UNIVERSIDADE NOVA DE LISBOA
FACULDADE DE CIÊNCIAS E TECNOLOGIA

1st Semester 2022-2023

BUSINESS MANAGEMENT

PROBLEM SET

ACCOUNTING AND FINANCIAL ANALYSIS

EXERCISES

1. Show in the Balance Sheet and in the Income Statement the accounts moved by the following equity facts to a certified wood dealer:

(i) Incorporation of the company with a deposit of 40,000 euros.

(ii) Bank loan application (and approval) for 5 years in the amount of 60,000 euros.

(iii) Purchase of computer equipment in the amount of 10,000 euros in cash.

(iv) Purchase of merchandise on 3 months' credit in the amount of 20,000 euros.

(v) Sale of goods, 1/3 in cash and 2/3 at 30 days, in the amount of 15,000 euros. The goods sold had cost 7,500 euros.

(vi) Payment of salaries to employees: 3,000 euros.

(vii) Payment of miscellaneous bills (electricity, water, telephone): 1,000 euros.

(viii) Payment of interest: 6,000 euros.

(ix) Depreciation of computer equipment: 2,500 euros.

2. Indicate the accounts that are altered (and how they change) by the following equity facts:

(i) Payment of the property insurance premium, in the amount of 10 000 euros

(ii) The company paid the bank part of its 5-year debt, in the amount of 150,000 euros

(iii) As a result of an (internal) R&D project, the company registered a patent in the amount of 25,000 euros

(iv) Part of the company's land has been revalued, and its value has increased by 30,000 euros

(v) New painting on the facade of the company's building, made by the company's employees, amounting to 40,000 euros, reflecting on the building's value

3. Suppose that the balance sheet of a portable computer reseller company is at the end of 2019:

Net Assets		Equity and Liabilities	
Non-current assets	20,000	Social Capital (Share Capital)	15,000
Inventories	??	Retained Earnings	(10,000)
Clients	5,000	Net Results (profit) for the year	??
Cash & Cash Equiv.	1,000	Non-current Liabilities	??
		Suppliers	??
Total Net Assets	50 000	Total Equity and Liabilities	??

a) Complete the company's balance sheet using the following additional information: return on assets is 10 percent and the general liquidity ratio is equal to 1.20

b) Explain the following values:

i) current assets

ii) permanent capital

iii) Working capital

c) Interpret the Value of Working Capital and the main liquidity (or treasury) ratios, explaining the eventual relationship

d) Does the fact that the cost of inventories sold during the year amount to 12,000 euros allow you to rethink your analysis (of the cash situation)?

e) What other information could be relevant to analyse the cash balance of this company in the year ahead?

4. Knowing that at the end of a given year it was found that:

i) The inventory rotation ratio in the year in question was 2

ii) The return on the Assets was 1%

iii) Equity corresponded to 80% of Liabilities

iv) The average balance of inventories in storage was 165 m.u. (monetary units)

v) The general liquidity ratio was 1.1.

Complete the Income Statement below, highlighting the Operating Profit (or Result), Financial Profit and Pre-Tax Profit:

Expenditures, Costs and Losses	m.u.
Cost of Goods Sold and Materials Consumed (CMVMC)	???
External Supplies and Services (FSE)	260
Personnel	???
Depreciation and Provisions	70
Other Operational Costs	10
	1 010
Interest and Other Assimilated Costs	40
	1 050
Taxes on Period's Profit	60
	1 110
Net Year's Result (Profit)	90
	1200
Revenues, Income and Earnings	
Sales of Goods and Services	1 150
Subsidies to Production	20
	1 170
Interest and Other Assimilated Earnings	30
	1200

a) State, justifying (i.e., showing the calculations), the value of the assets and liabilities of this company.

b) What is leverage, i.e., financial leverage (associated with debt and reflected in Assets/Equity)?

c) What is the return on Equity? Write the formula that indicates the relationship between this profitability measure and the financial leverage.

5. State whether the following statements are true or false, explaining the reasons for your answer:

a) The immediate liquidity ratio is always lower than the reduced liquidity ratio

b) In very special circumstances, the total assets may be less than the total liabilities + equity.

c) The net profits of a given year, have no relation to the equity of the following year.

d) Return on equity is always lower than return on assets

6. Regarding the year 2019, "Commerce Co." presents the list of accounts below with the respective balances

Accounts	Balances on Dec 31 in m.u.
Advancements from Customers and Clients	50
Accumulated Depreciation (Equipment, Brands and Patents)	60
Rental Expenses (for spaces and vehicles)	150
Cash and Cash Equivalents	10
Clients / Customers	270
Social Capital (or Share Capital)	255
Cost of Goods Sold and Materials Consumed (CMVMC)	410
Suppliers (current account)	170
Interest paid	30
Net Profits for the year	90
Inventories (of Merchandises)	300
Equipments, Brands and Patents	245
Transited Results	155
5-year bank loan	45
Sales Revenue	780
Salaries	100

a) Organize your Balance Sheet and Income Statement.

b) Knowing that the Working Capital (CA-CL) was equal to 650 m.u. in 2018, state, in quantitative terms, how it varies in 2019 according to the values mentioned above, while characterizing the liquidity situation (good or bad).

c) If the company buys a new machine and pays half in cash and the remainder in 6 months, how does the liquidity situation, as measured by the Working Capital, change? What about the long-term solvency situation (measured by the financial autonomy ratio, CP / A)?

d) Is the company's operating result greater than the net result (quantify both)? Could it be less in a real situation?

7. Answer the following questions:

a) Knowing that the "debt-to-equity ratio" of a company is equal to 3 and that the return on its Equity amounts to 10%, determine its return on the Assets.

b) In the context of a company's Income Statement, state what you mean by Amortizations.

c) Assume that the net assets of a company amount to 10 000 m.u. and that its Permanent Capitals are valued at 7,500 m.u. If the general liquidity ratio is 1.25, determine your Working Capital.

8. Suppose that the variable unit cost of producing a chocolate bar is equal to 30% of the final sale price of the chocolate bar and the fixed costs are 700 monetary units.

a) From what amount, in terms of revenue obtained from sales of chocolate, does the company have no loss?

b) What is the effect on revenue at the break-even point of a 10% decrease in the unit contribution margin?

c) Suppose that fixed costs increase by 30%. How much should revenues increase in order to continue at the break-even point?