EXAM FOR CONTINOUS ASSESSEMENT

Corporate Investment Appraisal

Master in Finance

Normal Period of Exam 2019-2020

22 January 2020

Duration: 1:30 hours

Please turn off your mobile.
Please keep silence at all times. Call the teacher in class if you are in need of anything.
You are allowed to use a A4 page (front and back) with your notes and formulas.
If you are stuck in one question, please move forward and come back later if you have time.
Good luck

Parte I – Evaluating managerial performance

Question 1 – Analyze the efficiency of the management of cash conversion cycle of X.Co (table below) in comparison to its major competitor Z.Co. *(1,5 points)*.

Question 2 – Explain, succinctly, what is the difference between **liquidity** and **solvency**. *(2 points).*

Question 3 – Identify two ratios that might be used to analyze liquidity and two ratios to analyze solvency. *(1,5 points).*

Question 4 – Based on the previous 4 ratios, please assess the liquidity and solvency of the X.Co and compare with its major competitor Z.Co *(2 points).*

Question 5 – Compare the financial strategy of both companies. *(1,5 points).*

Question 6 – What is your advice to the management of X.Co based on your previous analysis. *(1,5 points).*

	XCo	Zco
Summary of Balance Sheet		
Cash	143,3	351,2
Accounts receivable	1 598,7	1 591,3
Inventory	253,5	159,3
Noncurrent assets	2 300,0	2 500,0
Assets	**4 295,5**	**4 601,8**
Equity	1 250,0	1 400,0
Non-current liabilities	978,4	1 342,5
Notes payable	227,4	178,3
Accounts payable	1 244,0	1 237,9
Accrued expenses	595,7	443,1
Liabilities	3 045,5	3 201,8
Equity and Liabilities	**4 295,5**	**4 601,8**

	XCo	Zco
Items from income statement:		
Sales	9 012,1	8 436,7
Credit sales	85%	75%
Cost of goods sold	1 602,7	1 437,3
Depreciation	242,0	135,0
Financial expenses	412,9	463,6
Items from cash flow statement		
Lease payments	124,9	117,5
Preferred dividends	13,5	45,7

(Turn over the page, please…)

Part II – Capital Budgeting

Question 1 – Define and contrast the accounting rate of return with the economic (or financial) rate of return. Construct an example based on an investment that has an economic life of 3 years. *(1,5 points)*.

Question 2 - Under which circumstances do the NPV lead to better decisions than the IRR? *(1 point)*.

Question 3

a. What is the likely response by the stock market when a firm announces a positive NPV project? *(1 point)*.
b. Suppose the share price close yesterday at € 3,5 and the shareholders equity is represented by 2 million shares. The project with NPV = € 0,5 Million was announced yesterday after the stock market close. Based on these economics what is the expected share price today? *(1 point)*.
c. Is there any reason to believe that this response might sometimes be negative? *(1 point)*.

Question 4 – What is the Equivalent Annual Value and under which circumstances it is appropriate to use it in capital budgeting decisions? (*1 point*).

Question 5 – A medical device company has developed a new kind of cardiac diagnostic device. Owning to the highly competitive nature of the market, the economic life of this product is expected to be limited to 5 years. The sales department forecasts a demand of 5000 units in the first year and a decrease in demand of 10% a year after that. After 5 years, the project will be discontinued with no salvage value aside from the recovery of the remaining working capital requirements. The marketing department forecasted a unit price of 15.000€ and the production department estimated a variable cost per unit of 5.000€ (materials and labour). The finance department estimated general and administrative expenses of 18 million € per year. The initial investment is estimated at 60 million €. Working capital requirements is estimated at 30% of sales. Depreciation is straight line and income tax is 25%

Is the new project acceptable if the WACC is 10%? (3*,5 points*)