

ADVANCED GCE
ACCOUNTING
Management Accounting

F014/RB

RESOURCE BOOKLET

Tuesday 21 June 2011
Morning

To be given to candidates at the start of the examination

Duration: 2 hours



INSTRUCTIONS TO CANDIDATES

- The information required to answer questions 1–4 is contained within this resource booklet.

INFORMATION FOR CANDIDATES

- The quality of your written communication will be taken into account when marking your answers to the two questions/sub-questions labelled with an asterisk (*).
- In one of these questions, the focus will be on your ability to present numerical information legibly and in an appropriate accounting format. In the other, you will be assessed on the legibility and style of writing, the clarity and coherence of your arguments and the accuracy of your spelling, punctuation and grammar.
- This document consists of **8** pages. Any blank pages are indicated.

INSTRUCTION TO EXAMS OFFICER / INVIGILATOR

- Do not send this resource booklet for marking; it should be retained in the centre or destroyed.

- 1 Grant Ltd manufactures a single product and is investigating ways of improving its profitability. The following budgeted data is available for the production and sales of 30 000 units for its next financial year:

| | |
|--------------------|----------------------|
| | £ |
| Direct materials | 1 050 000 |
| Direct labour | 750 000 |
| Variable overheads | <u>600 000</u> |
| | 2 400 000 |
| Fixed costs | <u>840 000</u> |
| | <u>3 240 000</u> |
| Sales | <u>4 200 000</u> |

The following options are being considered:

- (i) Increase advertising by £150 000 per annum, together with introducing a sales commission of £8 per unit. The selling price would increase by £10 per unit and the sales quantity is estimated to increase by 9%.
- (ii) Increase overseas marketing by £60 000. Exports would increase from 6 000 units to 7 500 units. The selling price would be unchanged, as would all other costs.
- (iii) Reduce the selling price by 10%. It is estimated that units sold would increase by 25%. The increase in units sold would lead to a 5% material price reduction. All other costs would be unchanged.
- (iv) Subcontract the manufacture of some components of the final product. One component could be purchased from an outside supplier at a cost of £2.40 each. The current total variable costs of these components is £2.80 each. Each finished product contains two of these components. The department currently making these components would be closed down and four staff would be made redundant. Fixed costs would be increased by £30 000 to cover redundancy costs. Fixed costs of £10 000 relating to the running of the department would cease, if the department was closed. The selling price, quantity and all other costs would be unchanged.
- (v) The volume of sales is to be increased to generate a profit of £990 000 for the next year. The selling price, fixed costs and all costs per unit would be unchanged.

REQUIRED

- (a) Based on the original budget, calculate:
 - (i) profit; [1]
 - (ii) contribution per unit; [1]
 - (iii) break-even in both units **and** sales value. [2]
- (b) Taking each option independently, calculate the profit for each of options (i) to (iv). Show the contribution per unit in each case. [12]
- (c) For option (v), calculate the sales quantity necessary to achieve the required profit. [3]
- (d) Discuss **two** implications for the company of undertaking option (iv). [6]
- (e) State **two** applications of marginal costing. [2]

Total marks [27]

- 2 ESD Ltd manufactures components for the aircraft industry. It has prepared the following budget for July 2011:

| | | |
|-----------------------------------|---------------|-----------------------|
| | £ | £ |
| Direct materials | | 76 300 |
| Direct labour: | | |
| Slitting department (3 000 hours) | 27 000 | |
| Coiling department (4 200 hours) | 39 900 | |
| Assembly department (2 100 hours) | <u>16 800</u> | |
| | | <u>83 700</u> |
| Prime cost | | 160 000 |
| Factory overheads: | | |
| Slitting department | 9 600 | |
| Coiling department | 17 220 | |
| Assembly department | <u>6 300</u> | |
| | | <u>33 120</u> |
| Cost of production | | <u>193 120</u> |
| Administration expenses | | <u>28 968</u> |
| Total costs | | <u><u>222 088</u></u> |

Factory overheads are absorbed by departmental direct labour hour rates. Administration expenses are absorbed by a fixed percentage of the cost of production.

An enquiry reference 1912 has been received for the supply of components to Aerofit Electronics. The following direct costs have been estimated:

| | |
|---------------------|-------|
| | £ |
| Direct materials | 9 680 |
| Direct labour: | |
| Slitting department | 2 700 |
| Coiling department | 5 700 |
| Assembly department | 4 000 |

The direct labour costs are based on budgeted hourly rates.

REQUIRED

- (a) Calculate the budgeted overhead absorption rate for each production department. [3]
- (b) Prepare a detailed cost statement for enquiry reference 1912. [5]
- (c) All selling prices for ESD Ltd are based on a 10% net profit margin. Calculate the selling price to the customer for enquiry reference 1912. [2]
- (d) (i) Explain why ESD Ltd may have chosen to use the departmental direct labour hour rate to absorb overheads. [3]
- (ii) Discuss **three** alternative methods the company could have used to absorb overheads, indicating the circumstances in which each would have been appropriate. [9]

Total marks [22]

- 3 Tesjen plc is planning to expand its operations and is considering purchasing one of two existing businesses. The two businesses are:

Claman plc

Cost of business: £3 000 000, paid for immediately

Production: 150 000 units per annum

Sales: 60% of production will be sold to an existing customer who has agreed a contract for three years. Under the agreement the selling price will be £20 per unit for year one and year two, and £22 per unit for year three. Throughout the three year period it is estimated that the full remainder of production will be sold on the open market at the following prices.

| | | | |
|----------------------------|----|----|----|
| Year | 1 | 2 | 3 |
| Selling price per unit (£) | 22 | 23 | 24 |

Operating costs (including £300 000 depreciation each year): £2 000 000 in year one, £2 100 000 in each of years two and three.

Duncan plc

Cost of business: £4 800 000, paid for immediately

Production: 250 000 units per annum

Sales: A contract exists for year one, with 80% of production to be sold for £25 per unit. All other production for the three years will be sold on the open market at the following prices.

| | | | |
|----------------------------|----|----|----|
| Year | 1 | 2 | 3 |
| Selling price per unit (£) | 26 | 28 | 28 |

Operating costs (including £250 000 depreciation each year): £4 200 000 for years one and two, and £4 500 000 for year three.

The company's cost of capital is 12%.

Extract from present value table of £1 @ 12%.

| | |
|--------|------|
| Year 1 | 0.89 |
| Year 2 | 0.80 |
| Year 3 | 0.71 |

REQUIRED

- (a) Calculate for **each** option:
- (i) the net cash flow (excluding the initial cost of the purchase of the business) for each year. Show the cash inflow and cash outflow in your calculations; [6]
 - (ii) pay back (assuming even net cash flows throughout the year); [4]
 - (iii) net present value (assuming the net cash flows take place at the end of each year). [10]
- (b)* Discuss the benefits and limitations of payback and net present value as capital expenditure investment appraisal methods. [12]
- (c) Recommend to Tesjen plc which would be the better business to purchase. Justify your recommendation. [3]

Total marks [35]

4 The following is a summary of the balance sheet of Gerones Traders as at 31 May 2011:

| | £ | £ |
|-----------------------------|--------------|----------------|
| <i>Fixed Assets at cost</i> | | 200 000 |
| less depreciation | | <u>70 000</u> |
| | | 130 000 |
| <i>Current Assets</i> | | |
| Stock | 44 000 | |
| Debtors | 30 000 | |
| Bank | <u>3 000</u> | |
| | 77 000 | |
| <i>Current Liabilities</i> | | |
| Creditors | 11 000 | |
| Expenses | <u>4 000</u> | |
| | 15 000 | |
| <i>Working Capital</i> | | <u>62 000</u> |
| | | <u>192 000</u> |
| <i>Capital and Reserves</i> | | <u>192 000</u> |

The company is in the process of preparing budgets for the three months ending 31 August 2011, and the following information is available:

(i) Budgeted sales:

| | £ |
|----------------|--------|
| June 2011 | 66 000 |
| July 2011 | 54 000 |
| August 2011 | 57 000 |
| September 2011 | 60 000 |

Sales provide 50% gross profit on cost. Half the sales are always paid for in full in the month in which the sales are made. The remainder is always paid in full in the following month. No discount applies to sales. This policy has been in operation since January 2011.

- (ii) Purchases are always made to ensure that stock at the end of each month exactly covers the budgeted sales for the following month. Three quarters of purchases are paid for in the month received and a discount of 2% is received for prompt payment. The remainder is paid for in full in the following month.
- (iii) Expenses (excluding depreciation) are £12 000 per month. Two thirds are paid for in the month incurred and one third in the following month.
- (iv) A fixed asset which originally cost £22 000 is to be sold on 1 June 2011 for £3 400 cash. This fixed asset had been depreciated by £18 000.

A new fixed asset costing £24 000 is to be purchased on 1 July 2011, with 40% payable in July 2011 and the balance three months later.

Depreciation on all fixed assets is at the rate of 10% per annum on cost (accruing evenly throughout the year).

REQUIRED

- (a) For Gerones Traders, the Cash Budget for each of the months ending 30 June, 31 July and 31 August 2011. [12]
- (b)* For Gerones Traders, the Budgeted Trading and Profit and Loss Account for the three months ending 31 August 2011 **and** the Budgeted Balance Sheet as at 31 August 2011. [18]
- (c) Discuss **two** possible impacts of budgets on the managers in a business. [6]

Total marks [36]

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