

SOL'N -- ACCO 230.4 Final Exam dated May 1, 2010 (Formatted for LEGAL SIZE paper)

Problem 1 (45 marks; 81 minutes)

Multiple choice and "fill in the blanks"

Part (A) (24 marks; 43 minutes)

Multiple-choice

- 1. a
- 2. a
- 3. d
- 4. c
- 5. e
- 6. b
- 7. d
- 8. d
- 9. c
- 10. a
- 11. c
- 12. c
- 13. a
- 14. c
- 15. a
- 16. b

Part (B) (6 marks; 11 minutes)

Fill in the blanks -- Dividends

Determine the impact (decrease "D", increase "I", or no effect "NE") of a cash dividend and a stock dividend, respectively, on the selected items appearing below. Assume cash dividends are paid immediately upon declaration, and stock dividends are issued immediately upon declaration. A blank cell will be ignored, i.e., will be marked "incorrect".

IMPACT ON:			
	<i>Cash Dividend</i>	<i>Stock Dividend</i>	
Free cash flow	D	NE	
Total shareholders' equity	D	NE	
Share capital account <i>only</i>	NE	I	
Retained earnings account <i>only</i>	D	D	
Net earnings	NE	NE	
Working capital	D	NE	

Part (C) (7 marks; 13 minutes)

Fill in the blanks -- selected profitability ratios

Calculate the missing amounts in the table.

	Acme Corp.		Connors Inc.
Sales	\$8,500,000		\$1,800,000
Net earnings	\$950,000		\$72,000
Average total assets	\$4,750,000		\$600,000
Profit margin (one decimal place)	11.2%		4.0%
Asset turnover (one decimal place)	1.8		3.0 times
Return on assets (one decimal place)	20.0%		12.0%

Show work here, and on the back of this page if necessary:

Part (D) (8 marks; 14 minutes)

Fill in the blanks --- straight-line depreciation

Solve for the missing items. Assume straight-line depreciation is used.

	Machine X	
Cost	\$250,000	
Residual value	\$10,000	
Estimated useful life	40 years	
Annual depreciation amount	\$6,000	
Number of <i>months</i> owned at time of disposal	96	
Accumulated depreciation at disposal date	\$48,000	
Proceeds of disposal	\$220,000	
Gain on disposal	\$18,000	
Impact of disposal on <i>Total Assets</i> on the disposal date (increase, decrease, or no change). If increase or decrease, by how much?	Increase of \$18,000	

Show work here, and on the back of this page if necessary:

Problem 2 (14 marks; 25 minutes)

Accounting for bonds payable

CC Ltd. issued \$45,000,000 face value debentures on January 1, 2009. The bonds mature on January 1, 2019. The annual contractual (coupon) rate is 6%, and interest is paid semi-annually on July 1 and January 1. The annual market rate was 7% for similar bonds at the time of issuance. CC Ltd. received \$41,802,400 cash from the issuance of the bonds. CC Ltd. uses the *effective interest method* to amortize bond discount or premium.

Required (Round calculations to the nearest dollar)

1. Show the journal entry to record the issuance of the bonds, January 1, 2009. (1 mark)

Cash 41,802,400
Bonds payable 41,802,400

2. Show the journal entry to record interest on each of the following dates, assuming the *only* previous entry was the one you made on January 1. (5 marks)

- (a) July 1, 2009

Bond interest expense 1,463,084
Bonds payable 113,084
Cash 1,350,000

$\$41,802,400 \times 7\% \times 6/12 = \$1,463,084$
 $\$45,000,000 \times 6\% \times 6/12 = \$1,350,000$

- (b) Dec. 31, 2009 (CC's year-end date)

Bond interest expense 1,467,042
Bonds payable 117,042
Bond interest payable 1,350,000

$(\$41,802,400 + \$113,084) \times 7\% \times 6/12 = \$41,915,484 \times 3.5\% = \$1,467,042$
 $\$45,000,000 \times 6\% \times 6/12 = \$1,350,000$

3. Show in good form the Liabilities section of CC's balance sheet as at December 31, 2009. (3.5 marks)

CC Ltd.
Partial Balance Sheet
December 31, 2009

Current liabilities
Bond interest payable \$ 1,350,000

Long-term liabilities
Bonds payable, 6%, due 2019 \$42,032,526

$\$41,915,484 + \$117,042 = \$42,032,526$

4. Show the journal entry to record the payment of interest on January 1, 2010. (1 mark)

Bond interest payable 1,350,000
Cash 1,350,000

5. Assume that CC Ltd. redeems ten percent (10%) of the bonds for cash at 95 on Jan. 1, 2010 *immediately after* the payment of interest on that date. Show the journal entry to record this redemption. (At "95" is a term used in the course, and students are expected to know its meaning). (3.5 marks)

<i>Bonds payable</i>	4,203,253	
<i>Loss on redemption of bonds payable</i>	71,747	
<i>Cash</i>		4,275,000
$\$42,032,526 \times 10\% = \$4,203,253$		
$\$45,000,000 \times 10\% \times .95 = \$4,275,000$		

Problem 3 (22 marks; 40 minutes)

Cash flow statement

The HM Company has provided you with financial information for the years 2009 and 2008, respectively. The year-end date is December 31 for each year.

	2009	2008
Cash	\$17,000	\$40,000
Accounts Receivable	312,000	125,000
Merchandise inventory	36,000	25,000
Prepaid rent	0	7,000
Land, at cost	29,000	38,000
Equipment , at cost	690,000	600,000
Less: Accumulated depreciation	(224,000)	(215,000)
TOTAL ASSETS	\$860,000	\$620,000
Accounts payable	\$63,000	\$32,000
Rent payable	4,000	0
Bonds payable, due 2020	120,000	45,000
Common shares	195,000	75,000
Retained earnings	478,000	468,000
TOTAL LIABILITIES & EQUITIES	\$860,000	\$620,000

Additional information:

- 1) Net earnings for 2009 was only \$11,000. The calculation of net earnings *includes* the following *selected* items and amounts: Cost of goods sold, \$180,000; Gross profit, \$160,000; Depreciation expense, \$32,000; Gain on sale of land, \$2,000; Loss on sale of equipment, \$4,000; and Rent expense, \$16,000.
- 2) New equipment was purchased for \$120,000 cash in 2009. Old equipment was sold for cash in 2009 (the amount can be derived).
- 3) A small cash dividend was declared and paid in 2009 (the amount can be derived).
- 4) Accounts payable relates only to transactions with suppliers of merchandise inventory.

Required

- a) How much cash was paid to suppliers of merchandise inventory in 2009? (2 marks)

$$\begin{aligned} & \$180,000 + (\$36,000 - \$25,000) + (\$32,000 - \$63,000) = \\ & \$180,000 + \$11,000 - \$31,000 = \mathbf{\$160,000}. \end{aligned}$$

- b) How much cash was paid for rent in 2009? (2 marks)

$$\$16,000 - \$7,000 - \$4,000 = \mathbf{\$5,000}.$$

c) How much cash was collected from customers in 2009? (2 marks)

$$(\$160,000 + \$180,000) + (\$125,000 - \$312,000) =$$

$$\$340,000 - \$187,000 = \$153,000.$$

d) Prepare in proper form a complete Cash Flow Statement for 2009 (i.e., all sections). Use the indirect method for the Operating section. Show your answer on the next page. (16 marks)

HM Company
Cash Flow Statement
For the Year ended December 31, 2009

Operating activities		
Net earnings	\$11,000	
Add (deduct) items not affecting cash:		
Depreciation expense	32,000	
Gain on sale of land	(2,000)	
Loss on sale of equipment	4,000	
Increase in accounts receivable	(187,000)	
Increase in merchandise inventory	(11,000)	
Decrease in prepaid rent	7,000	
Increase in accounts payable	31,000	
Increase in rent payable	<u>4,000</u>	
Cash used in operating activities		(\$111,000)
Investing activities		
Acquisition of equipment	(120,000)	
Disposal of equipment (Note 1)	3,000	
Sale of land (Note 2)	<u>11,000</u>	
Cash used in investing activities		(106,000)
Financing activities		
Issuance of bonds payable	75,000	
Issuance of common shares	120,000	
Payment of dividends (Note 3)	<u>(1,000)</u>	
Cash from financing activities		<u>194,000</u>
Decrease in cash during 2009		(23,000)
Cash balance, December 31, 2008		<u>40,000</u>
Cash balance, December 31, 2009		<u>\$17,000</u>

Note 1: $\$600,000 + \$120,000 - \$690,000 = \$30,000$ cost of equipment sold.

$\$215,000 + \$32,000 - \$224,000 = \$23,000$ accum. depreciation re equipment sold.

$\$30,000 - \$23,000 - \$4,000 = \$3,000$ proceeds from disposal of equipment.

Note 2: $\$38,000 - \$29,000 + \$2,000 = \$11,000$.

Note 3: $\$468,000 + \$11,000 - \$478,000 = \$1,000$.

Problem 4**(10 marks; 18 minutes)***Financial ratios*

The following summary information relates to V Inc. for 2009 and 2008, respectively.

	<u>2009</u>	<u>2008</u>
<u>Assets</u>		
Cash	\$ 85,000	\$ 195,000
Accounts receivable	86,000	30,000
Merchandise inventory	50,000	20,000
Property, plant, and equipment, net	<u>300,000</u>	<u>220,000</u>
Total assets	<u>\$521,000</u>	<u>\$465,000</u>
<u>Liabilities and Shareholders' Equity</u>		
Accounts payable	\$ 80,000	\$ 40,000
Note payable, due June 15, 2010	90,000	90,000
Common share capital (5,000 shares)	225,000	225,000
Retained earnings	<u>126,000</u>	<u>110,000</u>
Total liabilities and shareholders' equity	<u>\$521,000</u>	<u>\$465,000</u>

Condensed Statement of Earnings for 2009

Sales	\$199,000
Cost of goods sold	147,000
Operating expenses	21,000
Interest expense	5,000
Income tax expense	<u>8,000</u>
Net earnings	<u>\$18,000</u>

Additional information

- 90% of all sales are made on credit.
- Market price per share, December 31, 2009 was \$28.
- Cash *used* by operating activities, \$18,000 (this figure is correct, you do not need to "prove" it).

Required

Calculate each of the following ratios for 2009 using the formulae in the text. Round calculations to one decimal place. Definitions are not required.

- a) Dividend payout ratio (hint: first determine the *total* amount of dividends declared).

$$\text{Dividends paid} = \$110,000 + \$18,000 - \$126,000 = \$2,000.$$

$$\text{Payout ratio} = \$2,000 / \$18,000 = \mathbf{11.1\%}.$$

- b) Dividend yield ratio.

$$(\$2,000 / 5,000) / \$28 = \mathbf{1.4\%}.$$

- c) Return on common shareholders' equity.

$$\$18,000 / ((\$225,000 + \$110,000 + \$225,000 + \$126,000) / 2) =$$

$$\$18,000 / \$343,000 = \mathbf{5.2\%}.$$

- d) Accounts receivable turnover ratio.

$$(\$199,000 \times .90) / ((\$30,000 + \$86,000) / 2) =$$

$$\$179,100 / \$58,000 = \mathbf{3.1\ times}.$$

- e) Cash current debt coverage ratio

$$(\$18,000) / ((\$40,000 + \$80,000 + \$90,000) / 2) =$$

$$(\$18,000) / \$105,000 = \mathbf{(17.1\ \%)}.$$

Problem 5**(9 marks; 16 minutes)***Accounting for bad debts*

The comptroller of B Ltd. has asked for your assistance. The company follows GAAP and has a December 31st yearend. The unadjusted balance in Allowance for Doubtful Accounts at December 31, 2009 was \$1,000 debit, before the adjusting entry for bad debts expense was made. An aging of the accounts receivable as at December 31, 2009 revealed the following:

		<u>Estimated Percentage Uncollectible</u>
Current accounts (not past due)	\$150,000	1%
1-30 days past due	15,000	3%
31-60 days past due	8,000	6%
61-90 days past due	5,000	12%
Over 90 days past due	<u>6,000</u>	30%
Total Accounts Receivable	<u>\$184,000</u>	

(a) What is the most likely reason that there is a debit balance in the allowance account? (2 marks)

The most likely reason for this occurrence is that actual write-offs during the year exceeded bad debt estimates.

(b) Prepare the adjusting journal entry on December 31, 2009 to recognize bad debts expense. Show all calculations. (5 marks)

Required balance in AFDA =

$$(\$150,000 \times 1\%) + (\$15,000 \times 3\%) + (\$8,000 \times 6\%) + (\$5,000 \times 12\%) + (\$6,000 \times 30\%) =$$

$$\$1,500 \quad + \quad \$450 \quad + \quad \$480 \quad + \quad \$600 \quad + \quad \$1,800 \quad = \quad \$4,830.$$

Adjusting journal entry, 12-31-09:

<i>Bad debts expense</i>	5,830	
<i> Allowance for doubtful accounts</i>		5,830

$$(\$1,000 + \$4,830 = \$5,830)$$

(c) How much is the net realizable value of accounts receivable after your journal entry for (b) above has been recorded? (2 marks)

$$\$184,000 - \$4,830 = \$179,170.$$

End of Final Examination