EXAMINATION QUESTION PAPER - Written examination

EXC 21221
Strategic Management Accounting

Department of Accounting, Auditing and Law

Start date:	04.06.2015	Time 09.00
Finish date:	04.06.2015	Time 14.00

Weight:	100% of EXC 2122
Total no. of pages:	6 incl. front page
No. of attachments to question paper:	0
Answer sheets:	Lines
Examination support materials permitted:	Interest tables and a BI-defined exam calculator are allowed. TEXAS INSTRUMENTS BA II Plus™

Case 1 Creative Accounting AS - part one (40%)

In the spring of 2015, two BI students decided to start their own company, after having attended the bachelor's program in Accounting and Auditing as well as gaining the necessary practice working part-time in an accounting firm, while studying. With these acquired pre-requisites, The Financial Supervisory Authorities of Norway ("Finanstilsynet") gave the two entrepreneurs the necessary approvals to start an accounting firm in Oslo.
The company, named Creative Accounting AS, was established in June 2015 with a share capital of kr 100 000 and was set up to be ready to commence its operations from July 1st, 2015. The services and technological solutions of the new company were already marketed some months before the company was formally founded, and offers were sent to 14 small and medium sized companies. By the time the company had obtained the authorization as an accounting firm, 10 of these companies had accepted the offers, securing a certain future incoming cash flow.

According to the contracts, Creative Accounting AS charge their fees based on actual time consumption and an hourly rate of kr 800 per hour (excluding 25% VAT). In the beginning, the two owners will manage without employees and expect to spend much of their time with marketing and administrative tasks, which means that the available capacity is limited to approximately a total of 200 hours per month, which entails a monthly revenue of maximum 160 000.
There will though be some excess capacity in the first few months, and the budgeted number of hours from the 10 contracts are:

July:	120 hours
August:	140 hours
September:	160 hours
October:	180 hours
November:	180 hours
December:	160 hours

The company plans to invoice their customers monthly, based on actual time consumption. Invoices will be sent to the clients one of the first days of the month on the basis of time recorded the previous month. According to Norwegian GAAP, this is recognized as accrued income in the same period as the work is done. The credit period is 20 days, which means that we can expect that work carried out in one month is paid for by the end of the following month.

The two owners have decided to pay themselves 55% of the net monthly revenues in salaries. These will be taken to cost the same month as the corresponding revenues are recorded (the matching principle), but the salaries are paid to the owners early the following month, and will therefore first be regarded as accrued salaries, which are reversed and *replaced by actual salary cost* the month thereafter.
According to this accounting principle, 55% of the accounting fees in October are recorded as accrued salaries in October, while they are treated and reported as actual salary costs in November.
On top of the salaries, similar accruals are made for 12.0% holiday pay (to be paid out in June 2016) and the employer's contribution to the social security system, which is 14.1% of salaries and accrued holiday pay.
The social security costs for salaries *reported* in July and August are paid 15th September, while 15th November is the due date for salaries reported in September and October.
According to this accounting principle, 12.0% of the accrued salaries for October are also accrued as accrued holiday pay same month, and in addition an accrual of 14.1% social security both on the salaries as well as the accrued holiday pay are made.

In addition to the personnel costs, some other costs will occur the first six months of the operation:
IT hardware Cost kr 70 000 ex 25% VAT, to be paid in July and depreciated over 36 months

IT software	Cost kr 25 000 ex 25% VAT, to be paid and expensed in July
Equipment/furniture	Cost kr 25 000 ex 25% VAT, to be paid and expensed in July
Office rent	Monthly cost of kr 7 000 ex 25% VAT, to be paid in the beginning of each quarter, three months advance, first time 1st July 2015.
Telephones	Monthly cost of kr 2 500 ex 25% VAT, invoiced from July 2015 onwards, 30 days credit
Travel costs	Car compensation costs of kr 1 500 per month (VAT exempt) to be paid the month the cost occur, from July 2015 onwards
Supplies and misc.	Monthly cost of kr 2 500 ex 25% VAT, invoiced from July 2015 onwards, 30 days credit

The company will be VAT-registered from July 2015 and the first payable VAT term is 10th October 2015 for July and August. Payable VAT for September and October is due 10th December 2015.

Question a (20%)

Present a projected monthly income statement, based on the assumptions from the above financial planning.

Question b (20%)

Present a monthly cash flow projection and use this as a basis to calculate the need for external funding, both the total amount and when funds must be transferred to the company.

Case 2 Creative Accounting AS – part two (30%)

The two owners of Creative Accounting AS contacted a consulting firm in the spring of 2015, before the company was formally established, to discuss business strategy and to design a strategy plan for the period from 2015 to 2018. Below you will find *the summary* of the strategy document.

<u>1.0 Strategy for 2015-2018, a summary</u>

We have seen an annual average growth in the market for accounting services the last years of approximately 5%. The growth is not due to an increase of the volume of hours to be billed to the around 250 000 companies that choose to use a chartered accounting company, but is actually an increase in prices per worked hour. This is interesting, because it shows that the accountants have been able gradually to charge more for their work. We may also assume that good accountants can charge more than average industry rate per hour and Creative Accounting AS shall therefore be positioned in segments of the market where price is not the only competition factor. High standards of accounting quality and good technological solutions are the most important things to strive for, because this will have a strong long-term positive impact on financial performance.
Equally important as high hourly rates is a high ratio of hours to be billed to the customers. Best practice suggests 90% invoice ratio, leaving only 10% for administrative tasks and training.

The best way to get clients that are willing to pay more than average is to utilize and further develop competitive cutting-edge technology. With the ERP system *Cloud Accounting* we are able to design a fully digitalized handling of all accounting transactions, as well as adapting the communication platform to our clients' organization in a way that it allows the users to share accounting information in an efficient way. We will though not be successful in implementing this technology before all our clients are using the function called *SmartTable*, where all users (management and employees) can hook up to the accounting database using iPads or other touch sensitive screens.

An interesting market segment is subsidiaries or branches of international companies in Norway, because these entities are often a part of big group of companies with much experience and competence to share with us. We will learn from having the most professional clients!
By the end of 2018, Creative Accounting AS should have 10 full-time employees and an annual sales income of 15 mill kroner. 40% of our clients should have international owners. Such growth will require lot of marketing, sales and administrative resources and we should not expect that the company would be particularly profitable in this first growing phase. Because we have limited funding, the costs for growing must be funded along the way from our daily business activities. We should though make sure that we have a least a 5% bottom line profit each year and adjust our strategic ambitions and corresponding activity plans accordingly. This will probably not be possible if we spend more than 60% of our costs in salaries and other personnel costs.

We will not be able to keep our clients and build up a good reputation without recruiting accountants that are willing to develop their own competence and skills along with the clients. We think that documented previous learning is the best way to predict future learning capacity and motivation, and good business school grades are therefore crucial. On the other side, Creative Accounting AS should try to make the company a good place to work and build careers, regardless of age and experience. We need to recruit accountants with good language skills in other languages than Norwegian and English and all accountants must from their second year in the company, be able to take sole responsibilities for all year-ending procedures for their clients, including their tax returns.
It will take a long time, probably 10-15 years, before Creative Accounting AS plays in the big league, and we will have to redesign our strategies many times before we get there and can see the fruits of our ambitions, paired with our joint competence. This strategy will give us guidelines for our start-up phase and take us one our first journey together.

Question a (10%)

Based on the information in this strategy summary, what are the factors that are critical for achieving the company's overall financial goals? Place these factors in relevant strategic perspectives.

Question b (10%)

What is a Key Performance Indicator and what are the characteristics of a well-defined KPI? Which of the critical success factors in Creative Accounting AS' strategy plan do you think could be most difficult to measure in a Balance Scorecard model?

Question c (10%)

Explain why cost driver and value chain analyses may be useful tools to aid the company in its future planning for increased value creation. Present examples of what such analyses may reveal.

Case 3 Alpenmilch Schokoladefabrik AG (30%)

In the little Swiss village Waldteufel, you will find the small family-owned chocolate factory Alpenmilch, established in 1913. After a downsizing process, the company has decided to produce only three products from January 2016 onwards:

- The 100 gram milk chocolate bar, called *Schneewittchen*
- The 100 gram 50% cocoa dark chocolate with hazelnut bar, called *Edelweiss*
- The 100 gram 70% cocoa dark chocolate with roasted fruits and chili, called *Matador*

These products are not produced simultaneously, but one product at a time in a given production series. A standard production series for all three products is 1 000 kilos of finished product (10 000 units of 100 gram chocolate). The cost objects in the further analysis are one series of each of the three products. The company has so far used a traditional costing model, where the indirect production costs are allocated to the three products using expected production time as cost driver for the allocation rate used.

We have the following data from the 2016 budgets:

	10 000 units of 100 gram Schneewittchen	**10 000 units of 100 gram Edelweiss**	**10 000 units of 100 gram Matador**
Planned production 2016	800 production series	500 production series	200 production series
Direct labor rate per hour	CHF 25.00	CHF 25.00	CHF 25.00
Standard production time	80 hours	120 hours	140 hours
Direct material costs	CHF 2 400	CHF 2 600	CHF 3 200
Packaging costs	CHF 600	CHF 600	CHF 600

The total planned production in 2016 is therefore (800 * 10 000) + (500 * 10 000) + (200 * 10 000) = 15 million 100 gram chocolates.
The budgeted indirect costs for 2016 in cost center Production are CHF 1 216 000, excluding facility costs, which are treated as non-assignable costs.

The company has negotiated sales prices for 2016 with the two Swiss distributors Migros and COOP as follows:

Schneewittchen	CHF 0.80 per unit
Edelweiss	CHF 1.00 per unit
Matador	CHF 1.00 per unit

The total budgeted sales income in 2016 is therefore (800 * 10 000 * 0.80) + (500 * 10 000 * 1.00) + (200 * 10 000 * 1.00) = CHF 13.4 mill.

Question a (10%)
Present a costing model for each of the two products showing budgeted production costs for each standard production series as well as production costs for each unit of 100-gram chocolate.
You should also show how much is left in the 2016 budgets to cover facility costs, sales and administration costs as well as profits.

The company wants to replace the current calculation model with a more sophisticated one and has started to analyze the how the different production activities consume resources that together makes up the total assignable indirect production costs of CHF 1 216 000. An external consulting firm was brought in to analyze activities and processes and their report concludes with the following picture of the activity costs:

Activities	Activity costs	Activity frequency Schneewittchen	Activity frequency Edelweiss	Activity frequency Matador
Machine calibration	CHF 420 000	220 adjustments	180 adjustments	300 adjustments
Procurement	CHF 240 000	120 purchases	120 purchases	160 purchases
Production	CHF 256 000	2 800 machine hours	4 000 machine hours	6 000 machine hours
Maintenance	CHF 300 000	120 service jobs	160 service jobs	220 service jobs

The activity frequency above refers to how many times it is expected that the activities are carried out for the whole planned production in 2016.
We may assume that all of the indirect production costs are fixed in this one-periodic cost analysis.

Question b (10%)

Revise your costing models with the new information from the activity studies. Comment on the differences and explain why Activity Based Costing may contribute to giving managers better support for their decisions.

Question c (10%)

Assume that there for each of the four activities in the Production Department that make up the total assignable indirect costs of CHF 1 216 000 are excess capacity, and that the budgeted activity frequencies above only represent 80% of *available capacity*.
Calculate the cost of excess capacity under these new assumptions (total indirect costs remaining unchanged) and describe strategies the company can make to reduce such costs in the future.