Solution -- ACCO 230.4 Midterm Exam -- Feb. 13, 2011

Problem 1 -- solution for Part A ("multiple-choice")

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

Problem 1 -- solution for Part B "fill-in-the-blanks" exercise

I.	Rent expense, month of December 2009	$2,000
II.	Prepaid rent, December 31, 2009	Zero
III.	Rent payable, December 31, 2009	$2,000
IV.	Rent expense, quarter ended Feb. 28, 2010	$6,000
V.	Prepaid rent, March 31, 2010	$2,000
VI.	Prepaid rent, April 30, 2010	Zero
VII.	Rent payable, May 31, 2010	$2,000
VIII.	Rent payable, June 30, 2010	Zero

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PROBLEM 1 (Part C) (Fill-in-the-blanks) -- 6 marks

Financial information is presented below for Strojo Ltd. for its most recent year. The information is correct but has been presented in a random order by a mischievous clerk.

Cost of goods sold	$385,000
Sales	*$800,000*
Net earnings	*$133,000*
Cost of goods purchased	$290,000
Sales discounts	$6,000
Net sales	$780,000
Sales returns and allowances	$14,000
Income tax rate	30%
Operating expenses	*$205,000*
Earnings before income tax	*$190,000*
Income tax expense	$57,000
Cost of goods available for sale	*$390,000*
Gross profit	*$395,000*
Merchandise inventory, January 1	$100,000
Merchandise inventory, December 31	*$5,000*
Retained earnings, January 1	*$4,479,000*
Retained earnings, December 31	$4,600,000
Dividends declared	$12,000

Instructions:
Show the missing amounts, in the spaces above. The company has a December 31st year end date.

Problem 2 - solution

a) Gross profit, sale of November 7 (perpetual, FIFO):

Units on hand, immediately prior to sale =

150 + 650 -700 + 500 - 100 = 500 (all deemed to be from purchase of Sept. 22)

Gross profit = (50 x $43) - (50 x $30) = $2,150 - $1,500 = $650.

b) Cost of inventory and number of units, October 31, (perpetual, Average):

	Date	Units	Avg. cost	Total cost
Opening inventory	1/1	150	$25.0000	$ 3,750.00
Purchase	5/15	650		$18,200.00
Balance		800	$27.4375	$21,950.00
Sale	6/2	(700)	$27.4375	($19,206.25)
Balance		100	$27.4375	$ 2,743.75
Purchase	9/22	500		$15,000.00
Balance		600	$29.5729	$17,743.75
Sale	9/28	(100)	$29.5729	($ 2,957.29)
Balance (Ans.)	10/31	500	$29.5729	$14,786.46

Problem 3 -- solution

Part (A) Journal entries, Plans Supply (FIFO, perpetual)

		Debit	Credit
Sep. 4	Merchandise inventory	1,085	
	Accounts payable		1,085
	[35x $31 = $1,085]		
Sep. 5	"No entry" -- Ginzer pays for freight.		
Sep. 6	Accounts payable	93	
	Merchandise inventory		93
	[3 x $31 = $93]		
Sep. 8	Accounts receivable	1,100	
	Sales revenue		1,100
	[22 x $50 = $1,100]		
	Cost of goods sold	682	
	Merchandise inventory		682
	[22 x $31 = $682]		
Sep. 9	Freight out	83	
	Cash		83
Sep. 12	Sales returns and allowances	200	
	Account receivable		200
	[4 x $50 = $200]		

Sep. 13	Accounts payable	992	
	Merchandise inventory		20
	Cash		972
	[$1,085 - $93 = $992]		
	[$992 x .02 = $19.84, say $20]		
Sep. 14	Cash	873	
	Sales discounts	27	
	Accounts receivable		900
	[$1,100 - $200 = $900]		
	[$900 x .03 = $27]		

Problem 3, Part (B) Journal entries, Ms. K's Grills (FIFO, periodic)

May 2	Purchases	12,500	
	Accounts payable		12,500
	[25 x $500 = $12,500]		
May 4	Freight in	396	
	Cash		396
May 6	Accounts payable	1,000	
	Purchase returns and allowances		1,000
	[2 x $500 = $1,000]		
May 9	Cash	12,000	
	Sales revenue		12,000
May 15	Accounts payable	11,500	
	Cash		11,500
	[$12,500 - $1,000 = $11,500; discount period expired]		

Problem 4 -- solution

(a) Adjusting journal entries, December 31, 2010.

1.	Insurance expense	1,700	
	Prepaid insurance		1,700
	[$5,100 / 6 x 2 = $1,700]		
2.	Depreciation expense	18,000	
	Accumulated depreciation -- equipment		18,000
	[$270,000 / 15 = $18,000]		

		Debit	Credit
3.	Depreciation expense	6,000	
	Accumulated depreciation -- building		6,000
	[$180,000 / 30 = $6,000]		
4.	Office supplies on hand	4,000	
	Other operating expenses		4,000
5.	Interest expense	200	
	Interest payable		200
	[$80,000 x .03 x 1/12 = $200]		
6.	Unearned rent revenue	2,175	
	Rent revenue		2,175
	[$2,900 / 4 x 3 = $2,175]		
7.	Income tax expense	121,200	
	Income taxes payable		121,200

(b)

Doby Ltd.
Statement of Earnings
For the Year Ended December 31, 2010

Sales revenue		$967,000	
Less: Sales returns and allowances		12,500	
Net sales		954,500	
Cost of goods sold		340,000	
Gross profit		614,500	
Operating expenses:			
Salaries and wages	76,000		
Depreciation expense	24,000		[$18,000 + $6,000]
Insurance expense	9,700		[$8,000 + $1,700]
Other	16,000		[$20,000 - $4,000]
Total operating expenses		125,700	
Operating income		488,800	
Other income and expense:			
Rent revenue	8,610		[$6,435+ $2,175]
Interest expense	(2,400)		[$2,200 + $200]
Total other income and expense		6,210	
Earnings before income taxes		495,010	
Income tax expense		121,200	
Net earnings		$373,810	
Earnings per share (EPS)		$14.95	[$373,810 / 25,000]

c. Doby Ltd.
Balance sheet (partial)
Long-term Assets
December 31, 2010

Land			$100,000
Building, at cost		$180,000	
Less: Accumulated depreciation		36,000 *	144,000
Manufacturing equipment, at cost	$270,000		
Less: Accumulated depreciation	27,000 **		243,000
Total long-term assets			$487,000

* $30,000 + $6,000 = $36,000.

** $9,000 + $18,000 = $27,000.

d. Remaining life of equipment, in months, December 31, 2010:
$243,000 / $18,000 x 12 = 162 months.

e. Age of building, in months, December 31, 2010:
$36,000 / $6,000 x 12 = 72 months.

f. Retained earnings balance, December 31, 2010:
$60,000 - $5,000 + $373,810 = $428,810.

g. Total current liabilities, December 31, 2010 (only a calculation was required):

Accounts payable	$ 7,500
Unearned revenue ($2,900 - $2,175)	725
Dividends payable	2,000
Interest payable	200
Income taxes payable	121,200
Total current liabilities	$131,625

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Problem 5 -- solution

1. Dividends paid:

$203,000 + $474,000 - $595,000 + $1,600 - $3,000 = $80,600

2.

(a) Current ratio = ($137,000 + $57,000 + $67,000) / ($57,000 + $37,000 + $3,000) = 2:69: 1

(b) Gross profit margin ratio = ($8,100,000 - $4,500,000) / $8,100,000 = 44.4%.

Definition: Represents the profit made by the company on merchandising operations only (cost of goods sold), without taking into account other necessary operating expenses.

(c) Free cash flow = $52,000 - $139,000 - $80,600 * = ($167,600).

Definition: Represents the cash available for discretionary purposes, e.g., plant expansion, additional dividends. In this case the free cash flow is negative.

* See Requirement (1) for dividends paid amount.

(d) EPS = $474,000 / 100,000 = $4.74.

(e) PE ratio = $26.00 / $4.74 (per "d") = 5.5 times.

(f) Debt to total assets ratio = ($930,000 - $595,000 - $150,000) / $930,000 = 19.9%.