Exam 2013, questions and answers Final W13

Financial Accounting (Concordia University)

CONCORDIA UNIVERSITY **FINANCIAL ACCOUNTING**
DEPARTMENT OF ACCOUNTANCY **COMM 217 ALL SECTIONS**

SUGGESTED SOLUTION, FINAL EXAMINATION (REGULAR)
WINTER 2013

QUESTION 1 (21 marks; 1.5 marks each)

1.C 2.A 3.C 4.C 5.C 6.D 7.D 8.D 9.D 10.B 11.B 12.D 13.D 14.B

QUESTION 2 (15 marks)

Req. 1 (4 marks)
Cost of ending inventory = (102 units x $65) + (56 units x $69) = $6,630 + $3,864 = $10,494
Cost of sales = (112 units x $72) + (76 units x $71) = $8,064 + $5,396 = $13,460
Gross profit = Sales – COGS = [(121 x $99) + (67 x $98)] – $13,460 = $18,545 - $13,460 = $5,085
Gross profit percentage = Gross profit / Sales = $5,085 / $18,545 = 27.4%

Req. 2 (1.5 marks)
Costs of all inventory units are taken into account in calculating the average cost of units sold. Because inventories purchased later have a lower cost, the cost of sales would be lower under the weighted-average cost method compared to the FIFO method. As a result, gross profit would be higher under the weighted-average cost method compared to the FIFO method.

Req. 3 (2 marks)

Cost of sales	$168 (0* + (69-66) x 56)	
Allowance for excess and obsolete inventory		$168

*The cost of inventories purchased on Feb 16 is lower than the net realizable value, so no adjustment is needed for this batch of purchase.

Req. 4 (3.5 marks)

Trade receivables	$11,979 ($99 x 121)	
Sales revenue		$11,979
Cost of sales	$8,703 ($72 x 112 + $71 x 9)	
Inventory		$8,703

Req. 5 (4 marks)
Weighted-average cost 1 = [(112 x $72) + (76 x $71)] / (112 + 76) = $71.60
Number of units remaining after the sale on January 30 = 188 – 121 = 67 units
Weighted-average cost 2 = [(67 x $71.60) + (56 x $69) + (102 x $65)] / (67 + 56 + 102) = $15,291.20 / 225 = $67.96
Cost of sale on March 21 = 67 x $67.96 = $4,553

QUESTION3 (15 marks)

Part 1 (4 marks)

Year	Depreciation expense (for the year)	Book Value (and the end of the year)
		$85,000
1	$85,000 x 1/5 x 200% = $34,000	51,000
2	$51,000 x 1/5 x 200% = $20,400	30,600
3	$30,600 x 1/5 x 200% = $12,240	18,360
4	$18,360 x 1/5 x 200% = $7,344	11,016
5	$80,000 - $73,984 accum. amort. = $6,016*	5,000

Cash	$35,000	
Accumulated depreciation	$66,640*	
Machine (or Equipment)		$85,000
Gain		$16,640

*$34,000 + 20,400 + 12,240 = $66,640 (see the table above)

Part 2 (3 marks)

Depreciation rate per unit = ($55,000 – 5,000) / 200,000 = $0.25

Depreciation expense in 2012 = $0.25 x (200,000 – 180,000) = $5,000

Part 3 (4 marks)

Cost of land = $315,000 x [170,000 / (170,000 +230,000)] + 5,000= $138,875

Cost of building = $315,000X [230,000 / (170,000 +230,000)] + 0= $181,125

Part 4 (4 marks)

New depreciable amount after repair = $100,000 – (100,000 / 5 * x 4) + 30,000 = $50,000
Depreciation expense in 2012 = ($50,000 – 2,000) / 3 = $16,000

Depreciation expense	$16,000	
Accumulated depreciation		$16,000

QUESTION 4 (16 marks)

Req. 1 (4 marks)

PV of principal = $1,000,000 x 0.5537* =	$ 553,700
PV of interest payments = $1,000,000 x 8.0% x ½ x 14.8775** =	$ 595,100
Bond issue price:	$1,148,800

* PV factor, n = 20, i=3%
** PV annuity factor, n = 20, i=3%

Cash	$1,148,800	
Premium on bonds payable		$148,800
Bonds payable		$1,000,000

Req. 2 (4 marks)

Big Burst Inc.
Statement of Financial Position (Partial)
on March 31, 2013

Current liabilities:	
Interest Payable	$6,667*
Long-term liabilities:	
Bonds payable, 8%, due 2023	1,000,000
Premium on bonds payable	147,877**
Carrying amount of bonds payable	1,147,877

*[($1,000,000 x 8% x ½) x 1/6] = $6,667
**$148,800 – {6,667 - [($1,148,800 x 6% x ½) x 1/6]} = $147,877
Format of the statement

Req. 3 (3 marks)

September 1, 2013		
Interest expense	$28,720 [($1,148,800 x 6% x ½) x 5/6]	
Premium on bonds payable	$4,613	
Interest payable	$6,667	
Cash [($1,000,000 x 8% x ½)]		$40,000

Req. 4 (3 marks)

September 1, 2013		
Bonds payable ($1,000,000 x .10)	100,000	
Premium on bonds payable	14,326*	
Cash ($1,000,000 x .10 x 1.02)		102,000
Gain		12,326

*[147,877 (from req. 2) - $4,613 (from req. 3)] * .10 = $14,326

Req. 5 (2 marks)

(Sept. 1, 2013 - Mar. 1, 2023 => 9.5 years)	
Total cash payments	$684,000 *
* $40,000 (from req. 3) x .90 x 9.5 x 2	
Total premium to be amortized	($128,938)**
**147,877 (from req. 2) - $4,613 (from req. 3) - $14,326 (from req. 4) = $128,938	
Cumulative interest expense	$555,062

QUESTION 5 (19 marks)

Req. 1 (15 marks)
Each √ = 1/3 mark.

Ponder Ltd.
Statement of Cash Flows
For the Year Ended December 31, 2012

Cash flows from (used in) operating activities:		
Net income		$ 101,800
Adjustments to reconcile net income		
to net cash provided by operating activities:		
Depreciation	$14,300	
Loss on sale of land	2,900	
Increase in trade receivables	(17,100)	
Increase in inventories	(7,400)	
Decrease in prepaid expenses	3,500	
Increase in trade payables	22,100	
Decrease in salaries payable	(13,300)	
Increase in income taxes payable	500	
Decrease in deposits from customers	(6,100)	(600)
Cash provided by operating activities		101,200
Cash flows from (used in) investing activities:		
Proceeds from sale of land ($23,000 - $16,100 - $2,900)		$4,000
Purchase of equipment		(27,000)
Proceeds from sale of equipment ($94,200 + $27,000 - $14,300 - $104,900)		2,000
Cash used for investing activities		(21,000)
Cash flows from (used in) financing activities:		
Principal repayments on note payable		(8,000)
Issuance of common shares		6,000
Dividend payments ($11,900 + $101,800 − $74,600)		(39,100)
Cash used for financing activities		(41,100)
Increase in cash and cash equivalents		$39,100
Cash and cash equivalents, December 31, 2011		16,600
Cash and cash equivalents, December 31, 2012		$ 55,700

Supplemental Disclosures	
Amount of interest paid	$2,600
Amount of dividend paid	$39,100
Amount of income tax paid	$8,500*

*900 + 9,000 – 1,400 = 8,500

Req. 2 (4 marks)
Cash Coverage Ratio = (Cash flow from operating activities + Interest paid + Income tax paid) / Interest paid = ($101,200 + 2,600 + 8,500) / $2,600 = 43.19

The cash coverage ratio evaluates a company's ability to generate cash flows from operating activities to make required interest payment. Ponder has a high cash coverage ratio, which indicates high solvency.

Free Cash Flow = Cash flow from operating activities – Dividends – Capital expenditures = ($101,200 – 39,100 – 27,000) = $35,100
Free cash flow is a measure of a firm's ability to pursue long-term investment opportunities without the need for external financing. Ponder has a positive free cash flow, which indicates strong financial flexibility.

QUESTION 6 (14 marks)

Req. 1 (10 marks)
a) Return on Equity = Profit / Average Shareholders' Equity
= 12,600 / [(90,000 + 33,500 + 90,000 + 27,500) / 2] = 10.46%
Profitability Test

b) Inventory Turnover = Cost of Sales / Average Inventory
= 952,000 / [(25,000 + 38,000) / 2] = 30.22
Liquidity Test

c) Quick Ratio = (Cash and Cash Equivalent + Short-term Investment + Net Trade Receivables) / Current Liabilities
= (49,500 + 37,000) / (42,000 + 1,000) = 2.01
Liquidity Test

d) Times Interest Earned Ratio = (Profit + Interest Expense + Income Tax Expense)/ Interest Expense
= (12,600 + 4,000 + 5,400) / 4,000 = 5.5
Solvency Test

e) Dividend Yield = Dividend per Share / Market Price per Share
= [(27,500 + 12,600 – 33,500) / 9,000] / 23 = 3.19%
Market Test

Req. 2 (4 marks)

a. Quick Ratio compares quick assets to current liabilities. Quick assets include cash, short-term investments, and net trade receivables. Compared to current assets, quick assets exclude inventories and prepayment. Inventories are omitted because of the uncertainty of the timing of

cash flows from their sales. Prepayment is also excluded because it is difficult to be converted to cash. Since quick assets only take into account cash and near-cash assets, the quick ratio is a more severe test of liquidity than the current ratio.

b. The times of interest earned ratio uses income statement measures (profit before interest and tax) to assess a company's ability to meet its accrued-based debt obligation (interest expense), and the cash coverage ratio uses cash flow measures (cash flows from operating activities before interest and taxes) to assess a company's ability to meet its cash-based debt obligation (interest paid). Profit includes cash and non-cash components, and the amount of interest expense is not necessarily the same as the amount of interest payment.