vrije Universiteit amsterdam

Faculty of Economics and Business Administration

Exam:	Accounting
Code:	E_IBA1_ACC
Examinator:	K. Shahzad
Co-readers:	C. Camfferman; P. Claes
Date:	28 May 2015
Time:	12.00
Duration:	2 hours
Calculator allowed:	Yes
Graphical calculator allowed:	No
Number of questions:	4 (sub-questions 17)
Type of questions:	Open
Answer in:	English

Remarks:	
-	Answers must be written down on the answer sheet.
-	**Both the exam and the answer sheets must be handed in at the end of the exam**.
-	Only use the accounts in the Appendix (page 6) when preparing journal entries, for analyses, etc..
-	You must show your calculations!

Credit score:	66 credits counts for a 10
Grades:	The grades will be made public (ultimately) on: Thursday, 11 June 2015
Inspection:	To be announced later on Blackboard
Number of pages:	6 (including front page)

Good luck!

Question 1 **20 Marks**

Zila Corporation sells internet routers (merchandise) and provides network maintenance services. Zila provides 5 year warranty for all routers sold. Following is the list of a selection of transactions that took place during 2014 (all amounts are in thousands €).

1. On 12 April, purchased routers on account for €90.
2. On 15 June, sold routers to Lina Lands on credit terms at a selling price of €88. The company earned a 10% profit on the cost price.
3. On 20 June, the company purchased a building for €750. The company paid €300 down in cash and took a mortgage for the balance.
4. On 1 July, the company purchased a one-year insurance policy for €3.6. The amount of insurance is paid immediately in cash.
5. On 1 December, €18 was received for a network maintenance service contract to be performed from 1 December 2014 through 31 May 2016. The service work for this contract is performed evenly and on a regular basis throughout this period.
6. On 30 December, the owner of the company transferred €6 in company's bank account in exchange for common stock.
7. During the year, 5 defective routers were returned by the customers. Zila Company accepted these routers under warranty and gave new routers the customers. The total cost price of these routers was €15.

a. Prepare journal entries for the above transactions.

b. Assume that today is 31 December 2014, the end of the current fiscal year. You are required to post adjusting entries for the following facts.

8. The company has not yet recorded the insurance expenses (transaction 4.) for the year.
9. The revenue for the service contract for the year (transaction 5.) has yet to be recorded.
10. The company's management decided that it should record warranty expenses equal to 3% of its total sales of €150.

Question 2 **Marks 18**

On 1 January 2012, a company purchased a truck for €40,000. The company expects the truck to last 4 years with an estimated residual value of €2,000. The company's financial year ends on 31 December. The company depreciates the truck using the straight-line method. On 31 December 2014, the company sold the truck for €8,000.

a. Given the accounting as described above, what is the amount for depreciation expenses for the year of purchase of the truck (2012)?

b. Given the accounting as described above, how much profit or loss does the company record for the sale of the truck in 2014?

c. In his article 'Criteria for choosing an accounting model', David Solomons argues that the kind of profit or loss number calculated in subquestion b. is not verifiable. Explain why the profit or loss on the sale of the truck is not verifiable in the sense intended by Solomons.

d. Suppose the accounting for the truck would be different, and that it would be accounted for by measuring it at its current value ('fair value') at every balance sheet date. State whether, in that case, you would show gains and losses on re-measurement (i) in profit or loss (income statement) or (ii) in other comprehensive income, and give arguments for your choice .

The financial accounts of Ginco Corporation for fiscal year 2014 reveal the following information. Sales, €180; cost of goods sold, €65; wages, €20; depreciation on plant and equipment, €10; income from investments, €0.5; allowances for trade receivables, €4.8; total equity €120; current liabilities, €15; non-current liabilities, €30.

e. Calculate the operating profit for Ginco Corporation.

Refer again to the information given with subquestion d. A discussion with Ginco's chief financial officer reveals that the allowance for trade receivables was created this year and the amount is considered to be very high. A more realistic figure for the allowance would be €1.8. The investors' required rate of return is 12 percent.

f. Calculate the expected shareholder value generated by Ginco Corporation in 2014 using the Economic Value Added (EVA) approach.

For the fiscal year 2014 a firm reported the following numbers:
sales, €500,000; gross margin, €140,000; depreciation expenses, €30,000; gain on sale of fixed assets, €3,000; income taxes expense, €16,000; net income, €75,000. In 2014 accounts receivable, net, increased by €12,000; merchandise inventories decreased by €2,000; accounts payable decreased by €16,000; mortgage payable decreased by €20,000. Beginning balances of selected accounts were: merchandise inventory, €60,000; accounts receivable, net, €50,000. Purchased fixed assets for cash, €54,000; sold fixed assets with book value of €6,000 for cash.

g. 1. Calculate the cash flow from operating activities for the year 2014.
   2. Calculate the cash flow from investing activities for the year 2014.
   3. Calculate the cash flow yield for the year 2014. (Rounded to 1 decimal place.)

Question 3 **Marks 16**

Lemda Corporation produces office chairs that it sells for €40 each. At the current capacity, the company can produce 50,000 chairs each year. The cost of producing and selling 50,000 chairs are as follows:

	Cost per chair
Direct Materials (wood)	€15
Direct Manufacturing labour	8
Variable Manufacturing Overhead	5
Variable selling expenses	2

At this production level the company incurs fixed cost of €250,000 for manufacturing overhead and €200,000 for selling expenses. The company has 1,200 chairs in its stock at the start of the year and would like to have 1,500 chairs in its closing inventory. Each chair requires 3 m^2 of wood @ €5 per m2 The company currently has 600 m^2 of wood in its beginning inventory and plans to have 900 m^2 of woods in its closing inventory. The applicable corporation tax rate is 40%.

a. 1. Compute the number of chairs Lemda Corporation must sell to reach the breakeven point.

2. If Lemda Corporation wishes to earn €22,500 in after tax net income for the year, how much must the company's sales volume in dollars be?

3. Compute the net income if Lemda Corporation's total sales are €2,000,000.

4. Compute the operating leverage if Lemda Corporation's total sales are €2,000,000.

5. Compute the number of chairs Lemda Corporation must manufacture if its total sales are €2,000,000.

6. Compute the m^2 of wood would Lemda Corporation need to buy if its total sales are €2,000,000.

7. Suppose that Lemda Corporation is currently producing 50,000 chairs per year. The company has received a one-off order from one of its clients to manufacture 10,000 chairs at €25 each. Lemda Corporation will incur no variable selling costs for this special order. If Lemda Corporation accepts this order it will have to sell 10,000 fewer chairs to its regular customers. On financial considerations alone, should Lemda Corporation accept this order? Show your calculations.

b. During this course, you learned that that for some decisions, variable costs are the appropriate costs to look at (i.e., the "relevant" costs) whereas for other decisions full costing is appropriate. Briefly discuss two types of decisions for which variable costs are relevant and two types of decisions for which full costs are relevant.

Question 4 **Marks 12**

Quartz, Inc., has identified the following overhead costs and cost drivers for next year

Overhead item	Expected Cost	Cost Driver	Quantity of Driver
Setup cost	€100,000	Number of setups	500
Ordering costs	40,000	Number of orders	3,200
Maintenance	200,000	Machine hours	4,000
Power	20,000	Kilowatt hours	80,000

The following are details for two of the many jobs completed during the year:

	Job 400	Job 402
Direct materials	€1,500	€3,500
Direct labour	€1,400	€4,000
Units completed	100	200
Direct labour hours	100	300
Number of setups	2	5
Number of orders	8	4
Machine hours	40	100
Kilowatt hours	60	200

The company's normal activity is 40,000 direct labor hours.

a. If Quartz, Inc., uses a traditional normal costing approach using direct labor hours to allocate overhead costs, calculate the total cost of Job 400 and Job 402.
b. If Quartz, Inc. uses activity-based costing, calculate the total cost of Job 400 and Job 402.
c. Based on information provided above alone, what would happen to the overall profitability of Quartz, Inc. after it switches from traditional normal costing approach to activity-based costing. You can choose between (i) increase, (ii) decrease (iii) unchanged. Motivate your answer.
d. List one advantage and one disadvantage of activity-based costing.
e. Briefly explain the difference between value engineering and Kaizen Costing.

Which of the following statements is (are) true regarding traditional costing and activity-based costing.

i. When overhead is applied based on the volume of output, high-volume products tend to "subsidize" low-volume products.
ii. Traditional product costing systems are designed primarily to accumulate cost information for financial reporting.

f. 1. Only A is true
2. Only B is true
3. Both A and B are true.
4. Neither A nor B is true.

Appendix

Only use the following accounts when preparing journal entries, T-accounts, Balance Sheets, Income statements, etc.

Accounts Payable	Mortgage Payable
Accounts Receivable	Notes Payable
Accumulated Depreciation - PPE	Paid-in Capital, Treasury Stock
Additional Paid-in Capital	Preferred Stock
Advertising Expense	Prepaid Insurance Premiums
Allowance for Uncollectible Accounts	Prepaid Rent
Amortization Expense	Prepaid, Other
Bonds Payable	Property, Plant & Equipment (PPE)
Bond Interest Expense	Provision for warranty expenses.
Car	Purchases
Cash	Purchases Discounts
Common Stock	Purchases Returns & Allowances
Common Stock Distributable	Rent Expense
Cost of Goods Sold	Rent Payable
Cumulative Preferred Stock	Rent Revenues
Depletion Expense	Retained Earnings
Depreciation Expense	Sales Discounts
Dividends	Sales Returns & Allowances
Dividends Payable	Sales Revenues
Freight-in	Service Revenues
Freight-out	Start-up and Organization Costs
Gain on Sale of PPE	Stock Dividends
General Expense	Supplies
Income Taxes Expense	Supplies Expense
Income Taxes Payable	Treasury Stock, Common
Insurance Expense	Unamortized Bond Discount
Interest Earned	Unamortized Bond Premium
Interest Expense	Uncollectible Accounts Expense
Interest Payable	Unearned Revenues
Interest Receivable	Utilities expense
Land	Wages Expense
Loss on Sale of PPE	Wages Payable
Maintenance Expense	Warranty Expense
Merchandise Inventory	