

**UNIVERSITY OF GRONINGEN**  
**Faculty of Economics and Business**  
**Department of Accounting**

**ANSWERS**  
**RESIT FINANCIAL ACCOUNTING**  
**FOR IB / E&BE**

**Semester 1.2 2015/2016**  
**Tuesday March 22, 2016**  
**Time: 9:00 to 12:00**  
**Location: Aletta Jacobs Hall**

### Exercise 1 (35 credits)

On 1 January 2016 Bas started a selling company Climb. Climb buys and sells climbing materials all over the country. The company's classified balance sheet on 31 January 2016 – the end of its first month of operations – is given below.

*Climb, Classified Balance Sheet on 31 January 2016*

<i>Long-term Assets</i>			<i>Liabilities</i>		
Building	180,000		Accounts Payable	150,000	
Accumulated Depreciation, Building	-500		Property Tax Payable	1,800	
Net Book Value Building		179,500	Bank Loan	85,500	
			Total Liabilities		237,300
<i>Current Assets</i>					
Inventory		150,000	<i>Stockholders Equity</i>		
Office Supplies		5,000	Common Stock	30,000	
Accounts Receivable	28,000		Additional Paid-in Capital	300,000	
Allowance for Uncollectible Accounts	-2,100		Retained Earnings	2,700	
Accounts Receivable, Net		25,900	Total Equity		332,700
Prepaid Insurance		900			
Cash		208,700			
Total Assets		570,000	Total Liabilities and Equity		570,000

#### Notes

- The building is depreciated in 30 years, using the straight line method. The residual value is 0. The depreciation expense is recorded every month.
- Climb uses the **perpetual inventory system** with the **average cost method**. The inventory on 31 January 2016 is equal to 750 ropes with a purchase price of €200 each, which were bought on 6 January with trade conditions: n/30, FOB destination.
- Climb uses the percentage of net sales method to estimate the allowance for uncollectible accounts. 6% of net sales are expected to be uncollectible.
- Prepaid insurance is the residual of the insurance paid at the beginning of the year for a period of 4 months.
- The bank loan was provided on 31 January; the yearly interest rate of 8% is paid in arrear semiannually.

During February 2016 the following transactions occurred:

- 04/02 Paid the purchase of 6 January.
- 09/02 Received payment from customers from the month January, assume no discount.
- 11/02 Purchased 100 ropes on account for € 300 each. Trade conditions are: n/30, FOB shipping point. Total freight expenses are € 800 and are also on account.
- 13/02 Returned 20 ropes purchased on 11 February for full credit, € 6,000.
- 15/02 Sold 50 ropes on account for €400 each. Trade conditions are: 5/10, n/30, FOB shipping point.
- 18/02 Received notice from the curator that one of the costumers went bankrupt. The outstanding amount of € 400 is written off completely.
- 19/02 Accepted a return of 10 ropes sold on 15 February for full credit and returned to inventory, € 4,000.
- 22/02 Received payment for amount due regarding the sale of 15 February.
- 25/02 Bought office supplies on account for € 400.
- 29/02 Declared and paid a cash dividend of € 1,000.

**Question A (19 credits)**

Prepare the journal entries for the transactions of *Climb* in February 2016. The chart of accounts is added at the end of this exam. Use only these accounts in your answers.

Please skip a line between the different journal entries. Round answers to the nearest whole number.

Date	Account	Debit	Credit
04/02	Accounts Payable	150,000	
	@ Cash		150,000
09/02	Cash	28,000	
	@ Accounts Receivable		28,000
11/02	Inventory	30,000	
	@ Accounts Payable		30,000
	Freight-in Expense	800	
	@ Freight-in Payable		800
13/02	Accounts Payable	6,000	
	@ Inventory		6,000
15/02	Accounts Receivable	20,000	
	@ Sales		20,000
	Cost of Goods Sold $(750 * 200 + 80 * 300) / 830 * 50$	10,482	
	@ Inventory		10,482
18/02	Allowance for Uncollectible Accounts	400	
	@ Accounts Receivable		400
19/02	Sales Returns and Allowances	4,000	
	@ Accounts Receivable		4,000
	Inventory $(209,64 * 10)$	2,096	
	@ Costs of Goods Sold		2,096
22/02	Cash	15,200	
	Sales Discounts	800	
	@ Accounts Receivable		16,000

Date	Account	Debit	Credit
25/02	Office Supplies	400	
	@ Accounts Payable		400
29/02	Cash Dividends	1,000	
	@Cash		1,000

The following additional information is also available:

- Office Supplies at the end of February 2016 are € 2,500.
- Income taxes for February 2016 are estimated at € 150. Income taxes are paid every quarter.

### Question B (6 credits)

Prepare the adjusting journal entries for February 2016 concerning

- Depreciation of the building
- Insurance
- Allowance for uncollectible accounts
- Office supplies
- Income tax expense
- Interest expense

Date	Account	Debit	Credit
29/02	Depreciation Expense, Building	500	
	@ Accumulated Depreciation, Building		500
29/02	Insurance Expense (900 /3)	300	
	@ Prepaid Insurance		300
29/02	Uncollectible Accounts Expense (16,000 * 6%)	960	
	@ Allowance for uncollectible accounts		960
29/02	Office Supplies Expense (5,000 + 400 – 2,500)	2,900	
	@ Office Supplies		2,900
29/02	Income Taxes Expense	150	
	@ Income Taxes Payable		150
29/02	Interest Expense ((85,500 * 8%) /12)	570	
	@ Interest Payable		570

**Question C (6 credits)**

Prepare the multi-step income statement for February 2016. Please be as detailed as possible.

*Multi-step income statement Climb February 2016*

Gross Sales	20,000	
Sales Returns and Allowances	-4,000	
Sales Discounts	<u>-800</u>	
Net Sales		15,200
Cost of Goods Sold before Freight In	-8,386	
Freight In	<u>-800</u>	
Cost of Goods Sold		<u>-9,186</u>
Gross Margin		6,014
Depreciation Expense, Building	-500	
Insurance Expense	-300	
Uncollectible Accounts Expense	-960	
Office Supplies Expense	<u>-2,900</u>	
Total Operating Expenses		<u>-4,660</u>
Income from Operations		1,354
Interest Expenses	<u>-570</u>	
Other Revenues and Expenses		<u>-570</u>
Income Before Income Taxes		784
Income Taxes Expense		-150
Net Income		634

**Question D (4 credits)**

Suppose Climb used the Last in, First out method. Recalculate the Cost of Goods Sold and the Gross Margin.

COGS =  $40 * 300 = 12,000$   
(sales 50 - 10 returns)

Gross Margin =  $15,200$  (net sales)  $- 12,000$  (COGS)  $- 800$  (freight-in) =  $2,400$

## Exercise 2 (33 credits)

MADEIRA corporation presents the beginning balance sheet (in euro's) on January 1, 2014 as follows:

**Balance sheet on January 1, 2014**

Building	840,000	Capital lease obligations	<b>516,066</b>
Capital lease trucks	<b>480,000</b>	Accounts payable	150,000
Trade inventory	470,000	Salaries payable	42,000
Accounts receivable, net	270,000	Common stock	750,000
Cash	30,000	Additional paid in capital	250,000
		Retained earnings	<b>381,934</b>
<b>Total</b>	<b>2,090,000</b>	<b>Total</b>	<b>2,090,000</b>

In the footnotes, the following information is disclosed with respect to 2014:

The trucks under capital lease were acquired on January 1, 2012. The lease period is 5 year, the interest is 7.931% per year and the annual lease term is € 200,000. The first term was paid on December 31, 2012. The present value of the capital lease is € 800,000. MADEIRA uses the straight line method for the depreciation of the trucks. The residual value is € 0 and the estimated useful life equals the lease period.

In the table below you will find the interest and repayment schedule of the capital lease.

<b>Year</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Interest	63,448	52,618	40,928	28,312	14,696
Repayment	136,552	147,382	159,072	171,688	185,304
Lease-term	200,000	200,000	200,000	200,000	200,000

The accounts receivable gross are € 300.000. MADEIRA uses the accounts receivable aging method to determine the allowance for uncollectible accounts.

The accounts receivable gross have the following composition:

	Not yet due	1-30 days past due	31-90 days past due	91-180 days past due
Amount	160,000	70,000	40,000	20,000
Estimated percentage uncollectible	1%	5%	10%	30%

During the financial year, customer E. Fial has gone bankrupt. The gross value of this customer was € 36,000. Out of the liquidation revenues, 10% of the gross value was received from the trustee.

The par value of the shares is € 100 per share.

On February 1, 2014 MADEIRA declares and pays a dividend of € 10 per share.

On September 1, 2014 MADEIRA issues 500 shares for € 300 each.

All sales and purchases are on account.

The table below gives a summary of all cash receipts and cash expenditures during 2014.

<b>Receipts</b>		<b>Expenditures</b>	
Receipts from accounts receivable	1,800,000	Payments to accounts payable	1,200,000
Receipt from trustee	<b>3,600</b>	Salaries paid	280,000
Receipts from share issue	<b>150,000</b>	Lease term paid	<b>200,000</b>
		Dividends paid	<b>75,000</b>
<b>Total receipts</b>	<b>1,953,600</b>	<b>Total expenditures</b>	<b>1,755,000</b>

On December 31, 2014, the amounts of the following balance sheet items are:

Building	€	800,000
Trade inventory	€	400,000
Accounts receivable gross	€	290,000
Salaries payable	€	15,000
Accounts payable	€	175,000

### Question A (3 credits)

Complete the balance on January 1, 2014

Capital lease trucks =  $800,000 - 2 * 160,000 = 480,000$   
 Capital lease obligations =  $800,000 - 136,552 - 147,382 = 516,066$   
 Retained earnings = balance = 381,934

### Question B (4 credits)

Complete the summary of cash receipts and cash expenditures during 2014.

Receipts from trustee =  $0.1 * 36,000 = 3,600$   
 Receipts from share issue =  $500 * 300 = 150,000$   
 Lease term paid = 200,000  
 Dividends paid =  $750,000 / 100 * 10 = 75,000$

### Question C (4 credits)

1. Calculate the purchases of trade inventory during 2014.
2. Calculate the cost of goods sold during 2014.

A/P 1/1 + purchases – payments = A/P 31/12  
 $150,000 + \text{purchases} - 1,200,000 = 175,000$   
 purchases = 1,225,000

inventory 1/1 + purchases – COGS = inventory 31/12  
 $470,000 + 1,225,000 - \text{COGS} = 400,000$   
 COGS = 1,295,000

**Question D (3 credits)**

Calculate sales during 2014.

A/R gross 1/1 + sales - receipts - uncollectible gross = A/R gross 31/12  
 $300,000 + \text{sales} - 1,800,000 - 36,000 = 290,000$   
 $\text{sales} = 1,826,000$

**Question E (4 credits)**

Calculate the allowance for uncollectible accounts on December 31, 2014 and the uncollectible accounts expense in 2014.

Allowance for uncollectible accounts 31/12:  
 $0.01 \times 160,000 + 0.05 \times 70,000 + 0.1 \times 40,000 + 0.3 \times 20,000 = 1,600 + 3,500 + 4,000 + 6,000 = 15,100$

Allowance for uncollectible accounts 1/1 = 30,000

Uncollectible:  $0.9 \times 36,000 = 32,400$

Expense =  $15,100 + 0.9 \times 36,000 - 30,000 = 17,500$

**Question F (11 credits)**

Complete the balance sheet on December 31, 2014 and the income statement for 2014.

**Balance sheet on December 31, 2014**

Building	800,000	Capital lease obligations	<b>356,994</b>
Capital lease trucks	<b>320,000</b>	Accounts payable	175,000
Trade inventory	400,000	Salaries payable	15,000
Accounts receivable, net	<b>274,900</b>	Common stock	<b>800,000</b>
Cash	<b>228,600</b>	Additional paid in capital	<b>350,000</b>
		Retained earnings	<b>326,506</b>
<b>Total</b>	<b>2,023,500</b>	<b>Total</b>	<b>2,023,500</b>

**Income statement in 2014**

Cost of goods sold (question C)	<b>1,295,000</b>	Sales (question D)	<b>1,826,000</b>
Salaries expenses	<b>253,000</b>		
Depreciation expense buildings	<b>40,000</b>		
Depreciation expense trucks	<b>160,000</b>		
Uncollectible accounts expense (question E)	<b>17,500</b>		
Interest expenses	<b>40,928</b>		
Net income	<b>19,572</b>		



Explanations:

Capital lease trucks:  $480,000 - 160,000 = 320,000$

Accounts receivable, net:  $290,000 - 15,100 = 274,900$

Cash:  $30,000 + 1,953,600 - 1,755,000 = 228,600$

Capital lease obligations:  $516,066 - 159,072 = 356,994$

Common stock:  $750,000 + 500 * 100 = 800,000$

Additional paid in capital:  $250,000 + 500 * 200 = 350,000$

Retained earnings:  $381,934 + 19,572 - 75,000 = 326,506$

Cost of goods sold: question C

Salaries expenses:  $280,000 + 15,000 - 42,000 = 253,000$

Depreciation expense building:  $840,000 - 800,000 = 40,000$

Depreciation expense capital lease trucks:  $800,000 / 5 = 160,000$

Uncollectible accounts expense: question E

Interest expense: 40,928

Sales: question E

### Question G (4 credits)

Recalculate net profit in 2014 using the statement of changes in stockholders' equity.

Stockholders' equity 31/12	1,476,506
Stockholders' equity 1/1	<u>1,381,934</u>
Change	94,572
Dividends	+75,000
Share issue	<u>-150,000</u>
Net profit	19,572

**Exercise 3 (32 credits)**

Suppose Teresa Treasures, a retail store, provides you the following comparative balance sheets and the related income statement.

Teresa Treasures Comparative Balance Sheets		
	January 31, 2008	January 31, 2009
<b>Assets</b>		
Cash	23000	22200
Accounts receivables	12000	23450
Merchandise inventory	25200	28100
Prepaid rent	6000	5500
Property, plant and equipment (PP&E)	79500	80000
Accumulated depreciation	-24000	-29000
Total assets	121700	130250

**Liabilities and Shareholder's equity**

Account payable	12300	26200
Income taxes payable	10000	8100
Long-term notes payable	39700	25800
Common stock and additional paid-in-capital	18500	20000
Retained earnings	41200	57150
Treasury stock	0	-7000
Total liabilities and shareholders' equity	121700	130250

Teresa Treasures Income Statement for the year ended January 31, 2009		
Sales		234900
Cost of goods sold		-178850
Gross margin		56050
Selling expenses	24000	
General expenses	11000	-35000
Income from operations		21050
Interest expense		-1200
Gain on sale of property, plant and equipment*		2000
Income before income taxes		21850
Income tax expense		-3400
Net Income		18450

\* concerns PP&E with a purchase price of 15000 and accumulated depreciation of 4000

**Question A (28 credits)**

Prepare the statement of cash flows for Teresa for the year ending January 31, 2009 using the indirect method. Distinguish between cash flows from operating, investing and financing activities.

**Cash from operating activities**

Net income	18450
+ depreciation expense	9000 (29000-24000+4000)
- gain on sale of PP&E	-2000
- increase in accounts receivables	-11450
- increase in inventory	-2900
+ decrease in prepaid rent	500
+ increase in accounts payable	13900
- decrease in income taxes payable	-1900
Net cash provided by operating activities	<u>23600</u>

**Cash from investing activities**

Cash expenditures on purchase of PP&E	-15500 (80000-79500+15000)
Cash proceeds from sale of PP&E	<u>13000 (15000-4000+2000)</u>
Net cash used for investing activities	-2500

**Cash from financing activities**

Cash paid on long-term notes	-13900
Cash proceeds from stock issue	1500
Cash paid for treasury stock	-7000
Cash paid for dividends	<u>-2500 (57150-41200) - 18450</u>
Net cash used for financing activities	<u>-21900</u>

**Question B (2 credits)**

Define and calculate the cash flow to asset ratio.

$$\begin{aligned}\text{Cash flow to assets ratio} &= \text{Net cash flows from operating activities} / \text{average total assets} \\ &= 23600 / 125975 \\ &0.19\end{aligned}$$

**Question C (2 credits)**

Define and calculate the cash flow yield.

$$\begin{aligned}\text{Cash flow yield} &= \text{Net cash flow from operating activities} / \text{net profit} \\ &= 23600 / 18450 \\ &1.28\end{aligned}$$

**Chart of Accounts exercise 1 (accounts in alphabetical order)**

**You may torn this page from the exam**

Accounts Payable
Accounts Receivable
Accumulated Depreciation, Building
Additional Paid-in Capital, Common Stock
Additional Paid-in Capital, Treasury Stock
Allowance for Uncollectible Accounts
Bank Loan
Building
Cash
Cash Dividends
Cash Dividends Payable
Common Stock
Common Stock Distributable
Cost of Goods Sold
Depreciation Expense, Building
Freight-in Expense
Freight-in Payable
Freight-out Expense
Freight-out Payable
Income Summary
Income Taxes Expense
Income Taxes Payable
Insurance Expense
Insurance Payable
Interest Expense
Interest Payable
Inventory
Office Supplies
Office Supplies Expense
Prepaid Insurance
Purchases
Purchases Discounts
Purchase Returns and Allowances
Retained Earnings
Sales
Sales Discounts
Sales Returns and Allowances
Stock Dividends
Treasury Stock, Ordinary
Uncollectible Accounts Expense