

I. Multiple Choice (17 points)

1. Intangible assets make up 40 percent of the total assets of a particular firm. This firm is most likely to be:

- a. a pharmaceutical firm that invests in research and development to create new drugs
- b. a consumer products company that invests in advertising to create brand recognition
- c. an information processing company that develops computer software to use in its business
- d. a restaurant business that has grown by acquiring other restaurant chains**

2. The difference between common stock and preferred stock is that preferred stock usually has preferential status with respect to

- a. dividends
- b. current assets
- c. noncurrent assets
- d. all of the above**

3. You have been asked to analyze the financial statements of the Cara Corp. with regards to liquidity and financial flexibility. Which financial statement would you find most use?

- a. Balance sheet**
- b. Statement of comprehensive income
- c. Statement of cash flows
- d. Statement of changes in equity

4. The amount of revenue recognized may need to be adjusted to recognize

	<i>Delayed receipt of payments</i>	<i>Sales discounts and allowances</i>	<i>Uncollectible accounts</i>	<i>Sales returns</i>
a.	Yes	Yes	Yes	Yes
b.	Yes	No	No	No
c.	No	Yes	No	Yes
d.	No	No	Yes	No

5. Ames Corp. purchased new equipment during the year but neglected to record depreciation. What is the effect of this omission on each of the named accounts?

	<i>Accumulated Depreciation</i>	<i>Retained Earnings</i>	<i>Depreciation Expense</i>
a.	Understated	Overstated	Understated
b.	Understated	No effect	Overstated
c.	Overstated	Understated	Understated
d.	Overstated	No effect	Overstated

6. A small leverage ratio may indicate that a company is
- well managed
 - financed with a relatively large amount of common shareholders' equity**
 - financed with a relatively large number of shares of common and preferred stock
 - financed with a relatively large amount of debt

7. The following information pertains to the Hamilton Company for the year ended June 30, Year 2:

Common shares outstanding	750,000
Stated value per share	\$15.00
Market price per share	\$45.00
Year 1 dividends paid per share	\$4.50
Year 2 dividends paid per share	\$7.50
Primary earnings per share	\$11.25
Fully diluted earnings per share	\$9.00

The price-earnings ratio for Hamilton's common stock is

- 3.0 times
 - 4.0 times
 - 5.0 times**
 - 6.0 times
8. Bad debt expense must be estimated in order to satisfy the matching principle where expenses are recorded in the same periods as the related revenues. In estimating the provision for doubtful accounts for a period, companies generally accrue
- an amount based on a percentage of total assets
 - a percentage of accounts receivable transactions for the period
 - a percentage of total sales
 - either an amount based on a percentage of credit sales or an amount based on a percentage of accounts receivable after adjusting for any balance in the allowance for doubtful accounts.**
9. Which method of recognizing uncollectible accounts is considered generally accepted?
- direct write-off method
 - percent of receivables method
 - percent of sales method**
 - both (b) and (c)
10. Recognizing income after the time of sale is
- never appropriate
 - always appropriate
 - never in accordance with GAAP
 - appropriate for some specific circumstances**

11. An example of a contingent obligation is
- notes receivable sold with recourse
 - a line of credit with an established lender
 - damage to equipment from a fire
 - allowance for uncollectible accounts
12. There are many similarities between lessee and lessor accounting for the capitalization of leases. Which one of the following is a criterion for the capitalization of a lease by a lessee?
- The lease transfers ownership of the property to the lessee by the end of the lease term.**
 - The lease term is at least 60% of the remaining life of the asset at the beginning of the lease.
 - The present value of the minimum lease payments is 75% or more of the fair market value of the leased asset.
 - Future costs are reasonably predictable.
13. A permanent difference
- results in income tax payable greater than income tax expense
 - causes a difference between financial income and tax income in the current year**
 - requires disclosure requirements on a firm's income tax return
 - results in a deferred tax asset
14. An investment in current marketable equity securities is valued on the Statement of Financial Position at the
- cost to acquire the asset
 - fair value**
 - lower of cost or market
 - par or stated value of the securities

Items 15 and 16 are based on the following:

Information concerning Monahan Company's portfolio of debt securities at May 31, Year 6, and May 31, Year 7, is presented below. All of the debt securities were purchased by Monahan during June, Year 5. Prior to June, Year 5, Monahan had no investments in debt or equity securities.

<i>As of May 31, Year 6</i>	<i>Amortized Cost</i>	<i>Fair Value</i>
Cleary Company bonds	\$164,526	\$168,300
Beauchamp Industry bonds	204,964	205,200
Morrow Inc. bonds	<u>305,785</u>	<u>285,200</u>
	675 275	658 700
<i>As of May 31, Year 7</i>	<i>Amortized Cost</i>	<i>Fair Value</i>
Cleary Company bonds	\$152,565	\$147,600
Beauchamp Industry bonds	193,800	204,500
Morrow Inc. bonds	<u>289,130</u>	<u>291,400</u>
	635 495	643 500

15. Assuming that the above securities are properly classified as available-for-sale-securities under Statement of Financial Accounting Standards # 115, "Accounting for Certain Investments in Debt and Equity Securities," the unrealized holding gain or loss as of May 31, Year 7, would be
- a. recognized as a \$8,005 unrealized holding gain on the income statement
 - b. recognized as other income with a year-end credit balance of \$8,005 in the Unrealized Holding Gain/Loss account**
 - c. recognized as a \$24,580 unrealized holding loss on the income statement
 - d. not recognized
16. Assuming that the above securities are properly classified as held-to-maturity securities under Statement of Financial Accounting Standards # 115, "Accounting for Certain Investments in Debt and Equity Securities," the unrealized holding gain or loss as of May 31, Year 7, would be
- a. recognized as a \$8,005 unrealized holding gain on the income statement
 - b. recognized as other comprehensive income with a year-end credit balance of \$8,005 in the Unrealized Holding Gain/Loss account
 - c. recognized as a \$24,580 unrealized holding loss on the income statement
 - d. not recognized**
17. Consolidated corporations
- a. may operate as one economic entity
 - b. are legally separate entities
 - c. must operate as one economic entity
 - d. both (a) and (b)**

II. Long-term liabilities (15 points)

WHITE Corporation, a calendar-year firm, is a large mining equipment manufacturer. The footnotes to its 1991 annual report included the following information pertaining to long-term debt (in thousands):

	1991	1990
Sinking-fund debentures, 9 1/2%, due 2000, less unamortized discount (1991-\$323; 1990 - \$363), effective rate 9.6%	\$44,509	\$51,556
Zero coupon bonds due 2011, less unamortized discount of \$500,282, 7 1/2% yield to maturity	\$154,718	---
Exchangeable senior subordinated bonds, 6 3/4%, due 2005	\$75,000	\$75,000

Questions:

- 1 What is the face value of the zero coupon bonds (i.e., the amount that will be repaid at maturity)? (2 points)

$$\begin{aligned} \text{Since we are given the discount, Face value} &= PV(1991) + \text{Discount}(1991) \\ &= 154,718,000 + 500,282,000 = 655,000,000 \end{aligned}$$

If it is issued on December 31, 1991 and is to be paid out on December 31, 2011, we can use $\text{Face value} = 154,718 * (1.075)^{20} = 657,219,027$. Since we are not given information on when the bond was issued, we cannot use this PV calculation.

- 2 Calculate the approximate proceeds from the zero coupon bonds (i.e., their market price when they were issued). Assume that they mature exactly 20 years after issuance and that interest accrues annually. (3 points)

$$\text{At issuance, proceeds} = 655,000,000 / (1.075)^{20} = \$154,195,611$$

- 3 Based on the **actual** book value reported above for the zero coupon bonds on December 31, 1991, estimate (i) the amount of interest expense that WHITE will record for these bonds in 1992, and (ii) the book value that WHITE will report for these bonds as of 12/31/92. (6 points)

$$\text{Interest expense} = 154,718,000 * 0.075 = 11,603,850$$

$$BV(1992) = 154,718,000 + 11,603,850 = 166,321,850$$

- 4 For the Exchangeable senior subordinated bonds, estimate the amount of interest expense WHITE recognized in 1992. When the company prepares the Statement of Cash Flows for that year using indirect method, should it adjust Net Income for the amount of interest expense to calculate cash flow from operations? (4 points)

$$\text{Interest expense} = 75,000,000 * 0.0675 = 5,062,500$$

This interest expense is paid out in cash as part of operations, hence NI is no longer adjusted.

III. Inventory (15 points)

Mitsukoshi, a leading department store in Japan, uses a FIFO cost flow assumption for inventories. Macy's Department stores, a leading department store chain in the United States, uses a LIFO cost flow assumption. Selected data for 1999 from the financial statements of the two firms appear below (in millions of dollars).

	Mitsukoshi	Macy's
Beginning inventories	\$ 43,777	\$ 1,418
Ending inventories	44,389	1,788
Sales	712,628	11,525
Cost of goods sold	542,205	8,453
Excess of replacement cost over reported value of inventory, i.e., LIFO reserve in the		
Beginning inventories	-	203
Ending inventories	-	251

Required

1. Calculate the gross margin percentage (gross margin/sales) for each firm based on their reported amounts. (5 points)

$$\text{Mitsukoshi GM: } (712,628 - 542,205) / 712,628 = 23.9\%$$

$$\text{Macy's GM: } (11,525 - 8,453) / 11,525 = 26.7\%$$

2. Compute the gross margin percentage for Macy's Department Stores assuming that it had used a FIFO cost flow assumption. (5 points)

$$\begin{aligned} \text{COGS, FIFO} &= \text{COGS, LIFO} - \text{Change in LIFO Reserve} \\ &= 8,453 - (251 - 203) \\ &= 8,405 \end{aligned}$$

$$\text{Thus, Macy's GM, FIFO} = (11,525 - 8,405) / 11,525 = 27.1\%$$

3. How does the cost flow assumption affect your conclusions regarding the relative profitability of these two firms based on gross margin for 1999? (5 points)

Putting Macy's and Mitsukoshi in the same cost flow assumption (a sensible thing to do if we want to compare two companies) makes Macy's even more profitable.

IV. Cost Accounting (10 points)

The Solom Company uses a job-costing system at its plant. The plant has a Machining Department and a Finishing Department. Its job-costing system has two direct-cost categories (direct materials and direct manufacturing labor) and two manufacturing overhead cost pools (the Machining Department, allocated using actual machine-hours and the Finishing Department, allocated using actual labor cost). The 1994 budget for the plant is as follows:

	Machining Dept.	Finishing Dept.
Manufacturing overhead	\$10,000,000	\$8,000,000
Direct manufacturing labor cost	900,000	4,000,000
Direct manufacturing labor-hours	30,000	160,000
Machine-hours	200,000	33,000

Required:

1. What is the budget overhead rate that should be used in the Machining Dept.? In the Finishing Department? (4 points)

Machining Department: $\$10,000,000/200,000 = \50 per machine-hour

Finishing Department: $\$8,000,000/\$4,000,000 = 200\%$ of direct manufacturing labor costs or $8,000,000/160,000 = \$50$ per direct labor hour.

2. During the month of January, the cost record for Job 15.501 show the following:

	Machining Dept.	Finishing Dept.
Direct material used	\$14,000	\$3,000
Direct manufacturing labor cost	600	1,250
Direct manufacturing labor-hours	30	50
Machine-hours	130	10

What is the total manufacturing overhead allocated to Job 15.501? (3 points)

*Machining overhead: $\$50 * 130$ hours = \$6,500*

*Finishing overhead, 200% of \$1,250 = 2,500 or $50 * \$50 = 2,500$*

Total manufacturing overhead allocated = $\$6,500 + \$2,500 = \$9,000$

3. Assuming that Job 15.501 consisted of 200 units of product, what is the unit product cost of Job 15.501? (3 points)

*Direct costs of Job 15.501 = Direct materials + Direct manufacturing labor
= $14,000 + 3,000 + 600 + 1,250 = 18,850$*

Indirect costs of Job 15.501 = Machining overhead + Finishing overhead = $6,500 + 2,500 = 9,000$

Total costs of Job 15.501 = $18,850 + 9,000 = 27,850$

The unit product cost of Job 15.501 is $\$27,850 / 200$ units = \$139.25 per unit.

V. Cash flow from operations, free cash flows (15 points)

Hertz is the world's largest provider of rental cars and trucks. Extracts from its statement of cash flows follow:

Cash Flows of Hertz Corp.			
	1989	1990	1991
Net Income	108	89	48
Depreciation of revenue equipment	475	530	497
Depreciation of property	57	69	75
Self-insurance and other accruals	100	85	122
Purchases of revenue equipment	(3003)	(4024)	(4016)
Sales of revenue equipment	2354	3434	3784
Changes in operating assets and liabilities (net)	(141)	13	(118)
Payment of self-insurance claims	(67)	(104)	(106)
Cash flow from operations	(117)	92	286
Cash flow from investing	(133)	(79)	(72)
Net change in debt	241	(4)	(84)
Dividends paid	(90)	(64)	(62)
Cash flow from financing	151	(68)	(146)
Effect of foreign exchange rates	1	11	0
Net increase (decrease) in cash	(98)	(44)	68

Source: Hertz Corp. 1991 Annual Report

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Note that Hertz includes purchases and sales of revenue equipment (cars and trucks to be rented) in cash flow from operations.

A. Recompute cash flow from operations, classifying purchases and sales of revenue equipment as investing cash flows. (3 points)

Hertz Corp. (\$ millions)

	1989	1990	1991
Reported cash flow from operations	(\$117)	\$92	\$286
Add back: purchases of equipment	3003	4024	4016
Subtract: sales of equipment	(2354)	(3434)	(3784)
Adjusted cash flow from operations	\$532	\$682	\$518

B. Compare the trend of cash flow from operations as reported with the trend after reclassification. (3 points)

As reported, cash flow from operations show steady improvement over the period 1989-1991, changing from a negative to a positive amount. After adjustment, the trend is eliminated; cash flow from operations is lower in 1991 than in either 1989 and 1990. The improvement in reported cash flow from operations was the result of reducing Hertz's net investment in rental equipment.

C. Recompute cash flow for investing, classifying purchases and sales of revenue equipment as investing cash flows. (3 points)

Hertz Corp. (\$ millions)

	1989	1990	1991
Reported cash flow for investing	(\$133)	(\$79)	(\$72)
Subtract: purchases of equipment	(3003)	(4024)	(4016)
Add back: sales of equipment	2354	3434	3784
Adjusted cash flow for investing	(\$782)	(\$669)	(\$304)

D. Compare the trend of cash flow for investing as reported with the trend after reclassification. (3 points)

Reported cash flow for investing shows little change over the three year period. After reclassification of equipment purchases and sales, cash flow for investing drops by more than half in 1991. After reclassification it reflects the sharp drop in net car and truck purchases in that year.

E. Assume that Hertz leases (rather than purchases) some of its rental cars and trucks. Discuss the impact of leasing (rather than buying) on cash flow from operations as reported by Hertz. (3 points)

For Hertz, cars are like inventory to manufacturing or merchandizing firms. Therefore, when cars are purchased, the full amount is reported as an operating cash outflow. For leased equipment, only the periodic lease payments are reported as operating cash outflows. Thus, for Hertz, leasing increases reported cash flow from operations.

VI. Operating versus Capital Leases (10 points)

If a lease is capitalized, as compared to being treated as an operating lease, describe the first year impact on:

(i) The current ratio (current assets/current liabilities): (2 points) Current ratio will be lower when the lease is capitalized as current liabilities now include the current portion of the capitalized lease obligation. “No impact” answer should receive 1 point.

(ii) The debt-to-equity ratio: (2 points) The debt-to-equity ratio will be higher because the present value of the minimum lease payments must be reported as debt.

(iii) Net Income: (3 points) Net income in the first year is lower under the capital lease method as total lease expense (the sum of depreciation and interest expense) exceeds the annual rental (lease expense under the operating lease method).

(iv) Cash flow from operations: (3 points) They are higher when leases are capitalized as only a portion (interest component) of the annual rental payment is reported as an operating cash outflow; the remainder is considered a financing cash outflow.

VII. Comparison of cost and equity methods (18 points)

The Burry Corporation acquired 15% of the Bowman Company for \$10 million on January 1, 1990. The Bowman Company's securities are not publicly traded.

For the years ended December 31, 1990, and December 31, 1991, Bowman reported earnings and dividends as follows:

	Net Income (Loss)	Dividends Paid
1990	(\$600,000)	\$800,000
1991	2,000,000	1,000,000

A. Under a strict reading of U.S. GAAP, what method of accounting should Burry use for Bowman in 1990? (3 points)

1990: Cost method, unless Burry can argue that it has "significant influence" over Bowman.

B. In 1990, when Burry owns 15% of the Bowman Company, what will be Bowman's impact on Burry's Net Income and Cash Flow from Operations in 1990? (6 points)

1990: Cost method will be applied. The impact on Burry's Net Income and Cash Flow from Operations would be equal to the dividends received from Bowman during the year: \$120,000 ($0.15 \times \$800,000$).

C. Now assume that Burry owns 25% of Bowman Company in 1991, but it owns 0% of Bowman in 1990. Under a strict reading of U.S. GAAP, what method of accounting should Burry use for Bowman in 1991? (3 points)

1991: Equity method, unless Burry does not have "significant influence."

D. When Burry owns 25% of the Bowman Company in 1991 and 0% of Bowman in 1990, what will be Bowman's impact on Burry's Net Income and Cash Flow from Operations in 1991? (6 points)

1991: Equity method will be applied. The impact on Burry's Net Income would be equal to the portion of Bowman's Net Income owned by Burry: \$500,000 ($\$2,000,000 \times 25\%$). The impact on Burry's Cash flow from Operations would be equal to the dividends received from Bowman during the year: \$250,000 ($\$1,000,000 \times 25\%$).