

Examiner's report

F5 Performance Management

December 2012



General Comments

The examination consisted of five compulsory questions worth 20 marks each.

The vast majority of candidates attempted all five questions, and there was little evidence of time pressure. Where questions were left unanswered by candidates, this appeared to be due to a lack of knowledge or poor exam technique, as opposed to time pressure, although occasionally a candidate would state that they had run out of time.

Many candidates started with question 5 this sitting. This was the question on activity-based costing and was overall one of the better answered questions on the paper, particularly parts (a) and (b), the numerical parts of the question. Question 1 on cost-volume-profit analysis was often left until last, and the lower quality of the answers suggested that this was because of a lack of knowledge of this area of the syllabus.

Generally speaking, candidates performed well on questions 2a, 3, and 5a and (b). The questions candidates found most challenging were the whole of question 1, 2b and c, the whole of question 4 and 5c. This is mainly due to candidates not understanding core syllabus areas well enough; a lack of technical knowledge and also due to a failure to read question requirements carefully. Question 1 was newer to the syllabus than the other topics examined but there was an article on this in the student accountant which should have helped in answering this question.

A number of common issues arose in candidate's answers:

- Failing to read the question requirement clearly and therefore providing irrelevant answers which scored few if any marks.
- Poor time management between questions; some candidates wrote far too much for some questions and this put them under time pressure to finish remaining questions.
- Not learning lessons from earlier examiner's reports and hence making the same mistakes.
- Illegible handwriting and poor layout of answers. The handwriting in candidate's answers is sometimes so bad that no marks can be awarded at all because it is simply not possible to read it.

Specific Comments

Question One

Part (a) of this question required candidates to calculate the weighted average contribution to sales ratio for Hair Co. Using the most simple approach for this, firstly then, it was necessary to calculate the individual contribution for each of the products. From this, the total contribution could be calculated by applying the sales volumes to the unit contributions. Then, the total sales figure could be calculated, finishing with the calculation of the ratio by dividing the first figure by the second.

The majority of candidates were able to calculate the unit contributions, which is obviously a very basic F2 skill. However, many students seemed unclear where to go from here. The most common error was that candidates then simply added together the three unit contributions, added together the three unit selling prices, and divided the former by the latter, giving a contribution to sales ratio of 36.9%. The problem with this calculation is that it does not take into account the relative sales volume of each product and it is not therefore a *weighted average* contribution to sales ratio but rather just an *average* contribution to sales ratio.

Part (b) asked candidates to calculate the break-even sales ratio for the company. This is a very simple calculation and was answered correctly by about half of candidates. Follow-on marks were given for using the ratio calculated in part a, even if this ratio was incorrect. All that needed to be done to calculate the break-even sales revenue was for the fixed costs of \$640,000 to be divided by the ratio. There is a far more complicated method of performing this calculation but it takes a ridiculously long time to perform and I'm not sure why



anyone would use it when there is such a simple way to calculate the required figure. Some candidates did attempt to use it though, but it is not to be recommended, given the length of time it takes and the complexity of the calculation itself. Hence, I am not going to describe it here.

Part c examined break-even charts. This was poorly answered by the majority of candidates with very few scoring full marks. There seemed to be two main problems. Firstly, despite the article, which described all the different charts that could be examined, there seemed to be a lack of knowledge about what a break-even chart looked like. Many candidates drew profit-volume charts, which are different. Secondly, in order to plot the lines, candidates needed to do some preliminary calculations for cumulative profit and revenue. Many missed this point and were therefore unable to plot the lines. This area needs to be revised for future sittings as there is clearly a knowledge gap here.

Part d asked candidates to comment on their findings for 3 marks. Answers to this were weak. The main point to identify was the fact that the company would break even earlier if it sold products in order of their CS ratios first. The reality is, however, that the company would neither sell the products in a constant mix or in order of their profitability, therefore the true break-even point would really lie somewhere in the middle of the two.

Question Two

This was a straight forward variance question. It should have been well-answered but it wasn't, apart from part a. In part (a), the requirement asked for calculations of the total labour rate and total efficiency variances. These were very simple calculations which about 1/2 of candidates scored full marks on. The most common error that occurred was that candidates used a standard cost of \$6 an hour rather than the correct standard cost of \$12 per hour. The \$6 given in the question was the standard cost of labour for each batch, but given that a batch only takes half an hour, it was necessary to identify that this figure needed to be doubled to arrive at the standard cost per hour rather than per batch. It is really important to read the question carefully when picking up key information.

Part b was more difficult, with a requirement to analyse each of the variances from part a into component parts for planning and operational variances. There were some poor attempts here, with a substantial number of candidates *writing* about planning and operational variances rather than performing the calculations. This was surprising, given that the requirement was very clear as to what was expected. Only a very small minority of candidates attempted to produce a total planning variance and a total operational variance, without splitting it between rate and efficiency as the question required.

There are two main ways of calculating the labour rate planning variance and the labour efficiency operational variance tested in part (b). The first one is the method I have used in my suggested solution, whereby the *actual* labour hours are used for the labour rate planning variance and the *actual* labour rate is used for the labour efficiency operational variance. I like this method because it enables us to reconcile the planning and operational variances back to the total variances for rate and efficiency. However, an equally valid method is to use the *revised* labour hours for the labour rate planning variance and the *revised* labour rate for the labour efficiency operational variance. Either approach will score you full marks, but if you use the former method, you should use it for both variances and if you use the latter method, you should also use it for both variances. Both the labour rate operational variance and the labour efficiency planning variance remain the same with either method.

Part c was the discussion part of the question where candidates had to assess the performance of the production manager. Marks were given for a discussion that followed on from the number calculated in parts a and b or, where calculations hadn't been performed, marks were still available for sensible discussion following on from the data given in the question.

Question Three

This was a classic performance management question and was generally well-answered by candidates compared to other questions on the paper. The company in the question had made certain changes and introduced some incentives in order to boost sales and the requirement asked for a discussion of whether these changes and incentives had been effective. As usual, it was necessary to do some preliminary calculations in order to assess performance and candidates should be reminded that absolute figures are rarely useful and percentage changes are far more informative.

The most common weakness in answers was the classic commentary stating that, for example, "Sales have gone up, which is good." Comments such as these simply won't score marks. Candidates needed to consider the relationship between the data and calculations with the information given in the question, in this case relating to the changes and incentives introduced. If this link is not being made, rarely will comments score marks.

Good candidates identified that, although sales had increased by 25%, net profit had decreased by 33%, but this was due to the mass of expenses that had been incurred in bringing about the changes. Consequently, the benefits of these changes would be expected to continue for some time, and it would certainly be useful to see quarter 3's results when these were available.

Poorer candidates seemed to think that the decrease in net profit margin was a sign that things were going wrong and cost of sales must be increasing dramatically. Again, I would emphasize that, at this level, candidates are expected to link the information in the scenario with the data and their calculations in order to draw valid conclusions. The candidates producing weaker answers appeared almost not to have read the scenario and simply to have read the data. In a question like this, it is really useful to annotate the written parts of the scenario and where, for example, it states that \$200,000 has been spent on advertising, note down next to it the calculations that might help to analyse the effect of that (NPM, increase in sales.) Then, when writing answers, the link has already been noted down and is ready to be discussed.

As far as the calculations go, it is useful to produce a small schedule either at the beginning or end of the answer with all workings on. This makes it easy to mark and see where the calculations have come from, so that credit can still be given even where minor errors have been made.

Question Four

Answers to this question were weak in parts. Part a asked candidates to explain what a monthly rolling budget was and how it would operate at Designit. The question was looking for a few key points – the budget covers a twelve month period; it is updated monthly; one month is added whilst another is removed; the first month is prepared in a lot of detail compared to the other months. The most common problem with answers was that they talked about quarterly budgets and how they would operate, rather than monthly budgets. Again, I think this must be due to inadequate reading of the question.

In part (b) candidates were asked to discuss the problems that might occur if rolling budgets and the new bonus scheme outlined in the scenario was to be introduced. Answers here were not bad, on the whole, with most candidates identifying that time pressure, increased costs and demotivation would all be a problem.

Part c asked for a discussion of the problems with the current bonus scheme and a suggestion of an alternative more effective one. Many candidates identified the fact that, in the current scheme, the first target was too easy and the second target was too hard, meaning that the managers were not motivated to work hard. However, only a minority of candidates were able to discuss a feasible alternative scheme. The question wasn't looking for complicated suggestions, just common sense answers suggesting perhaps a scheme with a number of different bonus rates over narrower bands of sales.



Finally, part d was supposed to provide the opportunity to gain some easy marks discussing the risk of using spreadsheets for budgeting. Answers to this tended to miss the key points unfortunately – the risk of errors arising from the input of incorrect formulae, for example, or the problems caused by lack of audit trail.

Question Five

The last question on the paper covered activity based costing and was definitely the question that students liked best. Part (a) was a simple calculation of transfer prices using traditional absorption costing and there were plenty of correct answers here. Part b asked for a recalculation of the transfer prices using activity based costing to allocate the overheads. Many candidates scored full marks, although when errors were made, the main ones were to use machine hours as the driver for machine set up costs and the number of set ups as the driver for machine maintenance costs. This error always seems to occur with these two categories of costs and I don't really understand why. I can only put it down to poor reading of the question.

In part (c), candidates had to calculate last month's profits for each division, showing it for each product and in total. Full follow on marks were given for profit figures based on the candidates own transfer prices in part b. One of the biggest problems was that some candidates didn't split the profits between the two products. This was a problem because it then made it difficult for them to earn all of the marks available in part (cii).

Part (cii) required a discussion of whether activity based costing should be implemented, considering it from the view of each of the divisional managers. Stronger candidates set their answer out using two headings – one to consider the decision from the point of view of the assembly division's manager and one to consider it from the retail division manager's viewpoint. The key point that the question was getting at was that the transfer prices set using machine hours as a basis for apportionment actually solve the problem of reducing R's transfer price so that its external selling price can be reduced, without needing to resort to using activity-based costing. What would be the point of using ABC, which is time consuming and expensive, when resolution can be found simply by apportioning costs on the basis of machine hours? Although only the strongest candidates identified this point, many candidates scored enough marks to still gain a pass on this part of the question.