

**Examination: 5071 „Management I” (Financial Accounting) Summer Term 2008**

**Examiner: Prof. Dr. Barbara Schöndube-Pirchegger**

**Examination questions: 5**

**Name: \_\_\_\_\_ Matriculation number: \_\_\_\_\_**

**The following aids can be used:** a calculator in accordance with the instructions given by the Board of Examiners and a dictionary.

Hint: A maximum of 120 points can be reached from solving the 5 assignments below. Use the space /tables provided to enter your answers.

**Assignment 1 (30 points)**

Company XY is an electrical retailer. Its balance sheets at the beginning and end of year x7, the income statement for the year and a summary of the company's ledger account, Cash, is presented below.

<b>Company XY</b>					
<b>Balance sheet at start- and end-year, x7</b>					
(amounts in 000)					
	Year x7			Year x7	
	Start	End		Start	End
<i>Current assets</i>			<i>Current liabilities</i>		
Cash	15	12	Accounts payable,		
Accounts receivable	54	55	merchandise suppliers	73	98
Merchandise inventory	202	198	Salaries payable	13	7
	271	265		86	105
<i>Fixed assets</i>			<i>Shareholders' equity</i>		
Equipment,			Share capital	300	300
net of depreciation	240	292	Retained profits	125	152
				425	452
<b>Total assets</b>	<b>511</b>	<b>557</b>	<b>Total liabilities and</b>	<b>511</b>	<b>557</b>
			<b>shareholders' equity</b>		

<b>Income statement for year x7</b>	
(amounts in 000)	
Sales revenue	668
Less: Cost of goods sold	-380
Gross Profit	288
Less: Operating expenses	
Depreciation expense	-44
Salary expense	-176
	-220
Operating profit	68
Income taxes	-36
Net profit	32

<b>Cash (amounts in 000)</b>			
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Balance, 1/1/ x7	15	Suppliers of merchandise	351
Cash sales	347	Salaries paid	182
		Dividends paid	5
Cash collected from credit sales	320	Income tax paid	36
		Suppliers of equipment	96
Balance, 31/12/ x7	12		

**Required:**

1. Prepare a cash flow statement for Company XY for the year, showing separately cash flows from operating, investing and financing activities. Calculate its cash flow from operations by the indirect approach. Classify tax payments as operating outflows and dividend payments as financing outflows.

<b>Company XY</b>	
Cash flow statement for year x7	
<b>Operating activities</b>	
Net profit	32
<b>Investing activities</b>	
<b>Financing activities</b>	
Net increase/ decrease in cash	

2. Explain the change in the four balance sheet accounts: "Accounts receivable", "Salaries payable", "Accounts payable, merchandise suppliers", and "Retained profits" between the start and the end of year x7, using information from the year x7 income statement and the movement in the cash account during the year. Use the following abbreviations: BB - beginning balance, EB - ending balance. An example for the account "Merchandise inventory" is given below.

**Example:**

Merchandise inventory			
BB	202	COGS	380
Purchases (25* + 351**)	376		
EB	198		

\* increase in accounts payable:  $98 - 73 = 25$

\*\* payments to suppliers of merchandise (see cash account)

Accounts receivable		Accounts payable, merchandise suppliers	
Salaries payable		Retained profits	

**Assignment 2 (20 points)**

At the beginning of year 1, Urban Furniture Company acquires a machine for € 78,000 and incurs additional cost of € 2,000 to put it into operation. The machine has an expected useful life of eight years. The expected residual value is zero.

**Required:**

1. Calculate the depreciation charge on the machine and its end-year carrying value for years 1 and 2 under the following methods of depreciation:

- a) the straight-line (SL) method.
- b) the declining-balance (DB) method. (The DB rate is assumed to be 200 % of the SL rate.)
- c) the units-of-production (UoP) method. (Forecast output in each of years 1 to 4 is: 2,500, 1,000, 3,500, and 3,000 units. Total expected output over the entire useful life is 20,000.)
- d) the sum-of-years' digits (SoYD) method. (Please round to whole numbers.)

	Depreciation	End-year carrying value
<b>a)</b> Year 1		
Year 2		
<b>b)</b> Year 1		
Year 2		
<b>c)</b> Year 1		
Year 2		
<b>d)</b> Year 1		
Year 2		

2. Assume Urban Furniture which reports according to IFRS uses the SL method to record depreciation on the machine and measures it at depreciated cost. The following situation occurs: A change in economic conditions in year 3 leads to a sharp reduction in the demand for furniture. Management estimates that the machine's value in use is € 45,000 and its net selling price is only € 25,000 at the end of year 3. However, the estimated useful life did not alter.

- a) Make the necessary journal entry to record the change in the machine's carrying value at the end of year 3 (Assume that depreciation for year 3 has already been recorded.)

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- b) Make the necessary journal entry to record the depreciation expense in year 4.

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- c) At the end of year 4 the machine is sold for € 35,000. Give the loss or gain on asset sale resulting from this transaction if applicable.

**Assignment 3 (20 points)**

The Woodworm Company manufactures two types of shelves made from beechwood. The list below shows the company's purchases (inflows) and uses (outflows) of beechwood in October x7.

	Date	Beechwood (m <sup>2</sup> )	Price (€/m <sup>2</sup> )
Beginning balance	1/10/x7	800	21,00
Inflow	3/10/x7	200	24,50
Outflow	5/10/x7	200	
Outflow	12/10/x7	750	
Inflow	25/10/x7	800	19,00
Ending balance	31/10/x7	850	

**Required:**

1. Calculate the cost of beechwood used in October x7 and the value of the ending inventory in beechwood at end-October x7 under FIFO, WAC and LIFO cost-flow assumptions. Assume the company calculates the cost on a periodic basis at the end of the month.
2. Recalculate the cost of beechwood used in October x7 and the value of the ending inventory in beechwood at end-October x7 under FIFO, WAC and LIFO assuming "Woodworm" uses a perpetual system to keep track of inventory quantities and values.

Use the table below to fill in your results.

<b>1) periodic system</b>	<b>FIFO</b>	<b>WAC</b>	<b>LIFO</b>
Cost of beechwood used (€)			
Ending inventory (€)			
<b>2) perpetual system</b>			
Cost of beechwood used (€)			
Ending inventory (€)			

**Assignment 4 (30 points)**

On 1 January x4, the Nassle Company issues € 10 million of 2.5 % bonds, due 31 December year x8. They are priced at 99.72173 % of their face value to yield 2.56 % to maturity. The company's financial year ends on 31 December. Interest is payable annually.

**Required:**

1. Assume that Nassle amortises any bond discount (or premium) on issue by the straight-line method and reports the bonds on the balance sheet at amortised cost.
  - a) Prepare the journal entry the company makes to record the issuance of the bonds.
  - b) Make the necessary journal entry to record interest expense and accrued amortization in x4.
  - c) What is the carrying amount of the bonds in Nassle's balance sheet at the end of x4?

Use the space below to enter your results.

**1 a)**

Dr.

Cr.

**1 b)**

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**1c)**

Carrying amount at end-x4: \_\_\_\_\_

2. Assume that Nassle amortises any bond discount (or premium) on issue by the interest method and reports the bonds on the balance sheet at amortised cost.

- a) What is the interest expense Nassle reports in its income statement for x5 and x6 with respect to the bonds? (Please round to whole numbers.)
- b) What is the carrying amount of the bonds in Nassle's balance sheet at the end of x5 and at the end of x6?
- c) Make the necessary journal entry to record interest expense and accrued amortization in x5.

Use the space below to enter your results.

**2 a) and b)**

	Year x5	Year x6
<b>a) Interest expense</b>		
<b>b) Carrying amount at year-end</b>		

2 c)

Dr.

Cr.

**Assignment 5 (20 points)**

Altran Technologies is a fast-growing French R&D consulting firm that started operations in x2. The company launched an initial public offering of its shares in x7 issuing 1,000,000 ordinary shares (with a par value of €1/share) for € 25. The shares are fully paid in x7. Issue costs of € 950,000 are charged against the share premium.

**Required:**

1. Complete the shareholders' equity section of Altran's x7 balance sheet using the information given above.

Shareholders' equity	<u>At end-x7</u>
Share capital	
Share premium	
Retained earnings	<u>5,523,000</u>

(Net profit for x7 of € 5,500,000 is included in the retained earnings figure.)

2. In x8, Altran's shareholders approve the following appropriation of x7 profits:
  - a transfer of 10 % of x7 profits to a legal reserve, as required by law;
  - a cash dividend of € 2.8 a share.

Show the effect of these events on the company's accounts by using journal entries.

Transfer of profits to legal reserve:

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Payment of cash dividend:

Dr.

Cr.

3. Additional events that affect Altran's shareholders' equity in x8 are the following:
- the company carries out a 2:1 split of its shares in October x8
  - it reports a net profit for the year of 5,832,000.

Prepare the shareholders' equity section of Altran Technologies' x8 balance sheet taking into account the events listed in part 2 as well. What is the number of issued and outstanding shares at the end of x8?

<u>Shareholders' equity</u>	<u>At end-x8</u>

Number of issued and outstanding shares: \_\_\_\_\_

4. Assume that there was an additional event in x8. Altran Technologies buys back 250,000 shares at a price of € 28.4 in November x8 and holds them in treasury. Revise the shareholders' equity section of the company's balance sheet prepared in (3). What is the number of outstanding shares at the end of x8?

<u>Shareholders' equity</u>	<u>At end-x8</u>

Number of outstanding shares: \_\_\_\_\_