EXAMINATION QUESTION PAPER - Written examination

EXC 21221
Strategic Management Accounting

Department of Accounting, Auditing and Business Analytics

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Part one – Financial Planning (50%)

Exercise 1 (25%)

The company Senza Scrupoli Inc. has estimated its balance sheet to look as follows per 31 December 2019:

Fixed assets	60 000 000
Inventory	17 550 000
Accounts receivable	11 988 000
Bank deposits	2 607 000
Total assets	**92 145 000**

Share capital	18 000 000
Premium fund	3 600 000
Retained earnings	4 200 000
Long-term liabilities	39 000 000
Short-term liabilities	9 216 000
Overdraft bank account (1)	6 990 000
Payable taxes	780 000
Accounts payable	5 700 000
Unpaid share holder dividend	1 800 000
Other short-term liabilities	2 859 000
Total equity and liabilities	**92 145 000**

The budgeted income statement for year 2020 looks as follows (all figures in $):

Sales income	168 000 000
Gain from sales of fixed assets	1 000 000
Costs of goods sold	86 000 000
Salaries and other personnel costs	60 000 000
Depreciation	4 000 000
Other operational costs	12 000 000
Operating profit (EBIT)	**7 000 000**
Interest income	60 000
Interest costs	2 800 000
Profit before taxes	4 260 000
Corporate tax (2)	1 192 800
Profit after taxes	**3 067 200**

(1) This a bank account where the bank allows the company to have a balance in the bank's favor. The limit of this credit is currently $ 8 000 000.
(2) The corporate taxes are 100% payable; to be paid the year after they are accrued for, no deferred taxes

There is additional information pertaining to the budgets for 2020, as follows:

1. You may disregard the effect of sales tax or value added taxes

2. You may assume that the sales are evenly distributed over the year and that all months have 30 days.

3. Sales income: Credit customers account for 90% of the sales, the rest is paid cash. Of the credit customers, 20% pay in the same month that the sales are registered, 70% the month after and the remaining 10% two months after.

4. Costs of goods sold: All purchases of goods are against credit. On average 30% is paid in the month of purchase, 50% the month after and the remaining 20% two months after.

5. Inventory: The company plans to reduce the value of the inventory by 2 000 000, during 2020.

6. Other operational expenses: You may assume that these are payable costs and that they are paid the same month they occur.

7. Salaries: Payable salaries per 31 December 2019 is estimated to be 180 000, which is expected to increase to 220 000 by the end of 2020. This is placed among other short-term liabilities.

8. Interest costs: Payable interests per 31 December 2019 is estimated to be 720 000, which is expected to decrease to 640 000 by the end of 2020. These are also placed under short-term liabilities.

9. Fixed assets: The company plans to buy and pay for investments in fixed assets of 16 000 000 during 2020. The company also plans to sell some of their existing fixed assets, which at the time of sales are expected to have a book value of 3 000 000.

10. Emission of new shares: It is expected to be paid 11 000 000 from new investors during 2020, of which 3 000 000 is a share premium

11. Long-term loan: The company plans to borrow 10 000 000 from their bank in 2020. The short-term loan of 9 216 000 will be paid in full and there will be installments on existing bank loans amounting to 5 000 000 in 2020.

12. Dividend: You may assume that the accrued dividend per 31 December 2019 will be paid early in 2020 and you should make a new accrual of 2 400 000 at the end of the year. The remaining profits should be off-set against retained earnings

13. Bank accounts: The ordinary bank account is estimated to increase its balance from 2 607 000 to 3 607 000 in 2002. The balance of the overdraft account at the end of 2020 will be determined by the other balance sheet accounts (the rest amount on the equity and liability side of the balance)

<u>Question 1 a) (15%)</u>
Present the expected balance sheet of Senza Scrupoli Inc. at the end of year 2020.

<u>Question 1 b) (10%)</u>
Explain the difference between the budgeted profit and the expected net cash flow for 2020, using a suitable model that specifies the sources of this difference.

Exercise 2 (25%)

The company Engulf Endeavour Inc. uses Activity Based Costing (ABC) for its product calculation. In the tables below you will find information related to the four products Rome, Paris, Madrid and Prague, for the budget year 2020.
The company manufactures the products by carrying out a number of activities that can we can group in four different activity groups. Each of the activities in each group share the same cost driver type, but there are also facility-based costs without a known cost driver.

Activity group	Fixed indirect costs 2020 ($)	Cost driver type	Available capacity in units	Budgeted capacity utilization in units
Group 1	3 000 000	Volume-based	5 000	4 000
Group 2	1 000 000	Volume-based	2 000	1 500
Group 3	400 000	Product-based	4 000	3 000
Group 4	2 000 000	Series-based	10 000	8 000
Facility-based activities	2 500 000	Not available		
Total	8 900 000			

Product	Direct cost per unit ($)	Production volume, units	Budgeted in Group 1	Budgeted in Group 2	Budgeted in Group 3	Budgeted in Group 4
Rome	1 000	1 000	300	200	200	600
Paris	1 500	800	700	400	1 000	400
Madrid	2 000	600	2 000	100	1 000	4 000
Prague	4 000	200	1 000	800	800	3 000
Total			4 000	1 500	3 000	8 000

Question 2 a) (10%)
Present costing models for the four products where you include all costs that are relevant in an ABC-based costing model.

Question 2 b) (5%)
Calculate the costs for the excess capacity in 2020, specified for each activity group, based on the information above.

Assume now that the company has the possibility to additionally deliver 400 units of product Paris, increasing the production volume from 800 to 1 200 units.
This additional order will increase the activity frequency in all of the four activity groups and that the budgeted activity will be as follows for product Paris:

- Activity group 1: 1 050
- Activity group 2: 600
- Activity group 3: 1 500
- Activity group 4: 600

Question 2 c) (10%)
If Engulf Endeavour Inc. wants to have a profit contribution of $ 200 000 from this new order, what is the offered price per unit? Calculate also the change in costs of utilized capacity if this order is accepted.

Part two – Value Creation and Financial Performance Management (50%)

Exercise 3 (10%)

Below you will find some elements of the Balanced Scorecard model and corresponding terminology. These elements are here listed randomly but in real life, they will be related to each other in a given sequential order from the first to the last activity.

Defining Key Performance Indicators
Performance measuring
Entering data in a scorecard
Setting targets
Defining critical success factors
Strategy development
Performing controlling activities
Designing a strategy map

Group the eight elements in a correct sequential order from start to stop, in a process that describes the implementation and the use of a Balanced Scorecard model. Comment on why you have chosen this specific order.

Exercise 4 (15%)

Question 4 a) (5%)
Explain what a cost driver is, give examples of generic cost drivers from Porter and Riley's lists and explain why cost driver analyses are important in strategic cost management.

Question 4 b) (10%)
Describe how The Lean Philosophy addresses the challenge of avoiding organizational waste of resources.

Exercise 5 (25%)

Realis AS is a company that develops and owns commercial real estate. The company currently owns approximately 800 000 m^2 shopping centers, office space for rent, hotels and car parks in the Oslo area. The development projects consist of both total renovation of outdated premises as well as construction of new ones. External contracting companies do all the building and renovation work. The company has currently 19 employees, working in four different organizational departments:

- Administration and finance
- Market and sales
- Development
- Technical operations (maintenance)

Realis AS has recently completed its strategy plan for 2020-2023, built on *three strategic themes:*

- Build for the future
- Preserve the values
- Create attractive and efficient rent objects

The company sums up the strategy plan as follows:

The real estate business is complex and competition in many of the market segments is stronger than before. Realis' shareholders have invested more than 400 million kroner in the company and the overall and long-term goal is now to secure a high return on their investment. We will need to exploit our revenue potentials to a maximum and we need attractive properties suited to our tenants' needs. If a tenant chooses not to renew the lease, it may often go another ten years before we can hope to get the company back as a customer. Customer retention and loyalty is therefore crucial, but such loyalty is the consequence of success in many areas. We know that one way to create customer satisfaction is to increase the intensity in following up the tenants' needs and complaints. We will secure a future operational capacity that enables us to follow up our customers much better than what we have done previously and we need to strengthen our Technical Operations Department and recruit highly experienced personnel.

Preserving property values requires improved maintenance processes. We shall invest in an IT-based system to handle maintenance and repair jobs better, with a focus on improved project control, resulting in increased performance at a lower cost than today.
We need to develop competence in all four departments and make sure that key personnel do not leave the company. Our goal is to be one of the preferred employers in the professional real estate market, with good incentive and bonus programs.

Building for the future requires efficient market behavior when new projects are recognized and planned for development. Projects must be well-planned before building work commences. We will not succeed with this without collaborating better with our various partners, such as the architects, consulting engineers, contracting firms and various sub-contractors.
Within our strategy period, almost all operational and financial costs are fixed and unavoidable. Hence, profitability is good when the rent revenues are good and we keep the available unrented space to a minimum. Effective market operation is therefore critical; we want the most attractive tenants and we need to offer efficient and well-functioning areas to the market.
Although we expect interest rates to be low in the near future, financial costs are a large part of our total costs and a correct loan to value ratio seems to be 75-80% on newer property and 60-65% on property older than 10 years. Such optimal financial gearing is not alone sufficient; we need to improve our relations with the banks to secure competitive low-cost funding.

Our goals are to make Realis the preferred company, both for investors, customers and employees in the real estate industry within the end of 2023. We will not succeed in this without a constant focus on gaining necessary control over critical success factors as well as measuring our own development in these areas systematically during the next four years.

Realis AS wants to implement a Balanced Scorecard model in 2020 and turns to you for advice.

Question 5 a) (5%)
What is in your opinion the biggest challenges that a large and complex company such as Realis AS may face when they design and implement a Balanced Scorecard model?

Question 5 b) (10%)
Design a strategy map based on the critical success factors you may recognize from the strategy summary. Is there in your opinion relevant areas that are not sufficiently covered in this summary?

Question 5 c) (10%)
Suggest at least four financial and four non-financial KPIs with a high degree of validity and reliability, based on your conclusions in the last question.