Solution for ACCO 230.2 Final Exam dated December 19, 2009 (Fall 2009)

PROBLEM 1 *Multiple-choice*

1. a
2. c
3. d
4. a
5. b
6. c
7. c
8. b
9. a
10. a
11. d
12. b

PROBLEM 2 **(19 marks; 38 minutes)** *Accounting for bonds payable*

1. Bond interest expense for the six months ending June 30, 2010 was correctly determined to be $489,010. Show the journal entry that Laverne actually made to record accrued interest expense on June 30, 2010. (3 marks)

Bond interest expense	*489,010*	
Bonds payable		*39,010*
Bond interest payable		*450,000*

2. Show the journal entry to record the payment of interest on July 1, 2010. (1.5 marks)

Bond interest payable	*450,000*	
Cash		*450,000*

3. Show the journal entry to record interest expense on January 1, 2011. (4.5 marks)

Bond interest expense	*490,379*	
Bonds payable		*40,379*
Cash		*450,000*

($14,010,830 x 7% x 6/12 = $490,379)

PROBLEM 2, solution continued

4. Assume that *immediately after* the payment of interest on January 1, 2011 Laverne redeems one-half (50%) of the bonds for cash at 101. Show the journal entry to record this redemption. *("At 101" is a term used in the course, and students are expected to know its meaning).*

(6.5 marks)

Bonds payable	*7,025,605*	
Loss on redemption of bonds payable	*549,395*	
Cash		*7,575,000*

($14,010,830 + $40,379) x 50% = $14,051,209 x 50% = $7,025,605.
$15,000,000 x 50% x 1.01 = $7,575,000.

5. What will be the effect on the following financial items immediately after the transaction in Requirement (4) only (improves, deteriorates, or no change)? No calculations are required for Requirement (5).
   (a) Debt to Total Assets ratio (78 % before transaction) __*Improves*__
   (b) Current ratio (1.15 before transaction) ___*Deteriorates*___
   (c) Working capital __*Deteriorates*__
   (d) Free cash flow ___*No effect*____ (3.5 marks)

<u>PROBLEM 3</u> **(16 marks; 32 minutes)** *Preparation of cash flow statement*

KB Ltd.
Cash Flow Statement
For the Year ended December 31, 2009

Operating activities		
Net earnings	$88,000	
Add (deduct) items not affecting cash:		
Depreciation expense	65,000	
Gain on disposal of capital assets	(22,000)	
Decrease in accounts receivable	9,000	
Decrease in merchandise inventory	3,000	
Increase in prepaid rent	(5,000)	
Decrease in accounts payable	(13,000)	
Increase in interest payable	1,500	
Increase in income taxes payable	4,500	
Cash from operating activities		$131,000
Investing activities		
Acquisition of fixed assets	(170,000)	
Disposal of fixed assets (Note 1)	80,000	
Cash used in investing activities		(90,000)
Financing activities		
Repayment of note payable	(100,000)	
Issuance of common shares	10,000	
Payment of dividends (Note 2)	(29,000)	
Cash used in financing activities		(119,000)
Decrease in cash during 2009		(78,000)
Cash balance, December 31, 2008		90,000
Cash balance, December 31, 2009		$12,000

Note 1: $270,000 + $170,000 - $367,000 = $73,000 cost of fixed assets sold.

$30,000 + $65,000 - $80,000 = $15,000 accum. depreciation of fixed assets sold.

$73,000 - $15,000 + $22,000 = $80,000 proceeds from disposal of fixed assets.

Note 2: $191,000 + $88,000 - $250,000 = $29,000.

PROBLEM 4 **(16 marks; 32 minutes)** *Financial ratios*

Calculate each of the following amounts for 2009. Also, briefly ***define** the **first three*** ratios.

a) Inventory turnover ratio.

$$\frac{\$90,000 - \$38,000}{(\$20,000 + \$30,000)/2} = \frac{\$52,000}{\$25,000} = 2.08 \text{ times}$$

Measures the number of times merchandise inventory is sold during the period. T's ratio is very low.

b) Asset turnover ratio.

$$\frac{\$90,000}{(\$310,000 + \$340,000)/2} = \frac{\$90,000}{\$325,000} = .28 \text{ times}$$

Measures how efficiently management uses assets to generate sales. T's ratio is very low.

c) Account receivable turnover ratio.

$$\frac{\$90,000 \times 90\%}{(\$30,000 + \$20,000)/2} = \frac{\$81,000}{\$25,000} = 3.24 \text{ times}$$

Measures the number of times accounts receivable is collected during the period. T's ratio is very low.

d) Earnings per share (EPS).

$$\frac{\$18,000}{5,000} = \$3.60 \text{ per share}$$

e) Times interest earned ratio.

$$\frac{\$18,000 + \$6,000 + \$4,000}{\$4,000} = \frac{\$28,000}{\$4,000} = 7 \text{ times}$$

f) Return on common shareholders' equity.

$$\frac{\$18,000}{(\$70,000 + \$100,000 + \$80,000 + \$110,000)/2} = \frac{\$18,000}{\$180,000} = 10\%$$

g) Average collection period for accounts receivable.

365 / 3.24 (from "c" above) = 113 days

<u>PROBLEM 5</u> (31 marks; 62 minutes) *Financial accounting and reporting issues*

Tina Reynolds works at an accounting firm. She has many small clients, and they all adhere to GAAP. Over the last many months she has helped her clients answer the following independent questions. *The marks for each case are shown in brackets.*

a) Client A overstated inventory on December 31, 2007 by $16,000 and understated inventory on December 31, 2008 by $12,000. Client A reported gross profit of $167,000 in 2007 and gross profit of $146,000 in 2008. Calculate the correct gross profit for <u>each</u> year. (4)

Correct gross profit, 2007 = $167,000 - $16,000 = $151,000.

Correct gross profit, 2008 = $146,000 + $16,000 + $12,000 = $174,000.

b) Client B showed a balance of $400,000 in Accounts Receivable as at December 31, 2008. An ageing schedule showed that $12,000 of these accounts receivable are doubtful of collection. The unadjusted balance in Allowance for Doubtful Accounts was a debit of $2,000. Show the journal entry to record bad debts expense for 2008. How much is the net realizable value of accounts receivable on December 31, 2008 *after* this entry is made? (4)

Bad debts expense	*14,000*	
Allowance for doubtful accounts		*14,000*
($2,000 + $12,000 = $14,000)		

NRV of AR = $400,000 - $12,000 = $388,000.

c) Client C disposed of a machine for $50,000 cash on October 1, 2009. The machine had been purchased on January 1, 2008 for $90,000. At the time of acquisition it was estimated that the useful life of the machine was five years, with a residual value of $8,000. Client C uses the double-diminishing balance method of depreciation. Calculate the gain or loss on disposal (no journal entry required). (5)

Depreciation, 2008 = $90,000 x 2/5 = $36,000.

Depreciation, 2009 = ($90,000 - $36,000) x 2/5 x 9/12 = $16,200.

Gain on disposal = $50,000 - ($90,000 - $36,000 - $16,200) = $12,200.

d) Client D received $430 from a customer for a cash sale. This amount <u>included</u> 5% GST. Show the journal entry to record this transaction. Round to nearest dollar; ignore PST. (3)

Cash	*430*	
Sales revenue		*410*
GST payable		*20*
($430 / 1.05 = $409.52, say $410)		

PROBLEM 5, solution continued

e) One of Client E's customers went bankrupt. The customer owed Client E $10,000. Show the journal entry to write-off the account. If the net realizable value of accounts receivable was $234,000 immediately before the write-off, how much was the net realizable value of accounts receivable immediately after the write-off? (3)

Allowance for doubtful accounts	*10,000*	
Accounts receivable		*10,000*

NRV of AR = $234,000 (does not change).

f) Client F acquired a truck on July 1, 2007 for $50,000. The truck has an estimated useful life of eight years (250,000 kilometres) and a residual value of $5,000. The truck was driven 20,000 kilometres in 2007, and 40,000 kilometres in 2008. Client F uses the units of production method of depreciation. Show the journal entry to record depreciation expense for 2007. Calculate the carrying amount (net book value) of the truck on December 31, 2008 (no journal entry required for 2008). If, instead, Client F had always been using the straight-line method, would the carrying amount be higher or lower on December 31, 2008? By how much? (6)

Depreciation expense (2007)	*3,600*	
Accumulated depreciation - truck		*3,600*

[($50,000 - $5,000) / 250,000 x 20,000 = $ .18 x 20,000 = $3,600.]

Carrying amount, 12-31-08, Units of Production Method:

$50,000 - $ .18 (20,000 + 40,000) = $50,000 - $ .18 x 60,000 = $39,200.

Carrying amount, 12-31-08, Straight-line Method:

$50,000 - 1.5 / 8 x ($50,000 - $5,000) = $50,000 - $8,438 = $41,562.

If the straight-line method were used the carrying amount of the truck would be $2,362 higher ($41,562 - $39,200) on December 31, 2008.

g) The office manager for Client G has heard Tina refer to the *matching principle*, but is not sure what it means. Briefly explain the meaning of the term *matching principle*, and why it is important in modern financial reporting. (3)

Under the matching principle expenses are recorded (matched) in the same accounting period as the revenues they generated. Proper matching of expenses with revenues results in a meaningful measure of performance (profit) for the accounting period.

PROBLEM 5, solution continued

h) On August 9, 2008 Client H received a cheque for $6,000 from a customer whose account had been written off earlier that year. Show the journal entry to record this recovery. Will the net realizable value of accounts increase, decrease, or remain the same immediately *after* this journal entry is recorded? (3)

Accounts receivable	*6,000*	
Allowance for doubtful accounts		*6,000*
Cash	*6,000*	
Accounts receivable		*6,000*

OR

Cash	*6,000*	
Allowance for doubtful accounts		*6,000*

As a result of this recovery the NRV of AR will decrease.