



# **Financial Accounting**

Handout

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#### Preface

Financial accounting incorporates two courses: the related lecture and the seminar. The aim of the courses is to entitle the students with the knowledge of the most important topics of accounting such as property plant and equipment, merchandising operations, inventories, receivables and liabilities. This handout provides case studies for learning purposes and includes a sample exam.

Lecturer: Zsuzsanna KOVÁCS

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#### **Course information**

### **Course title: FINANCIAL ACCOUNTING**

Course code: 60C101 Lecture 60C102 Seminar

Credit: 6

Type: lecture and seminar

Contact hours / week: 2+2 Evaluation: Lecture: exam mark (five-grade), Seminar: practical course mark (five-grade)

Semester: 4<sup>th</sup>

Prerequisites: Introduction to Accounting

### **Learning Outcomes**

a) regarding knowledge, the student

has a clear idea of the basic concepts and methods of financial accounting
is familiar with the basic economic events related to plant property and equipment items, merchandising operations, inventories, cash, receivable and trading securities

b) regarding competencies, the student

- is capable of determining how the balances related to plant property and equipment items, merchandising operations, inventories, cash, receivable and trading securities are modified by basic economic events

- is capable of editing accounting entries and applying the basic rule of double-entry bookkeeping for the above items

*c)* regarding attitude, the student

- is capable of critical evaluation of financial accounting data

- is devoted to performing high quality work in the field of financial accounting

*d)* regarding autonomy and responsibility, the student

- works individually in the field of financial accounting with responsibility

- prepares and presents accounting-related tasks and projects

#### Requirements

**For the seminar** (60C102): the practical course mark (five-grade) is based on the results of the mid-term tests written during the semester. Opportunity to retake mid-term test: once at the end of the semester. *60% of the points have to be collected in order to pass.* 

<u>For the lecture</u> (60C101): written exam during the examination period. Questions will cover the material of both the lecture and the seminar.

Only those students who had passed the seminar (have grade "pass" or better) may take the lecture exam.

#### 60% of the points have to be collected in order to pass.

<u>Class attendance</u> is not compulsory but recommended as well as continuous (weekly) learning and practicing during the semester.

	Grading
•	0-59%: fail
•	60-69%: pass
•	70-79%: satisfactory
•	80-89%: good
•	90-100%: excellent

#### **TOPIC 1: Property, Plant and Equipment**

#### *Learning outcome:*

The students will learn about Property, Plant and Equipment items: definition, function and classification. They will be informed about the related accounts and depreciation calculations. The most important outcome is to be able to calculate and post linear, units-of-output, double-declining and sum-of-the-years-digits depreciation. Acquisition and disposal transactions are also introduced and discussed as well as lump-sum acquisitions.

#### Problem P/1.

Pear Co. Is buying land, building and equipment for \$1,375,000 cash. The estimated market prices are the following:

- ✓ Land: \$175,000
- ✓ Building: \$800,000
- ✓ Eqipment: \$500,000

How do we allocate the purchase price between these assets? Worksheet:

Asset	Market value	% of total market value
Land		
Building		
Equipment		
Total		

Asset	Purchase price	% of total market value	Allocated cost
Land	•		
Building			
Equipment			
Total	-		

## Problem P/2.

On January 1, 20X2, Accounting Corporation purchased a machine for  $6,400,000 \in$ . There was an additional  $600,000 \in$  cost of instalment. The machine has a service life of 3 years and it is expected to be disposed for a  $400,000 \in$  salvage value. The Corporation uses a straight-line depreciation method.

- 1. Prepare a table showing the annual depreciation expense, accumulated depreciation and related calculations for each year!
- 2. How much is the book value in the Balance Sheet at Dec. 31, 20X3?
- 3. Prepare Journal entries to record the asset's acquisition, annual depreciation for each year and the asset's sale (at the end of the service life) for 400,000 €.

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation

## Worksheet:

2.

## Property, Plant & Equipment (20X3)

Equipment: Less: Accumulated depreciation: Book value:

3.				
General Journal				
Date	Accounts	Debit	Credit	

## Problem P/3.

On January 1, 20X2, 'This test is the best' Co. purchased a machine for 2,000,000  $\in$ . There was an additional 600,000  $\in$  cost of instalment. The machine has a service life of 3 years and it is expected to be disposed for a 200,000  $\in$  salvage value. The Corporation uses a straight-line depreciation method.

- 1. Prepare a table showing the annual depreciation expense, accumulated depreciation and related calculations for each year!
- 2. How much is the book value in the Balance Sheet at Dec. 31, 20X3?
- 3. Prepare Journal entries to record the asset's acquisition, annual depreciation for each year and the asset's sale (at the end of the service life) for  $300,000 \in$ .

### Worksheet:

1

1.			
Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation

2.

### Property, Plant & Equipment (20X3)

Equipment:

Less: Accumulated depreciation: Book value:

3.

General Journal			
Date	Accounts	Debit	Credit

## Problem P/4.

On January 1, 20X2, Bakery Corporation purchased an equipment for  $200,000 \in$ . The machine has a service life of 3 years and a salvage value of  $10,000 \in$ . The Corporation uses the double-declining balance depreciation method.

Prepare a table for the annual depreciation expense, accumulated depreciation and related calculations for each year!

Worksheet:

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation

## Problem P/5.

On January 1, 20X2, Lucky Corporation purchased an automobile for  $15,000 \in$ . According to the original plan, the machine has a service life of 4 years. The Corporation uses the straight-line depreciation method. The salvage value of the asset is  $5,000 \in$ .

By early in 20X5, it turns out that the depreciation estimates need to be revised:

- The Corporation decides to use the car for 6 years (instead of 4)
- The scrap value (salvage value) will be 2,000 €.

Prepare a table for the annual depreciation expense, accumulated depreciation and related calculations for each year!

Worksheet:

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation

### Problem P/6.

On January 1, 20X2, Sunny Corporation purchased an equipment for  $150,000 \notin$ . Originally planned, the asset has a service life of 5 years. The Corporation uses the straight-line depreciation method. The salvage value of the asset is  $10,000 \notin$ .

By early in 20X5, it turns out that the depreciation estimates need to be revised:

- The Corporation decided to use the asset for 6 years (instead of 5)
- The scrap value (salvage value) will be 5,000 €.

Worksheet:

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation

#### Problem P/7.

On January 1, 20X2, 'Easy' Corporation purchased an equipment for  $300,000 \in$ . The machine has a salvage value of  $15,000 \in$ .

Prepare a table for the annual depreciation expense, accumulated depreciation and related calculations for each year for the following cases:

- a) The Corporation uses the sum-of-the-years'-digits depreciation method, service life is 4 years.
- b) The Corporation uses the double declining balance depreciation method service life is 3 years.
- c) The Corporation uses the sum-of-the-years'-digits depreciation method, service life is 3 years.
- d) The Corporation uses the units of output depreciation method. Total output: 100,000 pieces. Annual outputs: 1st year: 50,000, 2nd year: 30,000, 3rd year: 20,000

d/1) Prepare a schedule for the annual depreciation expense, accumulated depreciation and related calculations.

d/2) How much is book value on the balance sheet at Dec. 31, 20X3?

d/3) Prepare Journal entries to record the asset's acquisition, annual depreciation for each year and the asset's eventual sale for 15,000  $\in$ 

## Worksheet: a) In case of Sum-of-the-years-digits, 4 years

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation

## b) In case of double-declining balance, 3 years.

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation

# c) In case of sum-of-the-years-digits 3 years.

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation

d/1) In case of units-of-output. Total output: 100,000 pieces. 1<sup>st</sup> year: 50,000, 2<sup>nd</sup> year: 30,000, 3<sup>rd</sup> year: 20,000

<u>e jeu: =</u>					
Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation		

d/2)

d/3)

General Journal			
Date	Accounts	Debit	Credit

## Problem P/8.

On January 1, 20X2, 'Funny' Corporation purchased an automobile for  $25,000 \in$ . Originally planned, the car has a service life of 4 years. The Corporation uses the straight-line depreciation method. The salvage value of the asset is  $5,000 \in$ .

#### Scenario "A"

By early 20X5, it turns out that the depreciation estimates need to be revised:

- The Corporation decided to use the car for 6 years (instead of 4)
- The scrap value (salvage value) will be  $4,000 \in$ .

#### Worksheet:

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation

Scenario "B" It turned out in early 20X6 that useful life will be 8 years (total), new salvage value will be 500 €. Worksheet:

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation

## Problem P/9.

On January 1, 20X2, 'Extended' Corporation purchased equipment for  $200,000 \in$ . The machine has a salvage value of  $20,000 \in$ .

Prepare a table for the annual depreciation expense, accumulated depreciation and related calculations for each year for the following cases. Scenarios:

- a) The Corporation uses the straight-line depreciation method, service life is 5 years.
- b) The Corporation uses the units of output depreciation method. Total output: 340 pieces. Annual outputs:

1<sup>st</sup> year: 40 2<sup>nd</sup> year: 60 3<sup>rd</sup> year: 120 4<sup>th</sup> year: 35 5<sup>th</sup> year: 85

- c) The Corporation uses the sum-of-the-years'-digits depreciation method, service life is 5 years.
- d) The Corporation uses the double declining balance depreciation method service life is 5 years.

## Worksheet:

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
a) 20X2			
b) 20X2			
c) 20X2			
d) 20X2			

## **SOLUTION for Problems**

## Solution P/1.

Asset	Market value	% of total market value	
Land	175 000	12%	
Building	800 000	54%	
Equipment	500 000	34%	
Total	1 475 000	100%	
Asset	Purchase price	% of total market value	Allocated cost
Asset Land	<b>Purchase price</b> 1 375 000	% of total market value12%	Allocated cost 165 000
Asset Land Building	Purchase price           1 375 000           1 375 000	% of total market value           12%           54%	Allocated cost 165 000 742 500
Asset Land Building Equipment	Purchase price           1 375 000           1 375 000           1 375 000           1 375 000	% of total market value           12%           54%           34%	Allocated cost 165 000 742 500 467 500

## Solution P/2.

1. Depreciable base = 7,000,000-400,000 = 6,600,000

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
20X2	2,200,000	2,200,000	6,600,000/3
20X3	2,200,000	4,400,000	same as above
20X4	2,200,000	6,600,000	same as above

2.

**Property, Plant & Equipment (20X3, €)** 7,000,000-4,400,000= 2,600,000

3.			
General Jour	nal		
Date	Accounts	Debit	Credit
20X2.01.01	D: Technical equipment	7,000,000	
	C: Cash		7,000,000
	Purchase of equipment		
20X2.12.31.	D: Depreciation expense	2,200,000	
	C: Accumulated depreciation		2,200,000
	Annual depreciation of 20X2		
20X3.12.31.	D: Depreciation expense	2,200,000	
	C: Accumulated depreciation		2,200,000
	Annual depreciation of 20X3		
20X4.12.31.	D: Depreciation expense	2,200,000	
	C: Accumulated depreciation		2,200,000
	Annual depreciation of 20X4		
20X4.12.31.	D: Cash	400,000	
	D: Accumulated Depreciation	6,600,000	
	C: Technical Equipment		7,000,000
	To record the disposal of the asset on December 31, 20X4		

## Solution P/3.

1. Depreciable base = 2,600,000-200,000 = 2,400,000

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
20X2	800,000	800,000	2,400,000/3
20X3	800,000	1,600,000	same as above
20X4	800,000	2,400,000	same as above

#### 2.

# Property, Plant & Equipment (20X3)

Equipment:	2,600,000 €	
Less: Accumulated depreciation:	1,600,000 €	1,000,000€

3.			
General Journ	nal		
Date	Accounts	Debit	Credit
20X2.01.01	D: Technical equipment	2,600,000	
	C: Cash		2,600,000
	Purchase of equipment		
20X2.12.31.	D: Depreciation expense	800,000	
	C: Accumulated depreciation		800,000
	Annual depreciation of 20X2		
20X3.12.31.	D: Depreciation expense	800,000	
	C: Accumulated depreciation		800,000
	Annual depreciation of 20X3		
20X4.12.31.	D: Depreciation expense	800,000	
	C: Accumulated depreciation		800,000
	Annual depreciation of 20X4		
20X4.12.31.	D: Cash	300,000	
	D: Accumulated	2,400,000	

Depreciation	
C: Technical Eqipment	2,600,000
C: Gain	100,000
To record the disposal of the asset on December 31, 20X4	

## Solution P/4.

# Rate in case of straight-line: 0,33 **Double rate: 0,67**

Year	Annual Expense	Accumulated Depreciation at	Annual Expense Calculation
		End of Year	
20X2	134,000	134,000	200,000*0,67
20X3	44,220	178,220	(200,000-134,000)*0,67
20X4	11,780 (190,000- 178,220)	190,000	(200,000- 178,220)*0,67=14,593 But! Accumulated depr. can not exceed 190,000

# Solution P/5.

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
20X2	2,500	2,500	(15,000-5,000)/4
20X3	2,500	5,000	same as above
20X4	2,500	7,500	same as above
20X5	1,833.33	9,333.33	(15,000-7,500-2,000)/3
20X6	1,833.33	11,166.66	same as above
20X7	1,833.33	13,000	same as above

## Solution P/6.

Year	Annual depreciation	Accumulated depreciation	Calculations
20X2	28 000	28 000	(150000-10000)/5
20X3	28 000	56 000	same as above
20X4	28 000	84 000	same as above
20X5	20 333	104 333	(150000-84000-5000)/3
20X6	20 333	124 666	same as above
20X7	20 333	145 000	same as above

## Solution P/7.

## a) Sum-of-the-years-digits, 4 years

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
20X2	114,000	114,000	(300,000-15,000)*4/10
20X3	85,500	199,500	(300,000-15,000)*3/10
20X4	57,000	256,500	(300,000-15,000)*2/10
20X5	28,500	285,000	(300,000-15,000)*1/10

# **b) Double-declining balance, 3 years.** Rate in case of straight-line: 0,33

Double rate: 0,67

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
20X2	201,000	201,000	300,000*0,67
20X3	66,330	267,330	(300,000-201,000)*0,67
20X4	17,670 (285,000- 267,330)	285,000	(300,000- 267,330)*0,67=21,889 But! Accumulated depr. can not exceed 285,000

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
20X2	142,500	142,500	(300,000-15,000)*3/6
20X3	95,000	237,500	(300,000-15,000)*2/6
20X4	47,500	285,000	(300,000-15,000)*1/6

c) Sum-of-the-years-digits 3 years.

# <u>d/1) Units-of-output. Total output: 100,000 pieces. 1<sup>st</sup> year: 50,000, 2<sup>nd</sup> year: 30,000, 3<sup>rd</sup> year: 20,000</u>

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
20X2	142,500	142,500	(300,000-15,000)*50,000/100,000
20X3	85,500	228,000	(300,000-15,000)*30,000/100,000
20X4	57,000	285,000	(300,000-15,000)*20,000/100,000

### d/2

**Property, Plant & Equipment (20X3), €:** 300,000-228,000=72,000

d/3			
General Jour	nal		
Date	Accounts	Debit	Credit
20X2.01.01	D: Technical equipment	300,000	
	C: Cash		300,000
	Purchase of equipment		
20X2.12.31.	D: Depreciation expense	142,500	
	C: Accumulated depreciation		142,500
	Annual depreciation of 20X2		
20X3.12.31.	D: Depreciation expense	85,500	
	C: Accumulated depreciation		85,500
	Annual depreciation of 20X3		
20X4.12.31.	D: Depreciation expense	57,000	
	C: Accumulated depreciation		57,000
	Annual depreciation of 20X4		
20X4.12.31.	D: Cash	15,000	
	D: Accumulated Depreciation	285,000	
	C: Technical equipment		300,000
	To record the disposal of the asset on December 31, 20X4		

## Solution P/8.

## Scenario A:

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
20X2	5,000	5,000	(25,000-5,000)/4
20X3	5,000	10,000	same as above
20X4	5,000	15,000	same as above
20X5	2,000	17,000	(25,000-15,000-4,000)/3
20X6	2,000	19,000	same as above
20X7	2,000	21,000	same as above

## Scenario B:

Year	Annual Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
20X2	5,000	5,000	(25,000-5,000)/4
20X3	5,000	10,000	same as above
20X4	5,000	15,000	same as above
20X5	5,000	20,000	same as above
20X6	1,125	21,125	(25,000-20,000-500)/4
20X7	1,125	22,250	same as above
20X8	1,125	23,375	same as above
20X9	1,125	24,500	same as above

# Solution P/9.

a)

Year	Annual depreciation	Accumulated depreciation	Calculations
20X2	36 000	36 000	(20000-20000)/5
20X3	36 000	72 000	same as above
20X4	36 000	108 000	same as above
20X5	36 000	144 000	same as above
20X6	36 000	180 000	same as above

b)

Year	Annual depreciation	Accumulated depreciation	Calculations
20X2	21 176	21 176	(200000-20000)/340*40
20X3	31 765	52 941	(20000-2000)/340*60
20X4	63 529	116 470	(200000-20000)/340*120
20X5	18 528	134 998	(200000-20000)/340*35
20X6	45 000	180 000	(200000-20000)/340*85

c)

Year	Annual depreciation	Accumulated depreciation	Calculations
20X2	60 000	60 000	(200000-20000)*5/15
20X3	48 000	108 000	(200000-20000)*4/15
20X4	36 000	144 000	(200000-20000)*3/15
20X5	24 000	168 000	(200000-20000)*2/15
20X6	12 000	180 000	(200000-20000)*1/15

d)

Year	Annual depreciation	Accumulated depreciation	Calculations
20X2	80 000	80 000	200000*0,4
20X3	48 000	128 000	(200000-80000)*0,4
20X4	28 800	156 800	(200000-128000)*0,4
20X5	17 280	174 080	(200000-156800)*0,4
20X6	5 920	180 000	<del>(200000-174080)*0,4</del>

### **TOPIC 2: Merchandising operations**

#### Learning outcome:

The students will learn about merchandising operations: purchases, sales, shipping. They will be informed about the related accounts and discount calculations. The most important outcome is to be able to calculate and post receivable and payable balances. F.O.B. formulas are also introduced and discussed as well as income-statements of merchandising operations.

#### Problem M/1.

Light Aquarium purchases merchandise on account from its supplier. Check the invoice below from Colourful Fish Szeged!

Colourful Fish Szeged					
Szeged, Water Falls 5.					
	Sold to:		Invoice		
	Light Aquarium		#5841		
	6800 Budapest		Date: 20X5.03.12.		
Light City Road 12.			Terms: 2/10, n/30		
			F.O.B. Point: Szeged		
Quantity	Item Description	Unit Price	Total (€)		
12	Plants	€ 5	60		
5	Pebbles	€4	20		
4	Fish	€ 80	320		
		TOTAL:	400		

Prepare Light Aquarium's journal entries for the following transactions (assuming they use a perpetual method of recording):

- 1. To record the invoice on March 12.
- 2. To record the return of the pebbles on March 14.
- 3. To record the payment of the balance on March 20.

## Worksheet:

Date	Accounts	Debit	Credit

# Problem M/2.

Seasoning Company sells herbs to several restaurants across the country under the terms 1/10, n/30.

Prepare the Journal	entries to re	cord the sa	le and the pa	yment for the	following tra	ansactions:

Transaction	F.O.B. terms	Cost of	Selling	Delivery	Date of	Date of
		goods	Price	Cost	Sale	Payment
		sold				
1.	Destination	2,000	3,200	300	05-Mar	10-Mar
2.	Shipping point, <u>Price prepaid</u>	3,000	4,800	150	08-Mar	01-Apr
3.	Shipping point	350	500	60	11-Mar	11-Apr
4.	Destination	5,000	6,500	650	12-Mar	02-Apr
5.	Shipping point	1,000	2,800	430	20-Mar	24-Mar

## <u>Worksheet</u>

# 1.

Date	Accounts	Debit	Credit
05-Mar			
10-Mar			

2.

Date	Accounts	Debit	Credit
08-Mar			
01-Apr			

# 3.

Date	Accounts	Debit	Credit
11-Mar			
11-Apr			

4.

Date	Accounts	Debit	Credit
12-Mar			
02-Apr			

Date	Accounts	Debit	Credit
20-Mar			
24-Mar			

#### Problem M/3.

The following transactions of Apple Retail occurred during April:

April 3: Purchased merchandise on account from Pear Wholesale for 6,000€, shipping cost is 500€. Terms: 3/20, n/30, FOB Shipping Point, price prepaid.

April 5: Sold merchandise on account to Fine Bistro (selling price:  $1,400\in$ , cost  $1,000\in$ ). Terms 2/20, n/eom, FOB destination.

April 12: Paid 25€ to deliver goods to Fine Bistro.

April 16: Returned some goods of the April 3 purchase and received a credit memo. The price of the returned goods was 700€.

April 17: Sold merchandise to cash customers (selling price: 740€, cost: 340€).

April 19: Paid the balance to Pear Wholesale for the April 3 purchase.

April 20: Fine Bistro returned some of the goods from the April 5 sale (selling price:  $200 \in$ , cost 140 $\in$ ).

April 21: Purchased 5,000€ inventory for cash.

April 24: Received payment from Fine Bistro.

Journalize the entries for the above transactions! Calculate the Gross Profit of Apple Retail for April! Worksheet is on the next page.

Date (April)	Accounts	Debit	Credit
03			
05			
12			
16			
17			
17			
10			
19			

20		
21		
24		

Net Sales = Cost of Goods Sold = Gross Profit =

## Problem M/4.

The following transactions of Sporty Retail occurred during April:

April 3: Purchased merchandise on account from T-Shirt Wholesale for 4,000€. Terms: 3/20, n/eom, FOB Destination.

April 5: Sold merchandise on account to Athletic (selling price: 4,500€, cost 3,000€). Terms

5/20, n/eom, FOB destination.

April 12: Paid 50€ to deliver goods to Athletic.

April 16: Returned some goods of the April 3 purchase and received a credit memo. The price of the returned goods was 400€.

April 17: Sold merchandise to cash customers (selling price: 960€, cost: 740€).

April 19: Paid the balance to T-Shirt Wholesale for the April 3 purchase.

April 20: Athletic returned some of the goods from the April 5 sale (selling price: 300€, cost 220€).

April 21: Purchased 2,000€ inventory for cash.

April 24: Received payment from Athletic.

Journalize the entries for the above transactions! Calculate the Gross Profit and Net Income of Apple Retail for April!
Date (April)	Accounts	Debit	Credit
03			
05			
12			
16			
17			
10			
19			

20		
21		
24		

Net Sales = Cost of Goods Sold = Gross Profit = Net Income =

## Solution for Problems

# Solution M/1.

Date	Accounts	Debit	Credit
Mar 12	Inventory	400	
	Accounts Payable		400
	Purchased merchandise on account, terms 2/10, n/30.		
Mar 14	Accounts Payable	20	
	Inventory		20
	Returned pebbles		
Mar 20	Accounts Payable	380	
	Cash		372.4
	Inventory		7.6
	<i>Paid invoice, discount taken ((400-20)*0,02))=7,6.</i>		

# Solution M/2.

1.

Date	Accounts	Debit	Credit
05-Mar	Accounts receivable	3,200	
	Sales revenue		3,200
	Delivery expense	300	
	Cash		300
	Cost of goods sold	2,000	
	Inventory		2,000
	Sold merchandise on account for 3,200, terms F.O.B. destination, paid the freight bill of 300. COGS: 2,000.		
10-Mar	Cash	3,168	
	Sales Discount	32	
	Accounts receivable		3,200
	Collected invoice amount less 1%.		

Date	Accounts	Debit	Credit
08-Mar	Accounts receivable	4,950	
	Sales revenue		4,800
	Cash		150
	Cost of goods sold	3,000	
	Inventory		3,000
	Sold merchandise on account for 4,800, terms F.O.B. shipping point, 150 freight prepaid. COGS: 3,000.		
01-Apr	Cash	4,950	
	Accounts receivable		4,950
	Collected invoice amount plus prepaid fright.		

3.			
Date	Accounts	Debit	Credit
11-Mar	Accounts receivable	500	
	Sales		500
	Cost of goods sold	350	
	Inventory		350
	Sold merchandise on account for 500, terms F.O.B. shipping point. COGS: 350.		
	·	·	
11-Apr	Cash	500	
	Accounts receivable		500
	Collected invoice amount.		

4.

Date	Accounts	Debit	Credit
12-Mar	Accounts receivable	6,500	
	Sales revenue		6,500
	Delivery expense	650	
	Cash		650
	Cost of goods sold	5,000	
	Inventory		5,000
	Sold merchandise on account for 6,500, terms F.O.B. destination, paid the freight bill of 650.		
02-Apr	Cash	6,500	
	Accounts receivable		6,500
	Collected invoice amount.		

5.		1	
Date	Accounts	Debit	Credit
20-Mar	Accounts receivable	2,800	
	Sales revenue		2,800
	Cost of goods sold	1,000	
	Inventory		1,000
	Sold merchandise on account for 2,800, terms F.O.B. shipping point. COGS: 1,000.		
24-Mar	Cash	2,772	
	Sales discount	28	
	Accounts receivable		2,800
	Collected invoice amount less 1%.		

## Solution M/3.

Date (Anril)	Accounts	Debit	Credit
03	Inventory	6,000	
	Accounts Payable – Pear Wholesale		6,000
	Record purchase of inventory on account.		
05	Accounts Receivable – Fine Bistro	1,400	
	Sales Revenue		1,400
	Cost of Goods Sold	1,000	
	Inventory		1,000
	Record sale on account.		
12	Delivery Expense	25	
	Cash		25
	Record payment of freight charges.		
16	Accounts Payable – Pear Wholesale	700	
	Inventory		700
	Record return of merchandise to supplier.		
17	Cash	740	
	Sales Revenue		740
	Cost of Goods Sold	340	
	Inventory		340
	Record cash sales.		

19	Accounts Payable – Pear Wholesale	5,800	
	Cash (€5,800 – €159)		5,641
	Inventory (( $(6,000 - 700) \times 0.03$ )		159
	Record payment on account within discount period.		

20	Sales Returns and Allowances	200	
	Accounts Receivable – Fine Bistro		200
	Inventory	140	
	Cost of Goods Sold		140
	Record receipt of returned goods.		
21	Inventory	5,000	
	Cash		5,000
	Record purchase of inventory for cash.		
24	Cash (€1,200 × 0.98)	1,176	
	Sales Discounts ( $\notin$ 1,200 × 0.02)	24	
-	Accounts Receivable – Fine Bistro		1,200
	Record payment.		

Net Sales = 1,400 + 740 - 200 (SR&A) - 24 (SD) = 1,916 Cost of Goods Sold = 1,000 + 340 - 140 (Ret.) = 1,200 Gross Profit = 1,916 - 1,200 = 716

## Solution M/4.

Date (April)	Accounts	Debit	Credit
03	Inventory	4,000	
	Accounts Payable – T-Shirt Wholesale		4,000
	Record purchase of inventory on account.		
05	Accounts Receivable – Athletic	4,500	
	Sales Revenue		4,500
	Cost of Goods Sold	3,000	
	Inventory		3,000
	Record sale on account.		
12	Delivery Expense	50	
	Cash		50
	Record payment of freight charges.		
16	Accounts Payable – T-Shirt Wholesale	400	
	Inventory		400
	Record return of merchandise to supplier.		
17	Cash	960	
	Sales Revenue		960
	Cost of Goods Sold	740	
	Inventory		740
	Record cash sales.		
19	Accounts Payable – T-Shirt Wholesale	3,600	
	Cash (3,600 x 0.97)		3,492
	Inventory $(3,600 \times 0.03)$		108
	Record payment on account within discount period.		

20	Sales Returns and Allowances	300	
	Accounts Receivable – Athletic		300
	Inventory	220	
	Cost of Goods Sold		220
	Record receipt of returned goods.		
21	Inventory	2,000	
	Cash		2,000
	Record purchase of inventory for cash.		
24	Cash (€4,200 × 0.95)	3,990	
	Sales Discounts (€4,200 × 0.05)	210	
	Accounts Receivable – Athletic		4,200
	Record payment received on account		

Net Sales = 4,500 + 960 - 300 (SR&A) - 210 (SD) = 4,950Cost of Goods Sold = 3,000 + 740 - 220 (Ret.) = 3,520Gross Profit = 4,950 - 3,520 = 1,430Net Income = Gross Profit - Delivery expense = 1,430 - 50 = 1,380

#### **TOPIC 3: Inventories**

#### Learning outcome:

The students will learn about inventories: purchases and sales implications. They will be informed about the related accounts and income calculations. Perpetual and periodic inventory recording systems are discussed related to this topic. The most important outcome is to be able to use different inventory costing methods: FIFO, LIFO, moving average method in the perpetual system.

#### Problem I/1.

Date		Transaction	Quantity	Unit Cost
Aug	1	Balance	100	5
	4	Purchase	120	6
	7	Sale	70	
	12	Purchase	80	7
	17	Sale	70	
	21	Sale	115	
	30	Balance	45	

The inventory transactions of Perpetual Forever in August ( $\in$ ):

Selling price of the goods is  $10 \notin$  unit!

Task:

PART A: Calculate the Cost of the Goods sold using perpetual FIFO, LIFO and moving average!

PART B: Prepare the journal entries of the period and calculate Gross Profit!

Worksheet: Goods available for sale in €: Ending inventory in units: Sold goods in units:

Working tables for PART A and B are on the following pages. <u>PART A:</u>

		Purchases		Cos	t of goods so	ld	Inventory on hand		
Date	Quant.	Cost/Unit	Total	Quant.	Cost/Unit	Total	Quant.	Cost/unit	Total
Jun 1									
Aug 4									
Aug 7									
Aug 12									
Aug 17									
Aug 21									
Aug 30									

		Purchases			Cost of goods sold			Inventory on hand		
Date	Quant.	Cost/Unit	Total	Quant.	Cost/Unit	Total	Quant.	Cost/unit	Total	
Aug 1										
Aug 4										
Aug 7										
Aug 12										
Aug 17										
Aug 21										
Aug 30										

lifo

fifo

		Purchases			t of goods so	ld	Inve	average		
Date	Quant.	Cost/Unit	Total	Quant.	Cost/Unit	Total	Quant.	Cost/unit	Total	
Aug 1										
Aug 4										
Aug 7										
Aug 12										
Aug 17										
Aug 21										
Aug 30										1

<u>PART B:</u> Journal Entries for FIFO

Date (Aug)	Accounts	Debit	Credit
04			
07			
12			
17			
21			

Net sales: Cost of goods sold: <u>Gross Profit:</u> <u>Ending Inventory:</u> LIFO

Date	Accounts	Debit	Credit
(Aug)			
04			
07			
12			
17			
21			

Net sales: Cost of goods sold: Gross Profit: Ending Inventory:

Average			~
Date	Accounts	Debit	Credit
(Aug)			
04			
07			
12			
17			
21			

Net sales: Cost of goods sold: <u>Gross Profit:</u> <u>Ending Inventory:</u>

## Problem I/2.

Date		Transaction	Quantity	Unit Cost
Jun	1	Balance	50	10
	4	Purchase	60	11
	7	Sale	60	
	12	Purchase	140	13
	17	Sale	40	
	21	Sale	90	
	30	Balance	60	

The inventory transactions of Practice and Achieve in August ( $\in$ ):

Selling price of the goods is 20€/ unit!

Task:

PART A: Calculate the Cost of the Goods sold using perpetual FIFO, LIFO and moving average!

PART B: Prepare the journal entries of the period!

Worksheet: Goods available for sale in €: Ending inventory in units: Sold goods in units:

Working tables for PART A and B are on the following pages. <u>PART A:</u>

		Purchases	rchases Cost of goods sold Inventory on			entory on hai	nd		
Date	Quant.	Cost/Unit	Total	Quant.	Cost/Unit	Total	Quant.	Cost/unit	Total
Jun 1									
Jun 4									
Jun 7									
Jun 12									
Jun 17									
Jun 21									
Jun 30									

fifo

		Purchases		Cos	Cost of goods sold			Inventory on hand		
Date	Quant.	Cost/Unit	Total	Quant.	Cost/Unit	Total	Quant.	Cost/unit	Total	I
Jun 1										
Jun 4										
Jun 7										
	-			-	-					
Jun 12										
Jun 17										
Jun 21										
Jun 30										

		Purchases		Cost of goods sold			Inve	average		
Date	Quant.	Cost/Unit	Total	Quant.	Cost/Unit	Total	Quant.	Cost/unit	Total	
Jun 1										
Jun 4										
Jun 7										
Jun 12										
Jun 17										
Jun 21										
Jun 30										

#### <u>PART B:</u> Journal Entries for FIFO

Date	Accounts	Debit	Credit
(Jun)			
04			
07			
12			
17			
21			

Net sales: Cost of goods sold: Gross Profit: Ending Inventory:

LIFO			
Date	Accounts	Debit	Credit
(Jun)			
04			
07			
12			
17			
21			

Net sales: Cost of goods sold: <u>Gross Profit:</u> <u>Ending Inventory:</u>

Average	1		
Date	Accounts	Debit	Credit
(Jun)			
04			
07			
12			
17			
21			

Net sales: Cost of goods sold: <u>Gross Profit:</u> <u>Ending Inventory:</u>

## Solution for Problems

## Solution I/1.

<u>PART A:</u> FIFO

	Purchases		Cost	Cost of goods sold		Inventory on han		d	
Date	Quant.	Cost/Unit	Total	Quant.	Cost/Unit	Total	Quant.	Cost/unit	Total
Aug 1							100	5	500
Aug 4	120	6	720				100	5	500
							120	6	720
Aug 7				70	5	350	30	5	150
							120	6	720
Aug 12	80	7	560				30	5	150
							120	6	720
							80	7	560
Aug 17				30	5	150	80	6	480
				40	6	240	80	7	560
Aug 21				80	6	480			
				35	7	245	45	7	315
Aug 30	200		1280	255		1465	45		315

LIFO

	Purchases		Cost of goods sold		Inventory on hand				
Date	Quant.	Cost/Unit	Total	Quant.	Cost/Unit	Total	Quant.	Cost/unit	Total
Aug 1							100	5	500
Aug 4	120	6	720				100	5	500
							120	6	720
Aug 7				70	6	420	100	5	500
							50	6	300
Aug 12	80	7	560				100	5	500
							50	6	300
							80	7	560
Aug 17				70	7	490	100	5	500
							50	6	300
							10	7	70
Aug 21				10	7	70	45	5	225
				50	6	300			
				55	5	275			
Aug 30	200		1280	255		1555	45		225

### Average

	Purchases			Cost of goods sold			Inventory on hand		
Date	Quant.	Cost/Unit	Total	Quant.	Cost/Unit	Total	Quant.	Cost/unit	Total
Aug 1							100	5,00	500,00
									1
Aug 4	120	6	720				220	5,55	220,00
Aug 7				70	5,55	388.50	150	5.55	832,50
									1
Aug 12	80	7	560				230	6.04	392,50
Aug 17				70	6.04	422,80	160	6.04	966,40
Aug 21				115	6.04	694,60	45	6.04	271,80
Aug 30	200		1 280	255		1505,90	45		271,80

# PART B:

### Journal Entries for FIFO

Date	Accounts	Debit	Credit
(Aug)			
04	Inventory	720	
	Accounts Payable		720
	Purchase of inventory on account (120*6).		
07	Accounts receivable	700	
	Sales revenue		700
	Cost of goods sold	350	
	Inventories		350
	Sold 70 units for 10€ each.		
12	Inventory	560	
	Accounts Payable		560
	Purchase of inventory on account (80*7).		
17	Accounts receivable	700	
	Sales revenue		700
	Cost of goods sold	390	
	Inventories		390
	Sold 70 units for 10€ each.		
21	Accounts receivable	1,150	

Sales revenue		1,150
Cost of goods sold	725	
Inventories		725
Sold 115 units for 10€ each.		

Net sales: 2,550 Cost of goods sold: 1,465 Gross Profit: 1,085 Ending Inventory: 315

LIFO

Date (Aug)	Accounts	Debit	Credit
(Aug) 04	Inventory	720	
	Accounts Payable		720
	Purchase of inventory on account (120*6).		
07	Accounts receivable	700	
	Sales revenue		700
	Cost of goods sold	420	
	Inventories		420
	Sold 70 units for 10€ each.		
12	Inventory	560	
	Accounts Payable		560
	Purchase of inventory on account (80*7).		
17	Accounts receivable	700	
	Sales revenue		700
	Cost of goods sold	490	
	Inventories		490
	Sold 70 units for 10€ each.		
21	Accounts receivable	1,150	
	Sales revenue		1,150
	Cost of goods sold	645	
	Inventories		645
	Sold 115 units for 10€ each.		

Net sales: 2,550 Cost of goods sold: 1,555 Gross Profit: 995 Ending Inventory: 225

Average			~ ~
Date (Aug)	Accounts	Debit	Credit
(Aug) 04	Inventory	720	
	Accounts Payable		720
	Purchase of inventory on account (120*6).		
07	Accounts receivable	700	
	Sales revenue		700
	Cost of goods sold	389	
	Inventories		389
	Sold 70 units for 10€ each.		
12	Inventory	560	
	Accounts Payable		560
	Purchase of inventory on account (80*7).		
17	Accounts receivable	700	
	Sales revenue		700
	Cost of goods sold	423	
	Inventories		423
	Sold 70 units for 10€ each.		
21	Accounts receivable	1,150	
	Sales revenue		1,150
	Cost of goods sold	695	
	Inventories		695
	Sold 115 units for 10€ each.		

Net sales: 2,550 Cost of goods sold: 1,507 Gross Profit: 1,043 Ending Inventory: 272

## Solution I/2.

Journal Entries for FIFO

Date	Accounts	Debit	Credit
(Jun)			
04	Inventory	660	
	Accounts Payable		660
	Purchase of inventory on account (60*11).		
07	Accounts receivable	1,200	
	Sales revenue		1,200
	Cost of goods sold	610	
	Inventories		610
	Sold 60 units for 20€ each.		
12	Inventory	1,820	
	Accounts Payable		1,820
	Purchase of inventory on account (140*13).		
17	Accounts receivable	800	
	Sales revenue		800
	Cost of goods sold	440	
	Inventories		440
	Sold 40 units for 20€ each.		
21	Accounts receivable	1,800	
	Sales revenue		1,800
	Cost of goods sold	1,150	
	Inventories		1,150
	Sold 90 units for 20€ each.		

Net sales: 3,800 Cost of goods sold: 2,200 Gross Profit: 1,600 Ending Inventory: 780

LIFO			
Date	Accounts	Debit	Credit
( <b>Jun</b> ) 04	T A	660	
0-	Inventory		
	Accounts Payable		660
	Purchase of inventory on account (60*11).		
07	Accounts receivable	1,200	
	Sales revenue		1,200
	Cost of goods sold	660	
	Inventories		660
	Sold 60 units for 20€ each.		
12	Inventory	1,820	
	Accounts Payable		1,820
	Purchase of inventory on account (140*13).		
17	Accounts receivable	800	
	Sales revenue		800
	Cost of goods sold	520	
	Inventories		520
	Sold 40 units for 20€ each.		
21	Accounts receivable	1,800	
	Sales revenue		1,800
	Cost of goods sold	1,170	
	Inventories		1,170
	Sold 90 units for 20€ each.		

Net sales: 3,800 Cost of goods sold: 2,350 Gross Profit: 1,450 Ending Inventory: 630

Average			
Date (Jun)	Accounts	Debit	Credit
04	Inventory	660	
	Accounts Payable		660
	Purchase of inventory on account (60*11).		
07	Accounts receivable	1,200	
	Sales revenue		1,200
	Cost of goods sold	633	
	Inventories		633
	Sold 60 units for 20€ each.		
12	Inventory	1,820	
	Accounts Payable		1,820
	Purchase of inventory on account (140*13).		
17	Accounts receivable	800	
	Sales revenue		800
	Cost of goods sold	494	
	Inventories		494
	Sold 40 units for 20€ each.		
21	Accounts receivable	1,800	
	Sales revenue		1,800
	Cost of goods sold	1,112	
	Inventories		1,112
	Sold 90 units for 20€ each.		

Net sales: 3,800 Cost of goods sold: 2,240 Gross Profit: 1,560 Ending Inventory: 742

#### **TOPIC 4: Cash, trading securities, accounts receivable**

#### Learning outcome:

The students will learn about current assets: cash, trading securities and accounts receivable. They will be informed about the related accounts and calculations. The most important outcome is to be able to calculate and post transactions including notes receivable. Petty cash recording is also introduced and discussed as well as posting the acquisition and subsequent valuation of trading securities.

#### Problem C/1.

'LastTest' Co. established a petty cash fund on May 1. During May, the transactions related to the fund are the following. Prepare the necessary journal entries!

- 1. May 1: a € 1,500 petty cash fund was established and Ms. Happy was appointed as custodian.
- 2. May 31: the fund contained:
  - ✓ remaining cash of €648
  - ✓ receipts for €350 office supplies, €150 fuel ticket and a €300 delivery expense slip.
- 3. Ms. Happy calculated the cash short and a check for €852 was written. The cash was placed in the box.

Date	Accounts	Debit	Credit
1.			
2.			
2			
3.			

#### Problem C/2.

'Cash again' Co. established a petty cash fund on Sep 1. During September, the transactions related to the fund are the following. Prepare the necessary journal entries!

- 1. Sep 1: a € 1,600 petty cash fund was established and Mr. Wright was appointed as custodian.
- 2. Sep 31: the fund contained:
  - ✓ remaining cash of €688
  - ✓ receipts for €450 office supplies, €250 fuel ticket and a €310 delivery expense slip.
- 3. Ms. Happy calculated the cash over and a check for 912 was written. The cash was placed in the box.

Date	Accounts	Debit	Credit
1.			
2.			
3.			

### Problem C/3.

Electronic Company purchases 1,000 shares (trading securities) of Technique Ltd. Prepare the journal entries for the purchase and the necessary end-of-month adjustments based on the following data:

- April 22 Purchased 1,000 shares of Technique. Price: €15 per share.
- April 30 The fair value of Technique's share: €13 per share.
- May 31 The fair value of Technique's share: €16 per share.
- June 18 Received a dividend from Technique. Amount: €0.20 per share.
- June 30 The fair value of Technique's share: €22 per share.

Date	Accounts	Debit	Credit
22 Apr			
30 Apr			
31 May			
18 Jun			
30 Jun			

#### Problem C/4.

Prepare Journal entries of 'Monday' Co. for the following transactions:

- 1. On December 1, 20X4, 'Monday' Co. received a € 15,000, 4%, 1-year note from 'Tuesday' Co. The note was issued based on an account balance of Tuesday as a customer of Monday.
- 2. On December 31, 20X4, Monday made an end-of-year adjusting entry to accrue the interest on the note.
- 3. On November 30, 20X5, Monday collected the full amount due to the note receivable.

Date	Accounts	Debit	Credit
X4-12-01			
X4-12-31			
X5-11-30			

#### Problem C/5.

'One more cash' Co. established a petty cash fund on Oct 1. During October, the transactions related to the fund are the following. Prepare the necessary journal entries!

- 1. Oct 1: a € 4,200 petty cash fund was established and Ms. Right was appointed as custodian.
- 2. Oct 31: the fund contained:
  - ✓ remaining cash of €1,700
  - ✓ receipts for €1,200 office supplies, €750 fuel ticket and a €570 delivery expense slip.

Date	Accounts	Debit	Credit
1.			
2.			
3.			

## Solution for Problems

## Solution C/1.

Date	Accounts	Debit	Credit
1.	Petty cash	1,500	
	Cash		1,500
	To establish a 1,500 $\in$ petty cash fund.		
2.	Office supplies expense	350	
	Fuel expense	150	
	Postage expense	300	
3.	Cash short	52	
	Cash		852
	<i>To record the expenses and replenishment of petty cash.</i>		

## Solution C/2.

Date	Accounts	Debit	Credit
1.	Petty cash	1,600	
	Cash		1,600
	To establish a 1,600 $\in$ petty cash fund.		
2.	Office supplies expense	450	
	Fuel expense	250	
	Postage expense	310	
3.	Cash Over		98
	Cash		912
	To record the replenishment of petty cash.		

# Solution C/3.

Date	Accounts	Debit	Credit
22 Apr	Trading securities	15,000	
	Cash		15,000
	To record the purchase of 1,000 shares of Technique at $\in 15$ per share.		
30 Apr	Unrealized loss on investments	2,000	
	Trading securities		2,000
	To record a $\notin 2$ per share decrease in the fair value		
31 May	Trading securities	3,000	
	Unrealized gain on investments		3,000
	To record a $\notin$ 3 per share increase in the fair value		
18 Jun	Cash	200	
	Dividend Income		200
	To record the $ eq 0.20 $ per share cash dividend		
30 Jun	Trading securities	6,000	
	Unrealized gain on investments		6,000
	To record a $\epsilon$ 6 per share increase in the fair value		

# Solution C/4.

Date	Accounts	Debit	Credit
X4-12-	Notes receivable	15,000	
01			
	Accounts receivable		15,000
	Receipt of 4% 1-year note		
X4-12-	Interest receivable	50	
31			
	Interest income		50
	Computed accrued interest on note (15,000*0,04*1/12).		
X5-11-	Cash	15,600	
30			
	Notes receivable		15,000
	Interest income		550
	Interest receivable		50
	To record interest income (11 months: $15,000*0,04*11/12=550$ ) and the collection of note receivable and accrued interest.		

#### **TOPIC 5: Short-term liabilities**

Learning outcome:

The students will learn about short-term liabilities: notes payable and employeerelated liabilities. They will be informed about the related accounts and calculations. The most important outcome is to be able to calculate and post transactions including notes payable and payroll.

#### Problem L/1.

Remember problem C/4?

Prepare Journal entries of 'Tuesday' Co. for the following transactions:

- 1. On December 1, 20X4, 'Monday' Co. received a € 15,000, 4%, 1-year note from 'Tuesday' Co. The note was issued based on an account balance of Tuesday as a customer of Monday.
- 2. On December 31, 20X4, Tuesday made an end-of-year adjusting entry to accrue the interest on the note.
- 3. On November 30, 20X5, Tuesday payed the full amount due to the note payable.

Date	Accounts	Debit	Credit
X4-12-01			
X4-12-31			
X5-11-30			

#### Problem L/2.

Windy Co. has issued a note for borrowing  $4,000 \in$  from Rainy Bank on October 1, 20X8. The interest rate is 7% and the payment is due on April 30, 20X9. Record the journal entries for 20X8 and 20X9 for Windy if the financial statements are prepared on December 31!

Date	Accounts	Debit	Credit
X8-10-01			
X8-12-31			
X9-04-30			
# Problem L/3

Hope Inc. has five employees at the accounting department. Their salaries are determined on a monthly basis (not on an hourly). Based on the table and the information given, prepare the payroll calculations for the department in the worksheet and post the related journal entries of Hope!

## Worksheet

Month: August, 20X8 (€)		DEDUCTIONS	
Name	Gross Earnings		Net Earnings
Mr. Monday	5 500		
Ms. Tuesday	4 000		
Mrs. Wednesday	1 800		
Ms. Thursday	2 700		
Mr. Friday	3 200		
Totals			

Deductions from gross wages:

- personal income tax: 15%
- social security contribution: 18.5% (amount is matched by the employer!)
- workers' union fee (all employees participate): 1%

Employer's expenses:

- social security
- labour market contribution: 1.5%
- the firm has a pension programme for the employees and contributes 3% of monthly gross wages

# <u>Worksheet</u>

Date	Accounts	Debit	Credit

# Problem L/4.

Last Inc. has four employees at the HR department. Their salaries are determined on a monthly basis (not on an hourly). Based on the table and the information given, prepare the payroll calculations for the department in the worksheet and post the related journal entries of Last!

### Worksheet

Month: April, 20X8 (€)		DEDUCTIONS	
Name	Gross Earnings		Net Earnings
Mr. Precise	6,600		
Ms. Neat	5,800		
Mrs. Motivated	4,300		
Ms. Funny	1,900		
Mr. Relaxed	7,000		
Totals			

Deductions from gross wages:

- personal income tax: 15%
- social security contribution: 18.5% (amount is matched by the employer!)
- workers' union fee (all employees participate): 1%

Employer's expenses:

- social security
- labour market contribution: 1.5%
- the firm has a pension programme for the employees and contributes 3% of monthly gross wages
- •

<u>Worksheet</u>

# Solution for Problems

# Solution L/1.

Date	Accounts	Debit	Credit
X4-12-01	Accounts payable	15,000	
	Notes payable		15,000
	Issuing a 4% 1-year note		
X4-12-31	Interest expense	50	
	Interest payable		50
	Computed accrued interest on note (15,000*0,04*1/12).		
X5-11-30	Note payable	15,000	
	Interest expense	550	
	Interest payable	50	
	Cash		15,600
	To record interest expense (11 months: $15,000*0,04*11/12=550$ ) and the payment of note and interest payable.		

# Solution L/2.

Date	Accounts	Debit	Credit
X8-10-01	Cash	4,000	
	Notes payable		4,000
	<i>To record the note issued (interest: 7%, maturity: April 30,20X9)</i>		
X8-12-31	Interest expense	70	
	Interest payable		70
	Computed accrued interest on note (4,000*0,07*3/12).		
X9-04-30	Note payable	4,000	
	Interest expense	93.33	
	Interest payable	70	
	Cash		4,163.33
	<i>To record interest expense (4 months: 4,000*0,07*4/12=93.33) and the payment of note and interest payable.</i>		

# Solution L/3.

			DEDUCTIONS		
Name	Gross Earnings	Personal income tax	Social Security Contribution	Workers' Union	Net Earnings
Mr. Monday	5 500	825	1 018	55	3 603
Ms. Tuesday	4 000	600	740	40	2 620
Mrs. Wednesday	1 800	270	333	18	1 179
Ms. Thursday	2 700	405	500	27	1 769
Mr. Friday	3 200	480	592	32	2 096
Totals	17 200	2 580	3 182	172	11 266

Date	Accounts	Debit	Credit
08.31	Salaries expense	17,200	
	Wages Payable		17,200
	To record gross wages		
	Wages Payable	5,934	
	Personal Income tax payable		2,580
	Social Security payable		3,182
	Worker's Union		172
	To record deductions in payroll		
08.31	Payroll contributions expense	2,838	
	Employee benefits expense	516	
	Social Security Payable		2,580
	Labour market contr. payable		258
	Pension Programme		516
	To record employer's salary-related expenses		

#### Sample Exam

# THIS IS A SAMPLE EXAM. PLEASE BE AWARE THAT THE ACTUAL EXAMS WILL BE DIFFERENT FROM THIS (REGARDING QUESTIONS, TOPICS, POINTS).

#### TASK 1. (15 POINTS)

A company purchased an asset for 200.000 with an expected useful life of five years and a salvage value of 20.000. After two years of use the company decided to revise the estimates. As of the beginning of the  $3^{rd}$  year: the total life will be 7 years, and the salvage value 10.000. Calculate the data in the following table!

Year	Annual depreciation	Accumulated depreciation at End of Year	Calculation of annual depreciation
1st			
2nd			
3rd			
4th			
5th			
6th			
7th			

#### TASK 2. (10 POINTS)

'Exam Company purchases 2,000 shares (trading securities) of Midterm Ltd. Prepare the journal entries for the purchase and the necessary end-of-month adjustments based on the following data:

- June 22 Purchased 2,000 shares of Midterm. Price: €22 per share.
- June 30 The fair value of Midterm's share: €18 per share.
- July 15 Received a dividend from Midterm. Amount:  $\notin 0.50$  per share.
- July 31 The fair value of Midterm's share: €23 per share.
- August 30 The fair value of Midterm's share: €25 per share.

Date	Accounts	Debit	Credit

#### TASK 3. <u>(8 POINTS)</u>

Prepare Journal entries of 'One' Co. for the following transactions:

- 1. On December 1, 20X4, 'One' Co. received a € 15,000, 4%, 1-year note from 'Two' Co. The note was issued based on an account balance of Two as a customer of One.
- 2. On December 31, 20X4, One made an end-of-year adjusting entry to accrue the interest on the note.
- 3. On November 30, 20X5, One collected the full amount due to the note receivable.

Date	Accounts	Debit	Credit

#### TASK 4. (7 POINTS)

Calculate the cost of goods sold using <u>periodic FIFO</u> method! 1st purchase: 100 pieces, price: 250 Ft/piece 2nd purchase: 140 pieces, price: 210 Ft/piece 3rd purchase: 200 pieces, price: 220 Ft/piece 4th purchase: 300 pieces, price: 230 Ft/piece <u>Sold: 350 pieces</u>

The cost of goods sold:\_\_\_\_\_

Calculations:

#### TASK 5. (15 POINTS)

WHAT IS DEFINED HERE?	
: It is recorded when the carrying amount of a f is not recoverable from its expected future cash flows.	ixed-asset
: These are fixed assets that lack physical sub	ostance.
: It is the difference between net sales ar	nd cost of
goods sold.	
: A formula meaning that freight is borne by	seller.

Name four typical short-term liabilities!	

#### TRUE OR FALSE?

An asset's residual value is an estimated value. TRUE/FALSE

Depreciation is the systematic allocation of the depreciable amount of an asset over its physical life. TRUE/FALSE

Merchandise is processed during manufacturing of goods or during the production of services. TRUE/FALSE

Under the first in first out method, the cost of goods sold is based on the most recent purchases. TRUE/FALSE

Writing off uncollectible accounts has no impact on income. TRUE/FALSE

,Allowance for uncollectibles' is recorded as an income statement account. TRUE/FALSE

Net earnings are equal to gross earnings plus deductions. TRUE/FALSE

# SOLUTION FOR SAMPLE EXAM

#### TASK 1. (15 POINTS)

Year	Annual depreciation	Accumulated depreciation at End of Year	Calculation of annual depreciation
1st	36000	36000	(200000-20000)/5
2nd	36000	72000	(200000-20000)/5
3rd	23600	95600	(200000-72000-10000)/5
4th	23600	119200	(200000-72000-10000)/5
5th	23600	142800	(200000-72000-10000)/5
6th	23600	166400	(200000-72000-10000)/5
7th	23600	190000	(200000-72000-10000)/5

## TASK 2. (10 POINTS)

Date	Accounts	Debit	Credit
June 22	trading securities	44000	
	cash		44000
	to record the purchase of 2000 shares		
June 30	unrealized loss on investment	8000	
	trading securities		8000
	to record a $\notin$ 4 per share decrease in the		
July 15	cash	1000	
	divided income		1000
	to record received dividends		
July 31	trading securities	10000	
	unrealized gain on investment		10000
	to record a $\notin$ 5 per share increase in the value		
Aug 30	trading securities	4000	
	unrealized gain on investment		4000
	to record a $\notin$ 2 per share increase in the value		

## TASK 3. (8 POINTS)

Date	Accounts	Debit	Credit
Dec 1	Notes receivable	15,000	
	Accounts receivable		15,000
	Receipt of 4% 1-year note		
Dec 31	Interest receivable	50	
	Interest income		50
	Computed accrued interest on note (15,000*0,04*1/12).		
Nov 30	Cash	15,600	
	Notes receivable		15,000
	Interest income		550
	Interest receivable		50
	To record interest income (11 months: 15,000*0,04*11/12=550) and the collection of note receivable and accrued interest.		

#### TASK 4. (7 POINTS)

Calculate the **cost of goods sold** using <u>periodic FIFO</u> method! 1st purchase: 100 pieces, price: 250 Ft/piece 2nd purchase: 140 pieces, price: 210 Ft/piece 3rd purchase: 200 pieces, price: 220 Ft/piece 4th purchase: 300 pieces, price: 230 Ft/piece <u>Sold: 350 pieces</u>

The cost of goods sold: 78,600

Calculations:		
Beginning inventory	0	
Plus: purchases	167,400	
Goods available for sales	167,400	
Less: ending inventory	88,800	
(300*230+90*220)		
Cost of goods sold =	78,600	

#### TASK 5. (15 POINTS)

#### WHAT IS DEFINED HERE?

Asset impairment: It is recorded when the carrying amount of a fixed-asset is not recoverable from its expected future cash flows.

Intangible asset: These are fixed assets that lack physical substance.

Gross Profit: It is the difference between net sales and cost of goods sold.

F.O.B Destination: A formula meaning that freight is borne by seller.

Name four typical current obligations!

- 1. Accounts payable
- 2. Notes payable
- 3. The current portion of long term debt
- 4. Accrued liabilities

#### TRUE OR FALSE?

An asset's residual value is an estimated value. **TRUE**/FALSE

Depreciation is the systematic allocation of the depreciable amount of an asset over its physical life. TRUE/**FALSE** 

Merchandise is processed during manufacturing of goods or during the production of services. TRUE/**FALSE** 

Under the first in first out method, the cost of goods sold is based on the most recent purchases. TRUE/**FALSE** 

Writing off uncollectible accounts has no impact on income. **TRUE**/FALSE

,Allowance for uncollectibles' is recorded as an income statement account. TRUE/FALSE

Net earnings are equal to gross earnings plus deductions. TRUE/FALSE

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