in half lengthwise, and write your name on it in LARGE block letters. Display this sign in front of you so that I can see it from the center of the room.

2. The exam must be completed within 80 minutes.

3. The total number of points in this exam is also 80, so budget about 1 minute / point. Avoid spending too much time on any one question.

Question	Topic	Points
I	PP&E, depreciation, and deferred taxes	20
II	Marketable securities	20
III	Present values and long-term debt	20
IV	Leases	20

4. Please work the problems in a clear, readable manner and show all computations. We will not grade what we cannot read.

5. If you feel that assumptions are necessary to solve a problem, please state your assumption and why it was necessary.

6. The following formulas may be useful for answering some of the questions.
   Present value factor for an ordinary annuity: Future value factor for an ordinary annuity:

$$\text{PVFA}(n\,\text{periods}, r) = \frac{1}{r} - \frac{1}{r(1+r)^n} \qquad \text{FVFA}(n\,\text{periods}, r) = \frac{(1+r)^n}{r} - \frac{1}{r}$$

7. Calculators may be used for computations on this exam.

8. Good luck!

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

Abercrombie & Fitch (A&F) is a large and growing retail chain of 597 stores in the U.S. The following information has been extracted from the company's February 1, 2003 annual report.

(thousands of dollars)	2003	2002
Gross property, plant, and equipment	$585,642	$501,323
Accumulated depreciation	192,701	136,211
Net property, plant, and equipment	392,941	365,112
Deferred tax liabilities related to PP&E	25,954	7,417
Statutory tax rate	38.5%	
Indirect statement of cash flows		
Operating activities: addback for depreciation	56,925	
Operating activities: add losses (less gains) from disposal	0	
Investing activities: purchases of PP&E	-92,976	

A. Calculate the cash received from the disposal property, plant, and equipment (PP&E) for the fiscal year ended February 1, 2003. (It may be helpful to use balance sheet equation entries to reverse engineer the disposal transaction.) [12 points]

B. Estimate the cumulative book-tax timing difference related to PP&E as at February 1, 2003. [3 points]

C. Estimate the amount of depreciation for tax purposes claimed by A&F for the fiscal year ended February 1, 2003. [5 points]

QUESTION II: MARKETABLE SECURITIES (20 POINTS)

A. In the financial statements of A&F, the company reports more than $10 million in marketable securities and zero *unrealized* gains or losses from marketable securities as at February 1, 2003. Given this information, what is your best estimate of what type of securities A&F holds (debt or equity) and how has the company classified the securities (held-to-maturity, trading, or available-for-sale)? [2 points]

B. Assume that company AAA purchased 1000 shares of ZZZ in 1998 for $50 per share. The company classified these shares as trading securities. Since 1998, ZZZ had paid no dividends. The price of ZZZ shares at the end of each year from 1998 to 1992 are as follows:

Year	1998	1999	2000	2001	2002
Price	$52	$60	$45	$50	$70

In June 2003, AAA sold its entire investment in ZZZ for proceeds (before-tax) of $80,000.

1. Provide the balance sheet equation entries required at the end of 2001 and 2002, and for the sale in 2003. Include the effect of income taxes at a rate of 35%. For simplicity, you may assume that taxes due on any realized gains are paid immediately with cash. (Note: although not required, it may be helpful to compute the balance of your accounts at the beginning of 2001.) [12 points]

Brief Description	Cash					R/E	R/E Comment

2. Identify the effect of the sale of ZZZ shares on AAA's *indirect* statement of cash flows (SCF) for 2003. Please note (i) the nature of the cash flow, (ii) the amount, and (iii) in which of the three section of the SCF the item appears. One part of this has been completed for you. [6 points]

   Operating activities:

   Net income (reflects gain after-tax) +6,500

QUESTION III: PRESENT VALUES AND LONG-TERM DEBT (20 POINTS)

A. Assume that you are just graduating and you have $50,000 outstanding in student loans. The loan bears interest at 8%. If you repay $5,841.47 per year, how many years will it take you to repay the entire loan? [3 points]

B. On January 1, 1991, Company BBB issued zero coupon bonds due on December 31, 2010. The maturity value of the bonds is $20 million and the company received proceeds of $5,168,380 at the time of issuance.

1. How much was the effective interest rate on these bonds? [3 points]

2. Record the balance sheet equation entries for the year ended December 31, 1991. (If you cannot solve part 1, make an assumption regarding the interest rate and state it.) [5 points]

	Cash		Bond Payable	-Discount on Bond Payable	R/E	R/E Comment
Bond issuance						
Year end adjustment						

3. Identify the effect of the bonds on the *indirect* statement of cash flows (SCF) for the year ended December 31, 1991. Please note (i) the nature of the cash flow, (ii) the amount, and (iii) in which of the three section of the SCF the item appears. Ignore the effect of income taxes. [6 points]

4. On December 31, 2002, BBB's zero coupon bonds were selling for $676.84 per 1000. How much was the market interest rate on these bonds on December 31, 2002? [3 points]

QUESTION IV: LEASES (20 POINTS)
On December 31, 2002, Company CCC entered into its only lease for a "Googleplexer." On the company's December 31, 2002 financial statements, you find the following information:

Note 1: Accounting Policies
The company depreciates property, plant, and equipment using the straight-line method.

Note 5: Leases

Future minimum lease payments	Capital Leases
2003	$300,000
2004	300,000
2005	300,000
2006	300,000
2007	300,000
2008 and later	0
Total minimum lease payments	$1,500,000
Portion representing interest	333,105
Net	1,166,895
Current portion	194,979
Long-term lease obligation	$971,916

A. How much was recorded in property, plant, and equipment for this lease? [2 points]

B. How much is the effective interest rate on this lease? [3 points]

C. Compute the total amount of expenses to be recorded on this lease for the 2003 fiscal year. (Note: if you cannot solve parts A or B, make an assumption(s) and state it.) [5 points]

D. If this lease had been considered an operating lease, how much expense would be recorded in 2003? [2 points]

E. Assume that there will be neither a transfer of title nor a bargain purchase option on this lease. Also assume that the useful life of the Googolplexer is 7 years. How much is the maximum market value of the Googolplexer at December 31, 2002. [3 points]

F. Maintain the assumptions in Part E and also assume that the purchase price of the Googolplexer at December 31, 2002 was $1,232,000. What interest rate assumption would allow CCC to treat the above lease as an operating lease? [5 points]