

UNIVERSITY OF BOLTON

BOLTON BUSINESS SCHOOL

BUSINESS PATHWAY

HONG KONG

SEMESTER 1 EXAMINATIONS 2008/2009

**FINANCIAL CONTROL IN MANAGEMENT CONTROL
SYSTEMS**

MODULE NO: BST3004DL

Date: 28th March 2009

Time: 3 hours

INSTRUCTIONS TO CANDIDATES:

This is an open book examination

There are SIX questions on this paper

Answer FOUR questions

Answer ONE question from EACH section A, B and C. Plus one more question from any of the three sections

During the examination you are allowed to use your notes but NO Textbooks or Study Guides are permitted.

Candidates are advised that the examiners attach importance to legibility of writing and clarity of expression.

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SECTION A

QUESTION A1.

The directors of Brown require \$500,000 to invest in a new project. The directors intend to finance the project by either making a rights issue to existing shareholders or by raising a bank loan.

Recently the share price has risen from \$1.50 to \$1.60 per share ex dividend. The rights issue at \$1.25 would be attractive to shareholders. The directors estimate that a rate of 12% would be charged on the bank loan which would be repayable by five equal instalments starting in 2010.

Extracts from the accounts for the last two years and a summary of ratios for 2007 are reproduced below:

Required:

- (a) Using the extract of the accounts as at 30 June 2008 calculate performance ratios which you consider to be of particular interest to the directors of the business.
(12 marks)
- (b) Give the reasons for your choice and assess the significance of the changes over the two years.
(8 marks)
- (c) Critically comment on the alternative methods of financing the new project and the use of ratios to inform the decision.
(5 marks)

TOTAL 25 MARKS

Table of Performance Ratios for June 2007

| | | | |
|----------------------------|------------|------------------------|------------|
| Working capital ratio | 2.11 :1 | Fixed Assets Usage | 6.9 Times |
| Acid Test | 0.94 :1 | Gearing Ratio | 22.64% |
| Debtors ratio | 18.21 Days | Interest Cover | 11.7 Times |
| Return to Shareholders | 18.73% | Earnings per share EPS | 38.4 cents |
| Return on Capital Employed | 26.42% | P/E Ratio | 3.9 Times |
| Net Profit on Sales (NPM) | 5.67% | Dividend Cover | 3.8 Times |
| Total Assets Usage | 3.6 Times | Dividend Yield | 6.67% |

**Question A1 continued over
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Question A1 continued

| Income Statement Extract for the year ended 30 June | | | | | |
|--|-------------------------|---------|-------------|---------|-------------|
| | | | 2007 | | 2008 |
| | | | \$'000 | | \$'000 |
| Revenue | | | 6175 | | 6329 |
| Operating profit | | | 350 | | 230 |
| Debenture Interest | | | 30 | | 30 |
| Profit before tax | | | 320 | | 200 |
| Taxation | | | 128 | | 116 |
| Profit for equity holder | | | 192 | | 84 |
| Balance Sheet as at 30 June | | | | | |
| | | | 2007 | | 2008 |
| | | | \$'000 | | \$'000 |
| Non-current assets net of depreciation | | | 901 | | 1064 |
| Current assets: | | | | | |
| Stocks and work in progress | | | 447 | | 526 |
| Trade receivables | | | 308 | | 321 |
| Balance at Bank | | | 52 | | 11 |
| | | | 807 | | 858 |
| Less | Current liabilities: | | | | |
| | Trade payables | | 205 | | 307 |
| | Dividends Payable | | 50 | | 50 |
| | tax payable | | 128 | | 116 |
| | | | 383 | | 473 |
| Net current assets | | | 424 | | 385 |
| Total assets less current liabilities | | | 1325 | | 1449 |
| Non-current liabilities | | | | | |
| 10% Debentures | | | 300 | | 300 |
| Total net assets | | | 1025 | | 1149 |
| Share capital and reserves | | | | | |
| | Issued share capital | | | | |
| | ordinary shares (units) | 500,000 | | 500,000 | |
| | cents nominal value | 100 | 500 | 100 | 500 |
| Retained earnings | | | 525 | | 649 |
| | | | 1025 | | 1149 |
| Share price - cents per share | | | 150 | | 160 |
| Dividend per share- cents | | | 10 | | 10 |

Section A continued
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Section A continued

QUESTION A2.

The directors of Cahill Ltd are concerned about the low level of profit generated by some of the four products and are seeking your opinion on the best way to use their limited resources in the next financial year.

They have provided a summary of values for 2008 and budgeted values for 2009. Costs and revenues are expected to remain constant except for fixed costs which are expected to fall by \$35,000. The supply of materials will be limited to 50,000kg in 2009.

| | | A | B | C | D |
|-------------------------------|-------|--------|--------|--------|--------|
| Units produced & sold in 2008 | Units | 10,000 | 15,000 | 35,000 | 35,000 |
| Costs and Revenue 2008 | | \$ | \$ | \$ | \$ |
| Variable costs per unit | \$ | 13 | 25 | 42 | 20 |
| Fixed costs per unit | \$ | 5 | 5 | 5 | 25 |
| Total cost per unit | \$ | 18 | 30 | 47 | 45 |
| Net profit | \$ | 7 | 18 | -7 | -10 |
| Selling price per unit | \$ | 25 | 48 | 40 | 35 |
| Materials used per unit | Kg | 0.5 | 1 | 0.8 | 0.6 |

| | | A | B | C | D |
|----------------------|-------|-------|-------|-------|-------|
| Expected Demand 2009 | Units | 20000 | 20000 | 30000 | 30000 |

Required:

- (a) Advise the company's management regarding the best use of the limited resources for 2009.

(15 marks)

- (b) Critically evaluate your findings and suggest alternative strategies for the directors of Cahill Ltd.

(10 marks)

TOTAL 25 MARKS

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SECTION B

QUESTION B3.

The directors of Smith are concerned about their cash flow and the need to maintain sufficient working capital to maintain production in the next financial year. The forecast accounts suggest that working capital will be approximately \$650,000 for the next financial year.

Budget Data for the Next Financial Year

Budgeted production costs:

| | |
|----------------------|--------------|
| | <u>\$000</u> |
| Raw materials A | 420 |
| Raw materials B | 200 |
| Direct Labour | 350 |
| Production overheads | 750 |
| Forecast sales (\$) | 1,800 |

| | |
|--------------------------|------------------------|
| Operating cycle: | <u>Number of weeks</u> |
| Raw materials in stock | 12 |
| Production cycle | 8 |
| Finished goods in stock | 6 |
| Debtor collection period | 6 |
| Creditor payment period | 2 |

Note: assume weeks per year = 52

Required:

(a) Using the budgeted cost data provide a detailed break down of the working capital requirements for the factory.

(15 Marks)

(b) Critically evaluate the outcome and suggest further action that the directors might take to manage the level of working capital required.

(10 Marks)

(Total 25 marks)

**Section B continued
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Section B continued

QUESTION B4.

Davis Ltd manufactures two products using some common facilities. The cost of the common facilities can only be avoided if neither product is sold. The sales manager is concerned that the forecast level of sales (units) might not be achieved and would like advice regarding the break even level of sales. The sales manager would also like to know the impact of a change in sales (units) equivalent to a 10% increase in the sales of Saturn but a 10% fall in the sales of Jupiter.

| | Saturn | Jupiter | Total |
|---|---------------|---------------|----------------------|
| Sales Volume Units | 3000 | 2400 | |
| | \$ | \$ | \$ |
| Unit selling price | 200 | 200 | |
| Unit variable costs | 100 | 50 | |
| Unit contribution | <u>100</u> | <u>150</u> | |
| Total sales revenue | 600000 | 480000 | 1080000 |
| Less: Total variable cost | <u>300000</u> | <u>120000</u> | <u>420000</u> |
| Contribution to direct and common fixed costs | 300000 | 360000 | 660000 |
| Less: Direct avoidable fixed costs | <u>22000</u> | <u>45000</u> | <u>67000</u> |
| Contribution to common fixed costs | 278000 | 315000 | 593000 |
| Less common (indirect fixed) costs | | | <u>55000</u> |
| Operating profit | | | <u><u>538000</u></u> |
| Total fixed costs | | | <u><u>122000</u></u> |

Required:

(a) Calculate the break even level of sales for each product.

(10 marks)

(b) Show the revised break-even level of sales in units should the forecast sales change by the percentages identified by the sales manager.

(8 marks)

(c) Critically evaluate the assumptions that underpin the calculation of multi-product break-even.

(7 marks)

TOTAL 25 MARKS

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SECTION C

QUESTION C5.

Required:

(a) Discuss alternative valuation methods for equity and debt. Your responses should focus on the requirements of a newly formed SME organization.

(10 marks)

(b) Critically evaluate, using examples, alternative sources of business finance.

(15 marks)

TOTAL 25 MARKS

QUESTION C6.

Required:

(a) Outline a suggested approach to a modern budgetary control policy.

(10 marks)

(b) Critically evaluate, using examples, the potential impact of behavioural aspects on budgetary control processes.

(15 marks)

TOTAL 25 MARKS

END OF QUESTIONS