

## **Financial Accounting I**

2014/2015

GAi

### **Chapter 6**

Solutions





### **Cases:**



Case 6.01 Renova Case 6.02 Worten Case 6.03 Logoplaste

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#### **Questions:**

#### 1. Concept of inventory

#### a. What is an inventory?

Inventories are assets held for sale in the ordinary course of business, assets that are in production process for sale and raw materials and other materials to be included in the production process or in the provision of services.

b. Comment the following statement: "The most important inventories of Renova are their merchandises".

The statement is incorrect. Renova is an industrial company, so the inventories comprise raw materials and finished products.

The merchandises are inventories that predominate in commercial enterprises.

# c. Which is the distinctive finished good of Renova? Give examples of other finished goods of this company.

The distinctive finished product of Renova is black toilet paper.

Other finished products include toilet white and colored paper, paper napkins and paper towels.

d. What is the main raw-material of Renova? Give examples of other raw materials.

The main raw material of Renova is the paper pulp.

Other raw materials Renova include bleaching chemicals, dye, ...

e. If Renova decide to sell one industrial equipment must classify it as inventory? Why?

No, because the industrial equipment will not be sold in the normal course of business.

#### 2. Cost of inventories

a. Assume that Renova bought 5 tons of pulp to Portucel. Which of the following expenses should be included in the cost of the paper pulp?

Renova should consider the following expenditures in the cost of the paper pulp:

- Acquisition price.
- Expenditure on transport of the paper pulp to the factories of Renova.
- Expenses insurance covering the transport of the paper pulp.

# b. Comment on the following statement: "The cost of toilet paper manufactured by Renova is determined in the same way that as the cost of paper pulp that the company acquires to *Portucel*".

The statement is incorrect.

The paper pulp is a raw material, so, the cost includes the purchase price and other costs necessary to have the raw materials in the factory.

However, the toilet paper is a finished product, so its cost should not only include the cost of raw materials consumed but also the costs incurred in processing the finished good.

#### 3. Inventory costing systems and cost flow (exit) assumptions

a. What are the cost flows assumptions that Renova can use to measure the outflow of toillet paper? Why?

Renova can use First In-First Out (FIFO) or Weighed Average Cost (WAC). Is not economically viable to use the specific cost.

#### b. Coment on the following statement:

"In an inflation scenario, the FIFO (first-in-first out) gives a greater CGSCM compared with the WAC assumption (weighted average cost)."

The statement is incorrect. In inflation scenario, FIFO gives a lower CMCMV because it assumes that are sold inventory acquired earlier (for a lower price).

c. Assume, hypothetically, that you are hired to work in the company Paper Plus, dedicated to the distribution of the Renova brand products in France. The financial reporting manager offers you the following information about the movement of the Paper Plus inventories in the year N.

Determine the cost of goods sold and the value of inventories at the end of year N, considering the use of FIFO criteria and also the weighted cost method (WAC).

| FIFO                                 | Renova Black                           | Amount     |
|--------------------------------------|--|------------|
| 1. Inventories at the beginning of N | 100.000 un x 5 €                       | 500.000€   |
| 2. Acquisition of inventories (# 1)  | 250.000 un x 5,56 €                    | 1.390.000€ |
| 3. CGSCM of toilet paper (1st sale)  | 100.000 un x 5 € + 150.000 un x 5,56 € | 1.334.000€ |
| 4. Inventories after sale            | 100.000 un x 5,56 €                    | 556.000 €  |
| 4. Acquisition of inventories (# 2)  | 400.000 un x 5,85 €                    | 2.340.000€ |

| 5. CGSCM of toilet paper (2nd sale)         | 100.000 un x 5,56 € + 250.000 un x 5,85 € | 2.018.500€ |
|---|---|------------|
| 8. Inventories after sale <b>and</b> at the |   |            |
| end of N                                    | 150.000 un x 5,85 €                       | 877.500€   |

CGSCM of Renova Black: 1.334.000 € + 2.018.500 € = 3.352.500 €.

Inventories of Renova Black at the end of N: 877.500 €.

| FIFO   | Renova Black               | Amount     |  |
|--|----------------------------|------------|--|
| 1. Inventories at the beginning of N                 | 100.000 un x 5 €           | 500.000€   |  |
| 2. Acquisition of inventories (# 1)                  | 250.000 un x 5,56 €        | 1.390.000€ |  |
| 3. CGSCM of toilet paper (1st sale)                  | 250.000 un x 5,4 € (CMP1)  | 1.350.000€ |  |
| 4. Inventories after sale                            | 100.000 un x 5,4 €         | 540.000€   |  |
| 4. Acquisition of inventories (# 2)                  | 400.000 un x 5,85 € (CMP2) | 2.340.000€ |  |
| 5. CGSCM of toilet paper (2nd sale)                  | 350.000 un x 5,76 €        | 2.016.000€ |  |
| 8. Inventories after sale <b>and</b> at the end of N | 150.000 un x 5,76 €        | 864.000€   |  |

**CGS1** = 5,4 € = (500.000 € + 1.390.000 €) / (100.000 un + 250.000 un) **CGS2** = 5,85 € = (540.000 € + 2.340.000 €) / (100.000 un + 400.000 un)

CGSCM of Renova Black: 1.350.000 € + 2.016.000 € = 3.366.000 €.

Inventories of Renova Black at the end of N: 864.000 €.

### CASE 6.02 Worten<sup>1</sup>

#### 1. Concept of inventories

#### a. Give examples of inventories of Worten.

Inventories of Worten include, for example, the appliances that Worten holds for sale in the ordinary course of business.

#### b. How should be classified the computers owned by Worten that are exposed for sale in the store? And the computers that are in stock in the warehouse? And computers that are being used in the department of customer support?

Computers owned by Worten on display for sale in the store, and also those in store, are inventories, because they are held for sale in the ordinary course of business. Computers being used in the support of department of customers are tangible fixed assets, because they are held for use in the sale of goods.

#### 2. Cost and cost outflow assumptions

a. Journalize each transaction of Worten in the last week of December, assuming that the company uses the Weighed Average Cost (WAC) to measure the exit of inventories from the warehouse.

| N⁰ | Description                   | Debit        | Credit       | Amount    |
|----|-------------------------------|--------------|--------------|-----------|
| 1  | Acquisition on credit         | Merchandises | Suppliers    | 4.120     |
| 2  | Acquisition on credit         | Merchandises | Suppliers    | 55.500    |
| 3  | Sale at prompt payment        | Cash         | Sales        | 32.500    |
|    |                               | CGSCM        | Merchandises | 24.260    |
| 4  | Acquisition on credit         | Merchandises | Suppliers    | 10.750    |
| 5  | Acquisition at prompt payment | Merchandises | Cash         | 57.000    |
| 6  | Sale at prompt payment        | Cash         | Sales        | 48.950    |
|    |                               | CGSCM        | Merchandises | 42.708,75 |

<sup>&</sup>lt;sup>1</sup> This case was prepared by Isabel Lourenço and José Pinhão Rodrigues. Adaptation to Gai: Ana Isabel Lopes

## b. If Worten would use FIFO inventory costing of the outputs, what would be the cost of goods sold in the transaction 6?

Using FIFO, the cost of goods sold in transaction 6 is 42.135.

#### 3. Imparment losses in inventories

### a. In what situations is that Worten have to recognize impairment losses on inventories?

Worten have to recognize impairment losses on inventories when, at the end of the year, has inventories whose net realizable value is less than the book value.

# b. Worten found that, at the end of year N, the net realizable value of a batch of 120 MP3 players recognized for 16 euros each, was only 1.500 euros. What accounting procedure should adopted by Worten?

Worten must recognize an impairment loss on inventories in the amount of 420 euros.

#### 4. Inventory sistems

## a. What are the main differences between the perpetual inventory system and the periodic inventory system?

The perpetual inventory system requires the calculation and the CGSCM registration, and the updating of the inventory after each sale.

Intermittent inventory system involves the calculation and the CMVMC registration, and the updating of the inventory, only at the end of the reporting period..

# b. If Worten would use the periodic inventory system, how would determine the cost of goods sold?

If Worten would use the intermittent inventory system, the records (journal entries) of the entry and exit in warehouse (purchases registration CGSCM and losses on inventories) would be made only at the end of the period.

The value of inventories at the end of the period would be determined based on a physical count of inventories and the CGSCM would be determined by difference (CGSCM = Initial Inventory + Purchases - ending inventory).

### CASE 6.03 Logoplaste<sup>2</sup>

General information about VAT:

1. The value added tax (VAT) is a tax that aims to tax all consumption of goods and services, including its impact on all stages of the economic cycle, ie from production to retail. However the taxable base of the tax is limited to the value added at each stage of this economic cycle.

2. They are subject to value added tax: a) the supply of goods and services made in the national territory; b) the importation of goods; c) intra-Community transactions carried out in the country, as defined and regulated in the VAT Rules for Intra-Community transactions.

#### Question 1

Assuming that *Logoplaste* is a company that deducts the VAT paid to suppliers and collects VAT from sales to customers, fill with an X the correct cells of the following table:

| N.º | DESCRIPTION   | INVOICED<br>VAT | DEDUCTIBLE<br>VAT | Not<br>Aplicable |
|-----|---|-----------------|-------------------|------------------|
| 1   | Acquisition of raw materials for production of packages                               |                 | Х                 |                  |
| 2   | Acquisition of industrial equipment to the engineer process of packages               |                 | х                 |                  |
| 3   | Sales of packs for mineral water  | Х               |                   |                  |
| 4   | Consulting services for the acquisition of stretch molding systems                    |                 | Х                 |                  |
| 5   | Water and electricity used in manufacturing plants                                    |                 | Х                 |                  |
| 6   | Office furniture acquisition to be installed in the accounting and finance department |                 | Х                 |                  |
| 7   | Sale of large packaging for detergents sold to foreign customer                       |                 |                   | Х                |

<sup>&</sup>lt;sup>2</sup> This case was prepared by Ilídio Lopes

#### **Question 2**

#### Journal entries:

| N⁰                           | Description                            | Debit account                     | Credit account             | Amount  |
|------------------------------|--|-----------------------------------|----------------------------|---------|
| 1 Acquisition of raw materia |  | Raw materials<br>(invent.)        |                            | 50.000  |
|                              | Acquisition of raw materials           | State                             |                            | 11.500  |
|                              |  |                                   | Suppliers                  | 61.500  |
|                              |  | Fixed Tangible<br>assets          |                            | 35.000  |
| 2                            | Association of industrial associations | State                             |                            | 8.050   |
| 2                            | Acquisition of industrial equipment    |                                   | Cash                       | 21.525  |
|                              |  |                                   | Other accounts payables    | 21.525  |
| 3                            | Consumption of raw materials           | CMSCM                             | Raw materials<br>(invent.) | 35.000  |
|                              | 4 Sales of packages (finished goods)   | Clients                           |                            | 123.000 |
| 4                            |  |                                   | Sales                      | 100.000 |
|                              |  |                                   | State                      | 23.000  |
|                              |  | External supplies<br>and services |                            | 3.000   |
| 5 Acquisition of cleaning s  | Acquisition of cleaning services       | State                             |                            | 690     |
|                              |  |                                   | Cash                       | 3.690   |
|                              | Acquisition of a patent                | Intangible assets                 |                            | 75.000  |
| 6                            |  | State                             |                            | 17.250  |
|                              |  |                                   | Other accounts payables    | 92.250  |
|                              | Telecommunications                     | External supplies<br>and services |                            | 1.000   |
| 7                            |  | State                             |                            | 230     |
|                              |  |                                   | Cash                       | 1.230   |

VAT assessment to pay to, or to recover from, the State:.

**VAT Invoiced:** 23.000 u.m.

**VAT deductable:** 11.500 + 8.050 + 690 + 17.250 + 230 = 37.720 u.m.

VAT ro recover from State: 14.720 u.m. (Debit balance of the account "State")