
Management Accounting

2nd Year Examination

August 2010

Paper, Solutions & Examiner's Report



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Accounting Technicians Ireland
2nd Year Examination: August 2010
Paper : MANAGEMENT ACCOUNTING

Thursday 19th August 2010 – 2.30 p.m. to 5.30 p.m.

INSTRUCTIONS TO CANDIDATES

In this examination paper the €/ \pounds symbol may be understood and used by candidates in Northern Ireland to indicate the UK pound sterling and the €/ \pounds symbol may be understood by candidates in the Republic of Ireland to indicate the Euro.

Answer FIVE questions.

Answer all three questions in Section A. Answer any two of the three questions in Section B

If more than the required number of questions in Section B are answered, then only the requisite number, in the order filed, will be corrected.

Candidates should allocate their time carefully.

All workings should be shown.

All figures should be labelled, as appropriate, e.g. €/ \pounds 's, units etc.

Answers should be illustrated with examples, where appropriate.

Question 1 begins on Page 2 overleaf.

SECTION A
ANSWER ALL THREE QUESTIONS

QUESTION 1 (*Compulsory*)

CAINE Ltd is reviewing its portfolio of products and has provided you with the following flexible budget information in relation to budgeted sales for the product Rocelle.

| | Flexed Budget 1 | Flexed Budget 2 |
|---------------------|-----------------|-----------------|
| Sales (units) | 100,000 | 150,000 |
| Sales income | £/€1,200,000 | £/€1,800,000 |
| Net Profit / (Loss) | (£/€150,000) | £/€150,000 |

In order to assist the sales manager with further analysis you are asked to prepare a number of calculations relative to this product line.

Requirement

- (a) Calculate the fixed costs attributable to Rocelle. **6 Marks**
- (b) Calculate the Contribution/Sales ratio (contribution /margin ratio), expressed as a percentage, for Rocelle. **2 Marks**
- (c) Explain the term 'breakeven' and calculate the breakeven point for the product Rocelle expressed in both units and sales turnover. **4 Marks**
- (d) Explain the term 'margin of safety' and calculate the margin of safety offered by Flexed Budget 2. **4 Marks**
- (e) CAINE Ltd. is considering a policy of requiring a target profit of 20% of turnover on all business lines. Calculate the activity required by Rocelle to generate this target profit. **4 Marks**

Total 20 Marks

QUESTION 2 (*Compulsory*)

The Irish division of EXTEL Ltd has taken over the production and sale of the product EXTEL-10. The product is made to order, so no stocks are normally carried. All general overheads including marketing, distribution and administration are centrally costed.

You have been provided with the following budget data for the first quarter:

| | |
|--------------------------------------|----------------|
| Budgeted production / sales | 10,000 units |
| | €/£ |
| Sales Revenue | 950,000 |
| Production costs @ €/£77.00 per unit | <u>770,000</u> |
| Budgeted Profit | <u>180,000</u> |

| | |
|--------------------------------------|--------------|
| Standard cost sheet EXCEL-10 | €/£ |
| Materials 5 kg @ €/£5.00 | 25.00 |
| Direct Labour 2 hours @ €/£8.00 | 16.00 |
| Variable Overhead 2 hours @ €/£12.00 | 24.00 |
| Fixed Overhead 2 hours @ €/£6.00 | <u>12.00</u> |
| | <u>77.00</u> |

The actual results for the first quarter were as follows:

| | |
|------------------------------|----------------|
| Actual production/sales | 9,500 units |
| | €/£ |
| Sales | 874,000 |
| Materials (45,000kg) | 229,500 |
| Direct Labour (18,000 hours) | 142,200 |
| Variable Overhead | 215,000 |
| Fixed Overhead | <u>120,000</u> |
| Actual profit | <u>167,300</u> |

Requirement

(a) Prepare a statement identifying all relevant variances required to reconcile the actual with budgeted profit.

15 Marks

(b) Outline the key elements which comprise a Standard Cost Sheet.

5 Marks

Total 20 Marks

QUESTION 3 (Compulsory)

The following data relates to the projected overheads for a division of FIRE plc, which has two production departments and two service departments:

| | Machining | Finishing | Corporate Services | Support Services |
|------------------|-----------|------------|--------------------|------------------|
| Machine hours | 50,000 | 5,000 | - | - |
| Machine value | 2,100,000 | 250,000 | - | - |
| Floor area | 5000 sq m | 1000 sq m | 500 sq m | 500 sq m |
| No of staff | 25 | 30 | 10 | 5 |
| Labour hours | 37,500 | 45,000 | 15,000 | 7,500 |
| Labour rate | €/£10 | €/£12 | €/£15 | €/£10 |
| Direct overheads | €/£75,000 | €/£120,000 | €/£25,000 | €/£45,000 |

| Budgeted overheads | €/£ |
|---------------------------|------------|
| Machine costs | 160,000 |
| Machine depreciation | 90,000 |
| Premises costs | 476,000 |
| Indirect staff costs | 70,000 |

- Corporate services costs are apportioned on the basis of staff numbers.
- Support services costs are all related to machines and are apportioned on the basis of machine value.

The product Flame is produced in batches of 100 units and each batch has the following production data:

| | |
|--------------------------------|----------|
| Direct material | €/£ 550 |
| Direct labour - Machining dept | 15 hours |
| - Finishing dept | 20 hours |
| Machine hours - Machining dept | 30 hours |

Requirement

- (a) Detail a suitable basis of apportionment for each of the budget overheads.

2 Marks

- (b) Prepare a statement calculating the total overhead costs for each production department.

8 Marks

- (c) Calculate a suitable overhead absorption rate for the Machining and Finishing Department.

4 Marks

- (d) Calculate the total cost of producing a unit of Flame.

6 Marks**Total 20 Marks**

SECTION B
ANSWER TWO OUT OF THE FOLLOWING THREE QUESTIONS

Question 4

Prepare a report for your Production Manager outlining the purpose of budgetary planning and control, the budgeting process, and the benefits and problems associated with budgeting.

Total 20 Marks**Question 5**

N & T Ltd sells a range of summer garden furniture products, specialising both in a traditional and a modern range. While the traditional range has sold well for many years, recently sales have dwindled in favour of the modern range and the company has to make a decision about the future of its product ranges.

N & T Ltd have provided you with the following financial information for the most recent year:

| | Traditional €/£ | Modern €/£ | TOTAL €/£ |
|-----------------------------|------------------------|-----------------------|----------------------|
| Sales | 500,000 | 1,200,000 | 1,700,000 |
| Less Cost of Sales | <u>300,000</u> | <u>720,000</u> | <u>1,020,000</u> |
| Gross Profit (Contribution) | <u>200,000</u> | <u>480,000</u> | <u>680,000</u> |
| Direct fixed costs | | | |
| - Salaries | 150,000 | 150,000 | 300,000 |
| General fixed costs | | | |
| - Administration | 20,000 | 48,000 | 68,000 |
| - Premises | 50,000 | 120,000 | 170,000 |
| - Miscellaneous | <u>17,500</u> | <u>42,000</u> | <u>59,500</u> |
| Net Profit/(Loss) | <u>(37,500)</u> | <u>120,000</u> | <u>82,500</u> |

- The direct salaries relate to the cost of retail sales assistants and these are currently split 50:50 between the two products. It is estimated that at least 40% of the total salaries could be avoided if the company chooses to discontinue either product range.
- General fixed costs have presently been allocated between the products on the basis of sales revenue. General fixed costs are unavoidable and are expected to be unaffected by any change in the product range offering.
- It is estimated that by concentrating on the sale of the modern range, sales of this product could increase by 25% without affecting direct or general fixed costs.

Requirement:

(a) Prepare a note discussing the importance of relevant costs and revenues for decision making. **4 Marks**

(b) Prepare calculations on the alternatives in order to advise N & T Ltd on whether sales of the 'Traditional' product range should be continued.

12 Marks

(c) Discuss any other factors which the company may need to take into consideration.

4 Marks
Total 20 Marks

Question 6

Capp Ltd, a manufacturing company, has provided you with the following information for three of its products for the last financial quarter:

| | A1 | B2 | C3 |
|------------------------|-----------|-----------|-----------|
| Sales Price – per unit | €/£60 | €/£35 | €/£150 |
| Direct Materials | | | |
| - X | 2 kg | 0.5 kg | 2 kg |
| - Y | - | 1 kg | 2 kg |
| - Z | 2 kg | 1 kg | 5 kg |
| Direct Labour | | | |
| - Grade 1 | 1 hour | 0.5 hours | 3 hours |
| - Grade 2 | 1 hour | 0.5 hours | 1 hour |
| Sales – units | 15,700 | 26,475 | 4,980 |

- Direct material X costs €/£4 per kg: Direct material Y costs €/£5 per kg: Direct material Z costs €/£2 per kg
- Grade 1 labour costs €/£15 per hour: Grade 2 labour costs €/£12.50 per hour
- Variable overhead is incurred at a rate of 20% of direct labour costs
- Fixed overhead costs of €/£525,000 have been incurred and these are allocated to product lines on the basis of sales revenue.

Requirement:

- (a)** Prepare a profit and loss account for Capp Ltd for each product line and the company for the quarter.

8 Marks

- (b)** Prepare the journal entries required in a job costing system to record the sales revenue and the flow of labour costs described for product A1 above.

4 Marks

- (c)** Capp Ltd is considering introducing an activity based costing system to accurately record, monitor and control and overhead costs. Discuss the issues associated with implementing an activity based costing system, using examples where appropriate.

8 Marks**Total 20 Marks**

2nd Year Examination: August 2010

Management Accounting

Solutions

Students please note: These are suggested solutions only; alternative answers may also be deemed to be correct and will be marked on their own merits.

Solution 1

(a) FIXED COST CALCULATION

| | Flexed Budget 1 | Flexed Budget 2 | Per unit |
|--------------------------|--------------------------|------------------------|----------|
| | £ | £ | £ |
| Sales income | 1,200,000 | 1,800,000 | 12 |
| Variable Cost | <u>600,000</u> | <u>900,000</u> | <u>6</u> |
| Contribution | 600,000 | 900,000 | <u>6</u> |
| Fixed Costs | <u>750,000</u> | <u>750,000</u> | |
| Net Profit/(Loss) | <u>(£150,000)</u> | <u>£150,000</u> | |

- The increase in sales from Flexed Budget 1 to Flexed Budget 2 is 50,000 units. This results in increased sales revenue of £600,000 – hence the sales price per unit can be calculated at £12.
- The increase in profits from Flexed Budget 1 to Flexed budget 2 is £300,000. As only variable costs increase – these can be calculated at £300,000 (£600,000 - £300,000) – which is £6 per unit.
- The increase in profit of £300,000 represents the additional contribution of 50,000 units of additional sales – hence the contribution per unit is £6.
- Fixed costs can be calculated as the balancing figure in either Budget as follows:
Contribution – Net Profit = Fixed Costs

Fixed Costs = £750,000

(b) CONTRIBUTION/SALES RATIO – CONTRIBUTION/MARGIN RATIO

$$\frac{\text{Contribution per unit}}{\text{Sales price per unit}} \times 100 = \frac{6}{12} \times 100 = 50\%$$

Solution 1 (Cont'd)**(c) BREAKEVEN POINT**

Breakeven Point is the term used in cost volume profit analysis for the point at which neither profit nor loss occurs. At breakeven, contribution exactly covers the fixed costs of an organisation or unit. Below breakeven, the organisation will make a loss. The breakeven point can be expressed in the number of sales units or in sales revenue.

To find the number of units required to breakeven, the fixed cost is divided by the contribution per unit. In a multi product situation the break even revenue is calculated by dividing fixed cost by the contribution sales value

$$\frac{\text{Fixed Costs}}{\text{Contribution per unit}} = \frac{750,000}{6} = 125,000 \text{ units} = \text{£}1,500,000 \text{ sales}$$

(d) MARGIN OF SAFETY

The margin of safety is the difference between the level of budgeted sales and the level of breakeven sales. It expresses how close sales are to breakeven. The Margin of Safety is a measure of risk – in that the lower it is, the riskier the potential outcome.

Margin of Safety = Budgeted Sales Revenue – Breakeven Sales Revenue

$$\begin{aligned} &= 1,800,000 \text{ revenue} - 1,500,000 \\ &= \text{€}/\text{£}300,000 \text{ sales} \\ &= 25,000 \text{ units} \end{aligned}$$

$$\text{Expressed as a percentage} = \frac{1,800,000 - 1,500,000}{1,800,000} = 16.66\%$$

(e) LEVEL OF ACTIVITY TO YIELD 20% TURNOVER

Calculation of Revised Contribution/Sales Ratio

| | |
|--------------------|---|
| Original C/S ratio | 50% |
| Profit requirement | 20% |
| Revised C/S Ratio | 30% (for calculation of target profit) |

Revised breakeven calculation to achieve target profit calculation

$$\frac{\text{Fixed Costs}}{\text{Revised C/S ratio}} = \frac{750,000}{30\%} = \text{£}2,500,000 \text{ sales} = 208,333 \text{ units}$$

SOLUTION 2

(a)

Sales Price Variance

(Actual Sales Quantity x Actual Price) – (Actual Sales Quantity x Standard Price)

| | | | | |
|-----------------|---|-----------------|---|----------------------|
| (9,500 x 92.00) | - | (9,500 x 95.00) | = | |
| 874,000 | - | 902,500 | = | £/€28,500 adv |

Sales Volume Variance – using margin

(Actual Sales Quantity x Standard profit per unit) – (Standard Sales Quantity x Standard profit per unit)

| | | | | |
|-----------------|---|------------------|---|---------------------|
| (9,500 x 18.00) | - | (10,000 x 18.00) | = | |
| 171,000 | - | 180,000 | = | £/€9,000 adv |

Material price variance

(Actual quantity of inputs x Actual price) – (Actual quantity of inputs x Standard Price)

| | | | | |
|-----------------|---|-----------------|---|---------------------|
| (45,000 x 5.10) | - | (45,000 x 5.00) | = | |
| 229,500 | - | 225,000 | = | £/€4,500 adv |

Materials usage variance

(Actual quantity of inputs x Standard price) – (Standard quantity required for actual output

| | | | | |
|-----------------|---|-------------------|---|----------------------|
| (45,000 x 5.00) | - | (9500 x 5 x 5.00) | = | |
| 225,000 | - | 237,500 | = | £/€12,500 fav |

Labour rate variance

(Actual Hours of input x Actual Rate) – (Actual Hours of input x Standard rate)

| | | | | |
|-----------------|---|-----------------|---|---------------------|
| (18,000 x 7.90) | - | (18,000 x 8.00) | = | |
| 142,200 | - | 144,000 | = | £/€1,800 fav |

Labour efficiency variance

(Actual Hours of input x Standard rate) – (Standard hours required for actual output x Standard rate)

| | | | | |
|-----------------|---|--------------------|---|--------------------|
| (18,000 x 8.00) | - | (9,500 x 2 x 8.00) | = | |
| 144,000 | - | 152,000 | = | £/€8000 fav |

Variable overhead expenditure variance

(Actual variable Overhead) – (Actual hours x Variable Overhead Recovery Rate)

| | | | | |
|---------|---|------------------|---|--------------------|
| 215,000 | - | (18,000 x 12.00) | = | £/€1000 fav |
|---------|---|------------------|---|--------------------|

Variable overhead efficiency variance

(Actual hours x Var. Overhead rec. Rate) – (Standard Hours x Var. Overhead rec. Rate)

| | | | | |
|------------------|---|--------------------|---|----------------------|
| (18,000 x 12.00) | - | (9500 x 2 x 12.00) | = | |
| 216,000 | - | 228,000 | = | £/€12,000 fav |

Fixed overhead expenditure variance

(Actual Fixed Overhead expenditure) – (Budgeted fixed overhead expenditure)

| | | | | |
|---------|---|---------|---|-----|
| 120,000 | - | 120,000 | = | nil |
|---------|---|---------|---|-----|

Fixed overhead efficiency variance

(Budgeted fixed overhead expenditure) – (Standard hours x fixed overhead absorption rate)

| | | | | |
|---------|---|-------------------|---|---------------------|
| 120,000 | - | (9500 x 2 x 6.00) | = | |
| 120,000 | - | 114,000 | = | £/€6,000 adv |

SOLUTION 2 (Cont'd)**Statement of Reconciliation of Budget to Actual Profit**

| | £ | £ |
|--|------------|----------------|
| Budget Profit | | 180,000 |
| Sales price variance | 28,500 adv | |
| Sales volume variance | 9,000 adv | |
| Material price variance | 4,500 adv | |
| Materials usage variance | 12,500 fav | |
| Labour rate variance | 1,800 fav | |
| Labour efficiency variance | 8,000 fav | |
| Variable overhead expenditure variance | 1,000 fav | |
| Variable overhead efficiency variance | 12,000 fav | |
| Fixed overhead efficiency variance | 6,000 adv | -12700 |
| Actual Profit | | 167,300 |

(b)

Where a standard costing system is used, this entails the preparation of a standard cost sheet for each product.

The key elements of a standard costs sheet includes:

- Direct Materials - detail to include specific type, quantity and price
- Direct Labour – detail to include grade, number of hours and rate of pay applicable
- Variable Overhead – total variable overhead (analysed) and relevant absorption method and rate
- Fixed Overhead – total fixed overhead (analysed) and relevant absorption method and rate

An example of a standard cost sheet

Product Name _____

| | Details | Quantity | Price | |
|---------------------|--------------|----------|---------|--------|
| Materials | Input 1 | 5 kg | 5.00/kg | 10.00 |
| | Input 2 | 2 kg | 4.00/kg | 8.00 |
| Labour | Grade 5 | 10 hours | 8.00/hr | 80.00 |
| Variable Overhead | Labour hours | 10 hours | 2.00/hr | 20.00 |
| Fixed Overhead | Labour hours | 10 hours | 4.00/hr | 40.00 |
| Total Standard Cost | | | | 158.00 |
| Selling price | | | | 250.00 |
| Standard profit | | | | 92.00 |

Solution 3**(a) Basis of Apportionment**

| | |
|----------------------|---------------|
| Machine costs | Machine hours |
| Machine depreciation | Machine value |
| Premises costs | Floor area |
| Indirect staff costs | Staff numbers |

(b) Statement of Overheads

| | Machining €/£ | Finishing €/£ | Corporate Services €/£ | Support Services €/£ |
|---------------------------------|------------------|------------------|------------------------------|----------------------------|
| Direct Overheads | 75,000 | 120,000 | 25,000 | 45,000 |
| Machine costs | 145,450 | 14,550 | | |
| Machine depreciation | 80,425 | 9,575 | | |
| Premises Cost | 340,000 | 68,000 | 34,000 | 34,000 |
| Indirect staff costs | 25,000 | 30,000 | 10,000 | 5,000 |
| | 665,875 | 242,125 | 69,000 | 84,000 |
| Corporate Services - allocation | 31,365 | 37,635 | (69,000) | |
| Support Services - allocation | 76,365 | 7,635 | | (84,000) |
| Total Overhead Cost | 773,605 | 287,395 | | |

(c) Overhead absorption rate

| | Machining €/£ | Finishing €/£ |
|---------------------------------|------------------|------------------|
| Total Overhead Cost | 773,605 | 287,395 |
| Machine Hours | 50,000 | |
| Labour Hours | | 45,000 |
| Overhead Absorption Rate | 5.47 | 6.39 |

(d) Total cost - Flame

| | | €/£ |
|--------------------------|------------|----------------------------|
| Batch costs | | |
| Direct materials | | 550.00 |
| Labour costs - machining | 15 x 10 | 150.00 |
| - finishing | 20 x 12 | 240.00 |
| Overheads - machining | 30 x 15.47 | 464.10 |
| - finishing | 20 x 6.39 | 127.80 |
| | | 1531.90 = 100 units |
| Per unit | | €/£15.32 |

Solution 4**REPORT TO PRODUCTION MANAGER ON BUDGETING**

The purpose of this report is to outline key aspects of budgetary planning and control systems and to discuss the benefits and problems associated with budgeting. I have used examples relevant to a production environment which may assist your understanding.

Planning

Planning is a key activity of a manager to ensure the future of the business or organisation. A budget can be defined as a plan expressed in monetary terms. Planning normally involves the establishment of goals or targets and then deciding what actions are necessary to achieve them. Planning can be short or long terms. Short term planning (up to 12-36 months) should be supported by a budget showing the expected financial implications of the decision taken and identification of the resources needed to achieve those targets. Long term planning is usually more strategic in nature and will be supported by sensitivity analysis on headline financial projections.

Control

Once prepared and approved, the budget can then be used to monitor and control performance by comparing actual results with the relevant budgets. This comparison should be utilised to evaluate operational and managerial performance. To complete the control process, management need to respond to variances between actual and budgeted result by taking corrective action and/or changing the plan (including the budget) to address changed circumstances.

Budgetary process

The budget is prepared from the business plans and should be approved prior to the budget period. It will normally show income, expenditure, and the capital to be employed. It may be prepared showing incremental effects on former budgets or actual figures, or be compiled by zero-based budgeting techniques (where all costs must be justified). The size and complexity of the business will influence the complexity of the budgeting process. Steps involved in this process can include establishing guidelines, scenario analysis, detailed calculations, negotiation and budget revision. Some organisations establish a Budget Committee to oversee that budgetary process and to make decisions about prioritisation of resources.

In a typical sales and manufacturing environment the budgetary process will comprise the following steps:

- The sales budget, setting out the quantities of each product and prices is a key driver for other operational budgets
- The production and stock budgets will translate the sales requirements into production targets, after adjusting for stocks of finished goods
- The materials budget will establish expected usage and purchase costs of materials required by the production process
- The labour budget will establish the estimated number of hours and labour rates required by the production process
- The overhead budgets will estimate the various elements of fixed and variable overheads associated with production and other aspects of the business
- The capital budget will detail plans for investment in equipment, machinery, buildings and vehicles to support the business needs
- The cash budget will consider the timing of cash-flows from sales and expenditures
- The master budget brings all the financial plans together in a projected Income and expenditure account, and projected balance sheet

Solution 4 (Cont'd)

Other management accounting tools and techniques are often used to support budgetary planning and control, including overhead absorption techniques and standard costing activities.

Benefits

The benefits of good budgetary planning and control include

- Improved co-ordination

The preparation of formal budget plans requires detailed planning - this in turn requires the co-ordination of activities within a section or department or the business as a whole.

- Clarification of authority and responsibility

Budget preparation requires clarification of manager responsibilities. A budget can provide clear guidelines for managers and translate organizational objectives into specific tasks related to individual managers.

- Communication

As the budgetary process will involve all levels of management, it provides a vehicle for communication - and ultimately should be communicated to all staff. Negotiation skills can be developed through the budgetary process.

- Motivation

The process of setting targets and comparing actual results with budget can be a motivating factor for staff, if correctly handled by management. This may include participation to achieve goal congruence. Similarly, budgetary monitoring processes can be used to encourage and motivate staff.

- Efficiency

Corrective action prompted by control activities can improve the business efficiency - this may involve improving an adverse variance, or developing a favourable variance. Management by exception techniques facilitated by budgeting can result in more efficient use of manager time.

- Integration

The integration of budgets can assist with cashflow and working capital management and well as general integration within an organisation.

Problems

Any business process may face problems and some of those associated with poor budgetary planning and control include

- Inefficiency

Ineffective budgetary processes may result in budgets with padding or slack elements. Generous budgets may result in futile spending in order to justify future budgetary allocations. These issues have implications on general cost control in the organisation

- Measuring change

Variance information may arise because of various changing circumstances and/or poor forecasting. Similarly, budgets which are developed internally and may not respond to changing external market circumstances

- Incremental approaches

Plans which are based on purely incremental approaches can place low value on new or developing activities and carry forward inefficiencies, rather than innovating and encouraging change. Additionally, well documented plans can be a contributory factor to inertia and a lack of flexibility with an organization

- Human aspects

Budgetary systems which are not well communicated can cause employee relations difficulties and impact on the morale of the organization

- Administration

Solution 4 (*Cont'd*)

Budget processes can be complex and administratively time consuming and costly. Budget guidelines may be applied universally, rather than being directed at specific target areas.

Conclusion

Good budgeting processes can be extremely beneficial for a business or organisation as they provide a focus from a management and operational perspective. Budgeting is regarded as a good management tool and an essential element of good governance in an organisation to minimise the risk of poor financial performance

Question 5

(a)

The relevant costs and revenues for decision making purposes are those which can be used to compare different options available. A decision entails a choice between at least two alternatives. Costs and revenues which differ between the alternatives are those which are affected by the decisions. If a cost or revenue are the same regardless of the alternative selected, then they are known as an irrelevant cost or revenue.

Relevant costs and revenues are used by managers for decision making concerned with special pricing, make or buy decisions, limiting resource decisions and product or business continuation issues.

Costs and Revenues for decision making include differential cost/revenues; incremental costs/revenues; avoidable and unavoidable costs; sunk costs and opportunity costs.

(b)

Option 1 – Status Quo

Overall total profits as detailed **€ / £82,500**

Option 2 – Discontinue 'Traditional' product range

| | € / £ | € / £ |
|---|--------------|----------------------------|
| Relevant revenues | | |
| - Current Sales | 1,200,000 | |
| - Incremental Sales | 300,000 | |
| Total Revised Sales | | 1,500,000 |
| Cost of Sales (60%) | | 900,000 |
| Gross Profit | | 600,000 |
| Differential costs | | |
| Direct Fixed Costs (300,000 - 40%) | | 180,000 |
| Unavoidable costs | | |
| Total General Fixed Costs (68,000 + 170,000 + 59,500) | | 297,500 |
| Net Profit | | <u>€ / £122,500</u> |
| Increase in Net Profit following discontinuation of Traditional range | | <u>€ / £40,000</u> |

(c)

Before making a decision on discontinuing a product line there are a number of qualitative factors which should be considered. These factors generally cannot be expressed in pure monetary terms, but often can be equally as important. Qualitative factors can include

- The impact on employees
- Existing customer reaction
- Other potential market opportunities
- Competitors response

Operational and production issues

Solution 6**(a) CAPP Ltd – Profit and Loss Account**

| | A1 €/£ | B2 €/£ | C3 €/£ | Total €/£ |
|-------------------|-----------|-----------|-----------|--------------|
| Sales | 942,000 | 926,625 | 747,000 | 2,645,625 |
| Direct Materials | | | | |
| - X | 125,600 | 52,950 | 39,840 | 218,390 |
| - Y | - | 132,375 | 49,800 | 182,175 |
| - Z | 62,800 | 52,950 | 49,800 | 165,550 |
| Direct Labour | | | | |
| - Grade 1 | 235,500 | 198,562 | 224,100 | 658,162 |
| - Grade 2 | 196,250 | 165,469 | 62,250 | 423,969 |
| Variable Overhead | 86,350 | 72,806 | 57,270 | 216,426 |
| Gross Profit | 235,500 | 251,513 | 263,940 | 750,953 |
| Fixed overhead | 191,185 | 183,880 | 149,935 | 525,000 |
| Net Profit | 43,815 | 67,633 | 114,005 | 225,453 |

(b) Job Costing - Journal EntriesSales Revenue

| | | | |
|----|---------------------|---------|---------|
| DR | Accounts Receivable | 942,000 | |
| CR | Sales Control a/c | | 942,000 |

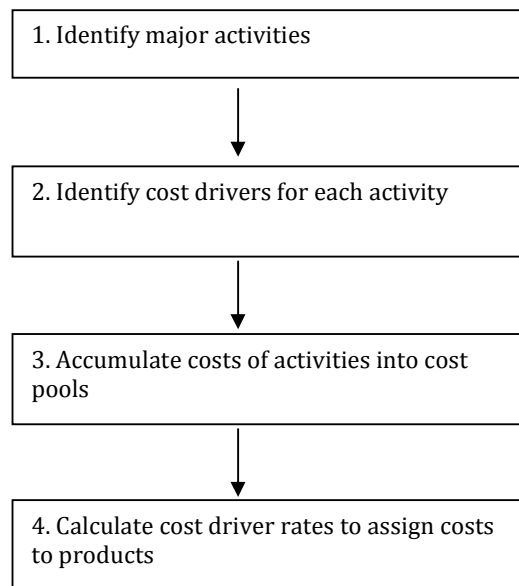
Labour Costs

| | | | |
|----|----------------------|---------|---------|
| DR | Work in Progress a/c | | |
| | - Grade 1 labour | 235,500 | |
| | - Grade 2 labour | 196,250 | |
| CR | Wages Control a/c | | 431,750 |

Solution 6 (Cont'd)**(c) Activity Based Costing**

Activity Based Costing (ABC) is used to allocate overheads to products, based on the drivers of the cost. This approach is appropriate where overheads represent a significant amount of costs and they are driven by a variety of factors, which are not necessarily volume related factors. The primary objective of ABC is to provide more accurate costing of products and services in order to assist better decision making.

There are four main steps involved in setting up an Activity Based Costing (ABC) system



The basic principle of ABC assumes that overheads are caused by activities. Overheads are accumulated and grouped together in cost pools and then allocated to the product using the appropriate driver. The cost driver is the activity that gives rise to the overhead. Hence the product which uses more of the activity bears a greater proportion of the relevant overhead.

Example of cost pools and drivers

Set Up costs – No of set ups

Inspection costs – No of inspections

Stores costs – No of stock issues

The benefits associated with an ABC system are gained from the emphasis placed upon the activities causing costs, which can lead to improved efficiency. The improved accuracy of costs can lead to improved decision making. Conversely, difficulties can arise as ABC systems are expensive initially and also to maintain, requiring data collection and this can also have behavioural implications.

2nd Examination: August 2010

Management Accounting

Examiner's Report

A relatively small number of candidates presented for this re-sit paper. The scripts divided into a number of categories – a small number of very good submissions, a number of borderline cases and a number of extremely poor efforts. This has resulted in an average mark of 43.5% and a pass rate of just 35%.

The performance per individual question was as follows:

| | Question 1 | Question 2 | Question 3 | Question 4 | Question 5 | Question 6 |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| No attempting | 103 | 109 | 103 | 77 | 49 | 83 |
| Ave. % | 36.02% | 39.31% | 55.19% | 51.95% | 50.82% | 47.53% |

The questions were designed assess the module objective and key learning outcome – the students knowledge and technical competency in management accounting to support business functions, activities and decision making, and covered all areas of the syllabus.

Question 1

This question examined cost- volume profit and breakeven analysis in the context of management accounting for decision making. It required a series of calculations to be prepared applying theory in this area. Some candidates were not able to present the formulae required for these calculations, even before application and as a result scored poorly. Others, who did present formulae and were awarded marks accordingly, were not able to apply this to the information provided. This is an area which merits further examination in light of the overall poor performance.

Question 2

This question assessed the subject area of variance analysis – a key element of the standard costing, budgetary planning and control section of the syllabus. Again the standard varied from those who were not able to present the variance formulae and struggled with the question, to those who produced the formulae without fully applying it and the minority who were able to attempt the relevant calculations. Part (b), required the elements of a standard cost sheet was answered to an acceptable level – but few gave a detailed solution, supported by an example which would have attracted the full mark allocation. It is disappointing that performance was generally poor in this important subject area.

Question 3

This question examined overhead apportionment and service department costing, through the various stages to full product costing. This question attracted the highest mark on the paper. Errors generally occurred in the calculation of the overhead absorption rate for each department and the application of this in part (d).

Question 4

This was a popular question in the optional section and it required a narrative discussion on budgetary planning and control. Candidates who scored relatively well used the requirements of the question to structure their answer. Those who scored less well did not provide enough detail or did not address key aspects of the subject

Question 5

This was a less popular question, but a number of those who attempted this question scored well. The question examined the issue of relevant costing in the context of a product elimination scenario. The calculation and presentation of relevant and appropriate information is an important support for decision making and can require the application of common business sense. Therefore, while students may be apprehensive of this subject, marks can be easily gained, if correctly approached. Some candidates did not answer part (c) while others were able to produce a comprehensive bullet pointed answer.

Question 6

This question examined practical job costing together with some theory in relation to activity based costing. As with other questions, many candidates did not complete all required elements of the question leaving themselves at a disadvantage.