FA 2.3

EXERCISE 13-10 (25-30 minutes)

(a)

2010	**To accrue the expense and liability for vacations:**			
	Wages Expense	**7,740**	**(1)**	
	Vacation Wages Payable			**7,740**
	To record vacation time paid:			
	No entry.			
2011	**To accrue the expense and liability for vacations:**			
	Wages Expense	**8,352**	**(2)**	
	Vacation Wages Payable			**8,352**
	To record vacation time paid:			
	Wage Expense	**162**		
	Vacation Wages Payable	**6,966**	**(3)**	
	Cash			**7,128 (4)**

(1) 9 employees X $10.75/hr. X 8 hrs./day X 10 days = $7,740
(2) 9 employees X $11.60/hr. X 8 hrs./day X 10 days = $8,352

(3) 9 employees X $10.75/hr. X 8 hrs./day X 9 days = $6,966

(4) 9 employees X $11.00/hr. X 8 hrs./day X 9 days = $7,128

(b)

2010	**To record sick time paid:**			
	Wages Expense	**2,880**	**(1)**	
	Cash			**2,880**

2011	**To record sick time paid:**			
	Wages Expense	**3,960**	**(2)**	
	Cash			**3,960**

(1) 9 employees X $10.00/hr. X 8 hrs./day X 4 days = $2,880

(2) 9 employees X $11.00/hr. X 8 hrs./day X 5 days = $3,960

EXERCISE 13-10 (Continued)

(c) Accrued liability at year-end (vacation pay only):

	2010	2011
Jan. 1 balance	$ 0	$7,740
+ accrued	7,740	8,352
– paid	(0)	(6,966)
Dec. 31 balance	$7,740(1)	$9,126(2)

(1) 9 employees X $10.75/hr. X 8 hrs./day X 10 days = $7,740

(2) 9 employees X $10.75/hr. X 8 hrs./day X 1 day = $ 774

9 employees X $11.60/hr. X 8 hrs./day X 10 days = 8,352

$9,126

EXERCISE 13-12 (15-20 minutes)

Perreault Corp.

Income Statement

For the Year Ended December 31, 2011

Revenue		**$10,000,000**
Cost of goods sold		**7,000,000**
Gross profit		**3,000,000**
Administrative and selling expenses	**$1,000,000**	
Profit-sharing bonus to employees	**198,198**	**1,198,198**
Income before income taxes		**1,801,802**
Income taxes (45%)		**810,811**
Net income		**$ 990,991**

Calculation of bonus and tax:

T = .45 ($3,000,000 – $1,000,000 – B)
B = .20 ($2,000,000 – B – T)
B = .20 [$2,000,000 – B – .45 ($2,000,000 – B)]
B = .20 ($2,000,000 – B – $900,000 + .45B)
B = .20 ($1,100,000 – .55B)
B = $220,000 – .11B
1.11B = $220,000
Bonus = $198,198.19
T = .45 ($2,000,000 – $198,198.19)
T = .45 ($1,801,801.81)
Taxes = $810,810.81

(b) Employee's Bonus Expense 198,198

Bonus Payable 198,198

EXERCISE 13-14 (10-15 minutes)

(a)	**Cash (150 X $4,000) .....**	**600,000**	
	Sales		**600,000**
	Warranty Expense	**17,000**	
	Cash, Inventory, Accrued Payroll		**17,000**
	Warranty Expense ($45,000* – $17,000)....	**28,000**	
	Estimated Liability Under Warranties		**28,000**

***(150 X $300)**

(b)	**Cash .....**	**600,000**	
	Sales		**600,000**
	Warranty Expense	**17,000**	
	Cash, Inventory, Accrued Payroll		**17,000**

(c) The cash method of accounting for warranty costs is acceptable when the costs are not material or when the warranty period is relatively short. It may also be acceptable when the amount of the liability cannot be reasonably estimated or if future costs are not likely to be incurred.

EXERCISE 13-22 (20-30 minutes)

1.(a) The *CICA Handbook for Private Enterprises section 3290* requires that, when some amount within the range appears at the time to be a better estimate than any other amount within the range, that amount be accrued. When no amount within the range is a better estimate than any other amount, the dollar amount at the low end of the range is accrued and the dollar amount of the high end of the range is disclosed. Since the information indicates that it is likely that a liability has been incurred at December 31, 2011, and a range of possible amounts can be reasonably determined, the criteria for recording a liability are met. In this case, therefore, Sugarpost Inc. would report a liability of $900,000 at December 31, 2011.

(b) Under the Exposure Draft of Proposed Amendments to *IAS 37 Provisions, Contingent Liabilities and Contingent Assets*, the term "contingent liabilities" is eliminated. This is based on the fact that either a situation results in a liability or it does not; a contingency relates to a future event, not whether the obligation exists at the reporting date. Liabilities can arise only from unconditional (or non-contingent) obligations. Uncertainty about the amounts that might be payable in the future is taken into account in the measurement of the liability, not its existence. If a liability is recognized, it is measured, and it is the measurement that takes into account the uncertainties that exist. In this case, it is apparent that there is an unconditional liability and thus Sugarpost Inc. would report a liability at the expected value of the outcomes at December 31, 2011 (not at the $900,000 minimum amount as discussed in part (a) for private enterprises GAAP).

2. **Su Li Corp. would not be required to make any entry. The wage increase is for the coming two years and does not relate to the current or prior years.**

3.(a) The loss should be accrued since both criteria (it is likely that a loss is incurred and the amount of the loss can be reasonably determined) for recording the contingency are met. Given that the loss is covered by insurance, except for the $500,000 deductible, only the $500,000 should be accrued.

(b) Under current IFRS requirements, the recognition criterion used to determine the chance of occurrence of a confirming future event is "probable," which is interpreted to mean "more likely than not." This is a somewhat lower hurdle than the "likely" required under private enterprise standards. If the amount cannot be measured reliably, no liability is recognized under IFRS either; however, the standard indicates that it is only in very rare circumstances that this would be the case. If recognized, IAS 37 requires the best estimate and an "expected value" method to be used to measure the liability. As in part (a) above, this would be the $500,000 deductible.

4. **This is a gain contingency because the amount to be received will be in excess of the carrying amount of the plant. Under private enterprise GAAP, gain contingencies are not recorded and are disclosed in the notes only when the probabilities are high that a gain contingency will become reality.**

EXERCISE 14-8 (15-20 minutes)

(a)	**Equipment**	**86,349.00***	
	Cash.....		**30,000.00**
	Notes Payable.....		**56,349.00**
	***PV of $75,000 @ 10% for 3 years**		
	($75,000 X 0.75132)		**$56,349**
	Down payment		**30,000**
	Capitalized value of equipment		**$86,349**

Excel formula =PV(rate,nper,pmt,fv,type)

Using a financial calculator:

PV	**$?**	**Yields $56,349**
I	**10%**	
N	**3**	
PMT	**$ 0**	
FV	**($ 75,000)**	
Type	**0**	

(b) December 31, 2012:

Interest Expense (see schedule).....	**5,634.90**	
Note Payable.....		**5,634.90**

Year	10% Interest	Balance
12/31/11		$56,349.00
12/31/12	$5,634.90	61,983.90
12/31/13	6,198.39	68,182.29
12/31/14	6,817.71*	75,000.00

*** rounded by $0.52**

EXERCISE 14-8 (Continued)

December 31, 2013:		
Interest Expense	**6,198.39**	
Note Payable		**6,198.39**
December 31, 2014:		
Interest Expense	**6,817.71**	
Note Payable	**75,000.00**	
Note Payable		**6,817.71**
Cash		**75,000.00**

EXERCISE 14-9 (15-20 minutes)

(a)

January 1, 2011

Cash	**860,651.79**	
Bonds Payable		**860,651.79**

(b)

Schedule of Interest Expense and Bond Premium Amortization

Effective Interest Method

12% Bonds Sold to Yield 10%

Date	Credit Cash	Debit Interest Expense	Debit Bond Payable	Carrying Amount of Bonds
1/1/11	–	–	–	$860,651.79
1/1/12	$96,000.00	$86,065.18	$9,934.82	850,716.97
1/1/13	96,000.00	85,071.70	10,928.30	839,788.67
1/1/14	96,000.00	83,978.87	12,021.13	827,767.54

(c) **December 31, 2011**

Bond Interest Expense	**86,065.18**	
Bonds Payable	**9,934.82**	
Interest Payable		**96,000.00**

January 1, 2012

Interest Payable	**96,000.00**	
Cash		**96,000.00**

(d) **December 31, 2013**

Bond Interest Expense	**83,978.87**	
Bonds Payable	**12,021.13**	
Interest Payable		**96,000.00**

January 1, 2014

Interest Payable	**96,000.00**	
Cash		**96,000.00**

EXERCISE 14-9 (Continued)

(e) Although the effective interest method is required under IFRS per IAS 39.47, accounting standards for private enterprises do not specify that this method must be used and therefore, the straight-line method is also an option. The straight-line method is valued for its simplicity and might be used by companies whose financial statements are not constrained by this specific element of GAAP.

EXERCISE 14-17 (30-35 minutes)

Using either a financial calculator or Excel the effective interest rate on the bonds is calculated as follows:

Excel formula =RATE(nper,pmt,pv,fv,type)

Using a financial calculator:

PV	$ 784,000	
I	? %	Yields 6.135%
N	40	
PMT	$ (48,000)	
FV	$ (800,000)	
Type	0	

Schedule of Bond Discount Amortization

Effective Interest Method

12% Semi-annual Bonds Sold to Yield 12.27%

Date		6.0% Cash Paid	6.135% Interest Expense	Discount Amortized	Carrying Amount
June 30	2004				$784,000.00
Dec. 31	2004	$48,000.00	$48,099.92	$99.92	784,009.92

June 30	**2005**	**48,000.00**	**48,106.09**	**106.06**	**784,205.98**
Dec. 31	**2005**	**48,000.00**	**48,112.56**	**112.56**	**784,318.54**
June 30	**2006**	**48,000.00**	**48,119.47**	**119.47**	**784,439.01**
Dec. 31	**2006**	**48,000.00**	**48,126.80**	**126.80**	**784,564.81**
June 30	**2007**	**48,000.00**	**48,134.58**	**134.58**	**784,699.38**
Dec. 31	**2007**	**48,000.00**	**48,142.83**	**142.83**	**784,842.22**
June 30	**2008**	**48,000.00**	**48,151.60**	**151.60**	**784,993.81**
Dec. 31	**2008**	**48,000.00**	**48,160.90**	**160.90**	**785,154.71**
June 30	**2009**	**48,000.00**	**48,170.77**	**170.77**	**785,325.48**
Dec. 31	**2009**	**48,000.00**	**48,181.25**	**181.25**	**785,506.72**
June 30	**2010**	**48,000.00**	**48,192.36**	**192.36**	**785,699.09**
Dec. 31	**2010**	**48,000.00**	**48,204.17**	**204.17**	**785,903.25**
June 30	**2011**	**48,000.00**	**48,216.69**	**216.69**	**786,119.95**
				2,119.95	

EXERCISE 14-17 (Continued)

Although not required, the entry at the issuance of the bonds:

6/30/04	**Cash ($800,000 X 98%) .....**	**784,000**	
	Bonds Payable.....		**784,000**

(a)

At June 30, 2011 the carrying amount of the bonds is as indicated in the effective interest table:

Bonds payable	**$800,000.00**
Less: unamortized discount	**13,880.05**
	$786,119.95

June 30, 2011

Bonds Payable	**786,119.95**	
Loss on Redemption of Bonds	**45,880.05**	
Cash		**832,000.00**

Reacquisition price ($800,000 X 104%)		**$832,000.00**
Net carrying amount of bonds redeemed:		
Par value $800,000.00		
Unamortized discount ..... (13,880.05)		**(786,119.95)**
Loss on redemption		**$45,880.05**

Cash ($1,000,000 X 102%)	**1,020,000**	
Bonds Payable		**1,020,000**

EXERCISE 14-17 (Continued)

Using either a financial calculator or Excel the effective interest rate on the bonds is calculated as follows:

Excel formula =RATE(nper,pmt,pv,fv,type)

Using a financial calculator:

PV	**$ 1,020,000**	
I	**? %**	**Yields 4.8853 %**
N	**40**	
PMT	**$ (50,000)**	
FV	**$ (1,000,000)**	
Type	**0**	

(b) **December 31, 2011**

Bond Interest Expense.....	**49,830.06**	
Bonds Payable.....	**169.94**	
Cash.....		**50,000.00**

($1,020,000 X 4.8853% = $49,830.06)

Pg 255 note error

2 Quick / Acid Test Ratio

$$\frac{\text{Quick Assets}}{\text{Current Liabilities}} = \frac{\text{Cash, mkt sec, AR(net)}}{\text{Current liabilities}}$$

The b/s amount is averaged in those ratios that use a P+L amount and a B/S amount

***EXERCISE 5-17 (15-20 minutes)**

(a) Current Ratio:

	2011	2010
	$45,000 + $91,000	$13,000 + $88,000
	$20,000	$15,000
	= 6.80	= 6.73

Debt to total assets ratio:

	2011	2010
	$20,000	$15,000
	$158,000	$112,000
	= 12.7%	= 13.4%

Free cash flow:

	2011
Net cash provided by operating activities	$42,000
Less: Purchase of equipment	(17,000)
Dividends paid	(13,000)
Free cash flow	$12,000

(b) Marubeni's current ratio has increased slightly from 2010 to 2011, and remains in excess of 6. The debt to total asset ratio has

declined and remains at a very low percentage. The accounts receivable are climbing slightly and could be investigated. The company has excellent liquidity and financial flexibility.

***EXERCISE 5-18 (15-20 minutes)**

(a)	**2011**	**2010**
Current ratio	**6.63**	**4.69**
Acid test ratio	**2.40**	**1.49**

(b) Current cash debt coverage – Net cash provided from operating activities divided by average current liabilities:

Its current cash debt coverage is 1.23 to 1 $\left(\frac{\$68,000}{\$55,500}\right)$

(c) Carmichael's current and acid test ratios are both in excess of 1 and they both exhibit an increasing trend from 2010 to 2011. Its current cash debt coverage is excellent at 1.23 to 1. However, free cash flow is negative in 2011. Note also that accounts receivable and inventories have increased substantially from 2010 to 2011. While these increases impact liquidity ratios positively, if Carmichael has difficulty in collecting receivables or if sales slow and the inventory is not converted to cash, Carmichael's liquidity and financial flexibility will be negatively affected.