



Examiner's report

MA2 Managing Costs & Finances

For CBE and paper exams covering July to December 2013

General Comments

The examination paper consisted of 50 multiple-choice questions, each worth 2 marks.

The three questions below, covering different aspects of the syllabus, are examples of questions that candidates found difficult. This report explains, for each sample question, the basis for the correct answer and for each of the incorrect options selected by some candidates.

Sample Questions for Discussion

Example 1

A predetermined fixed production overhead absorption rate of \$12.60 per unit is used by a business.

Profits calculated for a period were:

<i>Using absorption costing</i>	<i>\$125,100</i>
<i>Using marginal costing</i>	<i>\$106,200</i>

Sales volumes in the period were:

<i>Budgeted</i>	<i>30,000 units</i>
<i>Actual</i>	<i>28,000 units</i>

What was the actual production volume in the period?

- A*** *28,500 units*
- B*** *26,500 units*
- C*** *31,500 units*
- D*** *29,500 units*

This question tested item C2d in the Study Guide. It required a knowledge and understanding of the difference between the absorption and marginal costing methods and how that difference impacts on the respective profits reported for a period.

The essential difference between the two methods, in terms of their impact on profits, is that fixed production overheads are treated as a product cost in absorption costing and as a period cost in marginal costing. Profits reported for a period will, as a consequence, be different between absorption and marginal costing if there is a change in finished goods inventory in a period. This is because a share of the fixed production overheads are included in the finished goods inventory valuation using absorption costing but not using marginal costing.

The correct answer to this question, Option D, was the most popular answer but was, nevertheless, only selected by a minority of candidates. The difference in profits, comparing absorption costing with marginal costing, is \$18,900 (\$125,100 - \$106,200). The higher absorption costing profit means that more units were produced than sold, i.e. more fixed production overheads were in closing inventory than in opening inventory. The increase in finished goods inventory is 1,500 units (\$18,900 higher profit ÷ \$12.60 fixed production overheads per unit). The actual production volume is, therefore, 29,500 units (actual sales 28,000 units plus the increase in inventory of 1,500 units).

In Option B the error here was deducting the inventory change from, rather than adding it to, the number of units actually sold.

Option C, and Option A both adjusted the budgeted, rather than the actual, sales volume by the change in inventory. In the case of Option A, a further error was that the inventory adjustment was deducted from, rather than added to, the sales.

Example 2

A company with a single product, which has a selling price of \$12 per unit, has a breakeven point of 20,000 units. Fixed costs total \$100,000.

How many units, in excess of breakeven, have to be sold to achieve a net profit of \$30,000?

- A*** *6,000*
- B*** *2,500*
- C*** *26,000*
- D*** *10,833*

This question tested item D1e in the Study Guide and required a thorough understanding of the factors in CVP analysis. The key with this question was recognising that calculation of the contribution per unit of the company's single product is required, and being able to calculate the figure of \$5 per unit and then use it correctly (see below).

At the company's breakeven point the total contribution is \$100,000 (equal to the fixed costs) and, therefore, the contribution per unit is \$5 ($\$100,000 \div 20,000$ units). A further contribution of \$30,000 is required for a net profit of \$30,000 and, therefore, a further 6,000 units have to be sold in excess of breakeven ($\$30,000 \div \5 per unit). This is Option A Option C calculates the total sales units required rather than the units in excess of breakeven (i.e. total contribution $\$130,000 \div \5 per unit = 26,000 units or breakeven 20,000 units + extra 6,000 units = 26,000 units).

Option B and Option D are both calculated using the unit selling price rather than the unit contribution (e.g. Option B, $\$30,000 \div \12 per unit = 2,500 units). Option D also calculated the total sales rather than the sales in excess of breakeven.

Example 3

A business is considering whether to quote for a one-off job. The job would require 1,500 kilograms (kg) of material M. The business has 2,000 kg of material M in inventory, which were purchased for \$3.60 per kg. Other possible uses for the existing inventory of material M are to sell it as it is for \$2.40 per kg or to rework it at a cost of \$1.20 per kg so that it can be sold for \$4.00 per kg.

What is the opportunity cost per kg of using material M in the one-off job?

- A*** *\$4.00*
- B*** *\$2.40*
- C*** *\$3.60*
- D*** *\$2.80*



This question tested item D2f in the Study Guide on the subject of relevant costs for decision making. The fairly even spread of candidate selections across the four options indicates a widespread misunderstanding of the concepts in this area.

The opportunity cost of using material M in the one-off job is the cost (lost benefit) of the next best alternative foregone. If material M is used in the one-off job then the next best alternative that would have to be foregone is to rework the existing material that is held in inventory and then to sell it (\$4.00 per kg selling price - \$1.20 per kg rework costs = \$2.80 per kg). This would provide more benefit than the alternative of selling the existing material as it is for \$2.40 per kg.

Option D is thus the correct answer

Majority of candidates selected Option A, which, whilst based on the correct alternative use of the material, fails to reflect the correct opportunity cost because it does not allow for the cost of rework.

Some candidates incorrectly chose Option B which reflects the benefit of selling the existing material as it is. This is not the best alternative use of the material.

Finally, a minority of candidates chose Option C which was the cost of the existing material when it was purchased. This is referred to as a sunk cost because it has already occurred and is, as a consequence, irrelevant for decision making.