



Examiner's report

F2/FMA Management Accounting

For CBE and Paper exams covering January to June 2013

General Comments

As always, excellent scores were achieved by some candidates. I congratulate both them and their teachers. I offer my commiserations to those who were not successful.

The structure of the exam was the same as in previous sittings, a two-hour paper containing 50 multiple choice questions – each worth 2 marks. The mix of questions across syllabus heads was in line with both the CBE demo and the pilot paper.

The worst answered questions were calculation based. The worst answered questions mainly related to study guide headings D3 a and b, the reconciliation of budgeted and actual profits. I have mentioned this as an area of weakness in previous reports and gave an example of a questions in this area that candidates have struggled with in December 2012 examiner report. The weakness in this area continues and I urge candidates to revise this area well and do the question in the December 2012 report.

The best answered questions were narrative.

As is usually the case for this paper, F2 candidates on average, performed better than FMA candidates. The following questions are ones where the performance of candidates was very weak. Each of these questions relate to a mainstream topic in the Study Guide.

Sample Questions for Discussion

Example 1

An additive time series has the following trend and seasonal variations:

Trend

$$Y = 4,000 + 6X$$

Where

Y = sales in units

X = the number of quarters, with the first quarter of 2014 being 1, the second quarter of 2014 being 2 etc.

Seasonal variation

Quarter	1	2	3	4
Quarterly variation (units)	-4	-2	+1	+5

What is the forecast sales volume for the fourth quarter of 2015?

A 4,029

B 4,043

C 4,048

D 4,053

The question relates to study guide reference C2k.

The correct answer is D. This is calculated by firstly computing the trend for fourth quarter of 2015 ($Y = 4,000 + 6 \times 8 = 4,048$) and then adding a seasonal adjustment of 5, to give forecast sales of 4,053.



The most popular choice was alternative C. This indicates that many candidates were able to calculate the trend, but failed to apply the seasonal adjustment. Distractors (the incorrect answers to objective test questions) are often based upon partially complete calculations. Candidates are advised not to stop thinking as soon as they generate a number that corresponds with one of the options offered. A good way of avoiding this trap is not to look at the answers until you are satisfied that you have fully completed your calculation.

Answer A used a value of 4 for period 4 of 2015 and generated the wrong trend figure, but then correctly processed the seasonal adjustment.

Finally a minority of candidates selected answer B, indicating that they could correctly calculate trend but subtracted rather than added the seasonal adjustment.

Example 2

A company has the following budgeted costs and revenues:

	\$ per unit
Sales price	50
Variable production cost	18
Fixed production cost	10

In the most recent period, 2,000 units were produced and 1,000 units were sold. Actual sales price, variable production cost per unit and total fixed production costs were all as budgeted. Fixed production costs were over absorbed by \$4,000. There was no opening inventory for the period.

What would be the reduction in profit for the period if the company had used marginal costing rather than absorption costing?

- A \$4,000
- B \$6,000
- C \$10,000
- D \$14,000

The correct answer is C. This can be calculated by multiplying the increase in finished goods inventory of 1,000 units (2,000 units produced less 1,000 units sold) by the fixed production cost per unit that will be included in absorption costing closing inventory valuation.

The distractors were all based around the \$4,000 over absorption of fixed production cost. Distractor A suggests that the difference in profits will be equal to the over absorption of fixed production cost, whereas B and D suggest that it is due to a difference in inventory valuation and over absorption of fixed production cost. Incorrect answers were roughly evenly spread around the 3 distractors, suggesting a misunderstanding of under or over absorption (or possibly a high level of guessing).

Under or over absorption adjustments to profit do not cause a difference between marginal and absorption costing profits. They simply ensure that absorption costing charges the same amount of fixed overhead as marginal costing.

If we look in more detail at the situation it is apparent that the over absorption of \$4,000 was caused by the production of 400 units more than budgeted ($\$4,000 \div \10 per unit). Budgeted production would therefore be 1,600 units (2,000 units actually produced less the 400 units above).

It follows that budgeted fixed production cost was therefore 1,600 units x \$10 per unit = \$16,000. As actual fixed production cost was equal to budgeted, marginal cost fixed production costing would have recorded an actual fixed production cost of \$16,000.

Absorption costing would have charged \$20,000 of fixed production cost to product (2,000 units produced x \$10 per unit), however the adjustment for over absorption would have corrected this overcharge and reduced this cost by \$4,000, resulting in the same fixed production cost as marginal costing.

The important point is that it is not under or over absorption that causes the difference between profits under absorption and marginal costing principles. The difference in profits is caused by the difference in finished goods inventory valuations.

Example 3

A project has an initial cash outflow of \$12,000 followed by six equal annual cash inflows, commencing in one year's time. The payback period is exactly four years. The cost of capital is 12% per year.

What is the project's net present value (to the nearest \$)?

- A \$333
- B -\$2,899
- C -\$3,778
- D -\$5,926

This question covers Study guide reference C5j.

The correct answer is A.

A four year payback period implies an (equal) annual cashflow of $\$12,000 \div 4 \text{ years} = \$3,000$ per year. As these cash flows run for 6 years the NPV is equal to \$333 ($-\$12,000 + \text{Annuity factor for 6 years @ 12\%} \times \$3,000 = -\$12,000 + 4.111 \times \$3,000 = \$333$). Alternative C is based upon an incorrect calculation of annual cashflow ($\$12,000 \div 6 \text{ years} = \$2,000$ per year), suggesting a misunderstanding of the payback method.

In alternative the NPV was based on a project life of 4 years rather than 6 suggests a failure to read the question carefully.

Finally alternative D's NPV was based upon a combination of the other two distractors that is an annual cashflow of \$2,000 for 4 years.

Inevitably examiners' reports focus on the more difficult questions that were badly attempted. The exam also contained a number of questions that were very well answered.

Future candidates are advised to:

- Study the whole syllabus, because the paper will cover the full syllabus.
- Practise as many multiple choice questions as possible.
- Read questions very carefully in the examination.
- Try to attempt the "easy" examination questions first.
- Not to spend too much time on apparently "difficult" questions.
- Attempt all questions in the examination (there are no negative marks for incorrect answers).
- Read previous Examiner's Reports.
- Read Student Accountant