

**EXAMINATION QUESTION PAPER - Written examination****EXC 21221****Strategic Management Accounting****Department of Accounting, Auditing and Business Analytics****Start date:** 12.12.2017 Time 09.00**Finish date:** 12.12.2017 Time 14.00**Weight:** 100% of EXC 2122**Total no. of pages:** 5 incl. front page**Answer sheets:** Lines**Examination support materials permitted:** BI-approved exam calculator  
Simple calculator  
Bilingual dictionary**Re-sit** Ordinary

### Question 1 (10%)

Radioactive AS imports DAB-radios from a manufacturer in Taiwan. The company is now preparing budgets for first half of 2018. We have the following information from the forecasts for second half of 2017:

|                                                |              |
|------------------------------------------------|--------------|
| Sales volume                                   | 8 000 radios |
| Average sales price                            | 780,00 kr    |
| Costs of goods sold                            | kr 2 800 000 |
| Salaries and other payable personnel costs (*) | kr 1 600 000 |
| Other payable operating costs (*)              | kr 800 000   |
| Depreciation (*)                               | kr 100 000   |

(\*) Costs that can be regarded as fixed or step costs within the planning horizon.

The demand for such radios are expected to fall in the first half of 2018, but the market is quite price sensitive, but the decrease in sales volume is not expected to be dramatic if the company reduces the sales price a little.

Radioactive AS faces *two alternative scenarios* for first half of 2018:

- They can keep the sales prices as in second half of 2017. The company expects then a reduction in sales volume of 25%, compared with second half of 2017. As a consequence of the reduced activity level will both salaries and other payable personnel costs as well as other payable operating costs be reduced by 20% each.
- They can reduce the sales price by 10%. The company expects then a reduction in sales volume of only 5%, and a corresponding drop of variable costs.

The purchase price per unit is expected to be the same as for the second half of 2017 in both of the two scenarios.

What do you advise the company to do? Document your advice with the necessary calculations.

### Question 2 (10%)

We can gather the following information from the same company's balance sheet per 1<sup>st</sup> July 2017 and expected balance per 31<sup>st</sup> December 2017:

|                         | <u>01.07.2017</u> | <u>31.12.2017</u> |
|-------------------------|-------------------|-------------------|
| Company cars            | 420 000           | 320 000           |
| Inventory               | 220 000           | 220 000           |
| Accounts Receivable     | 840 000           | 1 040 000         |
| Other short-term claims | 40 000            | 70 000            |
| Bank deposit            | 358 000           | 884 000           |
|                         | -----             | -----             |
| Total assets            | 1 878 000         | 2 534 000         |
|                         |                   |                   |
| Share capital           | 100 000           | 100 000           |
| Retained earnings       | 302 000           | 1 242 000         |
| Long-term debts         | 404 000           | 204 000           |
| Accounts Payable        | 356 000           | 600 000           |

|                              |           |           |
|------------------------------|-----------|-----------|
| Other short-term liabilities | 716 000   | 388 000   |
|                              | -----     | -----     |
| Total equity and debts       | 1 878 000 | 2 534 000 |

Make a specified presentation that shows the connection between:

Opening balance bank deposits

+ Expected incoming payments in the second half of 2017

- Expected outgoing payments in the second half of 2017

= Closing balance bank deposits

You may disregard the effect of Value Added tax (VAT) on the company's cash flow.

### Oppgave 3 (10%)

You may assume that the figures above are based on the company's customers paying on average after 30 days and that the company's supplier of radios is also paid on average after 30 days.

Assume further that the sales and costs of sales is distributed evenly and that there are only 180 days in the second half of 2017.

- How would the net cash flow be influenced if customers paid after 20 days (instead of 30) and the supplier of radios was also paid after 20 days (instead of 30)?
- What would the balance of bank deposits, Accounts Receivable and Account Payable be per 31<sup>st</sup> December 2017 if the above changes in credit periods took place?

You may still disregard the effect of Value Added Tax (VAT).

### Question 4 (5%)

Company X had a bank deposit balance of 1 312 000 1st January 2017. In the beginning of March 2017 this was reduced to 722 000. In March 2017 the company paid dividend to its shareholders, amounting to 10% of the nominal value of the share capital of 1 200 000. In addition, the company purchased the same month a new delivery van for 346 000.

What was the cashflow from Company X's operating activities in the first quarter of 2017?

### Question 5 (15%)

Explain in your own words how the following concepts (listed here in a random order) *relate to each other* in a balanced scorecard model:

- Key performance indicators
- Scorecard
- Targets
- Critical success factors
- Strategy development
- Controlling activities
- Strategy map

### Question 6 (10%)

Give generic examples of various critical success factors that may often be relevant for a company in the four different strategic perspectives:

- Infrastructure and resources (often also called learning and growth)
- Internal processes
- Customer/market
- Finance

### Question 7 (10%)

Explain *The Resourced Based View* and how this concept can contribute to increasing a company's competitive advantages. Comment also on how focus on value adding resources may affect the design of a balanced scorecard model for a company.

### Question 8 (20%)

The Activity Corporation AS utilizes Activity Based Costing for its product costing. The company produces four different products, Alpha, Beta, Gamma and Kappa, and in the manufacturing process indirect costs are grouped in four different activity groups:

- Procurement
- Maintenance
- Machine calibration and set-up
- Quality control

The following information is available from the 2018 budgets:

| Activity               | Fixed costs | Cost driver    | Available capacity | Budgeted capacity |
|------------------------|-------------|----------------|--------------------|-------------------|
| Procurement            | 3 000 000   | No. of orders  | 5 000 orders       | 4 000 orders      |
| Maintenance            | 1 000 000   | No. of jobs    | 2 000 jobs         | 1 500 jobs        |
| Calibration and set-up | 400 000     | No. of set-ups | 4 000 set-ups      | 3 000 set-ups     |
| Quality control        | 2 000 000   | No. of tests   | 10 000 tests       | 8 000 tests       |
| Facility based costs   | 2 500 000   | N/A            | ---                | ---               |
| Total budgeted costs   | 8 900 000   |                |                    |                   |

| Product | Direct cost per unit | Number produced/sold | Number of purchase orders | Number of maintenance jobs | Number of machine set-ups | Number of quality tests |
|---------|----------------------|----------------------|---------------------------|----------------------------|---------------------------|-------------------------|
| Alpha   | 1 000                | 1 000 units          | 300                       | 200                        | 200                       | 600                     |
| Beta    | 1 500                | 800 units            | 700                       | 400                        | 1 000                     | 400                     |
| Gamma   | 2 000                | 600 units            | 2 000                     | 100                        | 1 000                     | 4 000                   |
| Kappa   | 4 000                | 200 units            | 1 000                     | 800                        | 800                       | 3 000                   |
| Total   |                      |                      | 4 000                     | 1 500                      | 3 000                     | 8 000                   |

a)

Show how budgeted manufacturing costs can be divided between costs for utilized capacity and costs for excess capacity.

b)

Present a costing model for one unit of the product Alpha, based on the budgets for year 2018.

**Question 9 (10%)**

Explain the basic principles of the lean-philosophy (classical "lean manufacturing") and give examples of how these principles can be used in real life.