

Examiner's report

MA2 Managing Costs & Finance

June 2012



General Comments

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

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

SAMPLE QUESTIONS FOR DISCUSSION

Example 1

Costs are determined for different manufactured jobs. A mark-up is then applied to each total job cost (manufacturing and non-manufacturing costs) in order to achieve a target profit margin. The completed Job 163 has total manufacturing costs of \$734. Non-manufacturing overheads are absorbed at 10% of selling price. The target profit margin is 6% of selling price.

What is the selling price of Job 163 (to the nearest \$)?

- A \$874
- B \$851
- C \$864
- D \$859

This question tested Section C3c in the Study Guide.

If non-manufacturing overheads are 10% of selling price and target profit margin is 6% of selling price then the manufacturing costs must be 84% ($100 - 10 - 6$) of selling price. Thus the correct answer is $\$734 \div 0.84 = \874 (Option A). Only 26% of candidates correctly chose this option.

The most popular, but incorrect, option was Option B (selected by 32% of candidates). This incorrectly assumes that the non-manufacturing costs and the target profit are a combined 16% of manufacturing costs, not 16% of selling price. Thus $\$734 \times 1.16 = \851 .

Options C and D (42% of candidates) combined aspects of Options A and B. Option C was $\$734 \div 0.9 \times 1.06 = \864 . Option D was $\$734 \times 1.1 \div 0.94 = \859 .

Example 2

A company incurs the following unit costs on its single product:

	\$ per unit
Prime costs	10.35
Variable manufacturing overheads	1.05
Fixed manufacturing overheads	7.20
Variable non-manufacturing overheads	0.90
Fixed non-manufacturing overheads	2.95

23,000 units of the product were sold in a period during which 23,600 units were manufactured. Inventory of the product at the end of the period was 940 units.

What is the difference in profit for the period comparing absorption costing with marginal costing?

- A \$4,320
- B \$6,090
- C \$6,768
- D \$9,541

This question tested Section C2e in the Study Guide.

The reason that profits in a period may differ, depending upon whether absorption costing or marginal costing is applied, is because of differences in inventory valuation. Fixed manufacturing overheads are treated as product costs in absorption costing, and are thus included as part of the cost of finished goods inventory, but are treated as period costs in marginal costing and written off as incurred. If there is a change in finished goods inventory in a period then profits will be different between absorption costing and marginal costing. If inventory increases in a period the absorption costing profit will be higher, because additional fixed manufacturing overheads are carried over to the following period, and vice versa for a reduction in inventory. Candidates' selections indicated a fairly widespread and varied misunderstanding of the reasons for profit differences.

28% of candidates correctly chose Option A. The profit difference is \$4,320 (absorption costing higher because of the increase in inventory although this was not required to be known) which is the inventory change of 600 units multiplied by the \$7.20 fixed manufacturing overheads per unit.

The most popular choice was Option B (31% of candidates). This incorrectly included a share of all of the fixed overheads (not just fixed manufacturing overheads) in the valuation of inventory using absorption costing (600 units \times \$10.15 per unit = \$6,090).

Option C was also popular (26% of candidates). This was incorrect because it was based on the whole of the inventory (940 units) and not on the change in inventory (600 units). Thus 940 units \times \$7.20 per unit = \$6,768.

Finally, 15% of candidates incorrectly chose Option D. This option had both the error in Option B and the error in Option C. Thus 940 units \times \$10.15 per unit = \$9,541.

Example 3

Which of the following statements support the use of spreadsheets in budgeting?

- (1) *The effect on revenues, costs and profit, of changed assumptions regarding budget variables, can be identified easily and quickly*
- (2) *Data input errors can be identified easily and quickly*
- (3) *Errors in formulae will always be highlighted*

- A 1 only
- B 1 and 2
- C 2 and 3
- D 1 and 3

This question tested Section F1a in the Study Guide.

Whilst the correct answer, Option A, was the most popular option (30% of candidates), candidates' selections were spread fairly evenly across all four options (B 24%, C 19%, D 27%). This indicates that candidates are not



clear on what spreadsheets can or cannot be expected to do. It is not true to state that the use of spreadsheets enables data input errors to be identified easily and quickly, nor is it true to state that errors in formulae will always be highlighted. Even if such errors are spotted it will not generally be the result of using spreadsheets. A major benefit of the use of spreadsheets, however, is the facility it provides for 'what-if' analysis (for example, changed assumptions in budgeting).

Example 4

90% of a company's sales are on credit with the balance sold for cash. 50% by value of credit customers pay in the calendar month of sale with the remainder within a further month. Trade receivables at the end of Month 2 were \$92,000 and sales in Months 2 to 4 are forecast to be:

Month 2	\$164,000
Month 3	\$215,000
Month 4	\$189,000

What are the expected cash receipts from sales in Month 3?

A	\$182,200
B	\$192,050
C	\$189,500
D	\$233,450

This question tested Section E3c in the Study Guide.

Questions, like this one, on cash budgeting require candidates to follow instructions about the timing of cash flows. 39% of candidates correctly chose Option B.

Looking at the data in the question, the trade receivables of \$92,000 at the beginning of Month 2 represent 45% (0.9×0.5) of the sales in Month 1 and would be expected to be received in Month 2 along with the cash sales in Month 2 (10% of the total sales in Month 2) plus half of the credit sales in Month 2 (45% of the total sales in Month 2). Thus the expected cash receipts in Month 2 would be $\$92k + (\$164k \times 0.55) = \$182,200$. This is Option A. This timing error was made by 13% of candidates.

The receipts in Month 3 (the requirement of the question) would comprise the cash sales in Month 3 (10% of the total sales in Month 3) plus half of the credit sales in Month 3 (45% of the total sales in Month 3) plus the remaining 45% of the total sales in Month 2 (50% of the credit sales in Month 2). Thus receipts in Month 3 would be expected to be $(\$215k \times 0.55) + (\$164k \times 0.45) = \$192,050$.

Option C ignored the cash sales, assuming instead that all of the sales were on credit. As a result 50% of each month's sales would be received in the calendar month of sale and 50% in the month following. Thus, using this assumption, the cash receipts in Month 3 would be $(\$164k \times 0.5) + (\$215k \times 0.5) = \$189,500$. 32% of candidates incorrectly selected this option.

Option D used the figure of \$192,050 from Option B but then incorrectly added 45% of the trade receivables from the beginning of Month 2. Thus $\$192,050 + (\$92k \times 0.45) = \$233,450$. This is inconsistent logic which resulted in an impossibly large figure (given the amount of the sales in each month) which should have been recognised as such by the 16% of candidates who incorrectly chose Option D.