

# Examiner's report

## F5 Performance Management

### June 2010



#### General Comments

The paper consisted of five compulsory 20 mark questions. The mix of narrative to numerical requirements was 47% to 53%. Most candidates attempted all questions and there was no evidence that the paper was found to be particularly time pressured.

#### Specific Comments

##### Question One

Question 1 examined the area of costing. In part (a), candidates were required to calculate the cost and quoted price of two products using traditional absorption costing and total cost plus pricing. The majority of candidates got these calculations right without a problem. Part (b) then required candidates to work out the costs and prices using activity based costing instead. Again, many candidates scored full marks here, demonstrating a good understanding of the area.

Parts (c) and (d) were the narrative parts of the question and definitely where the problems began. Part (c) asked candidates to suggest pricing strategies for the company in question and reasons for poor sales of one product. The question was looking for common sense answers, for example, to suggest that the company establish what their competitors are charging and base their prices on the going rates. Answers tended to be repetition of paragraphs learnt from textbooks rather than actually giving thought to the question and thinking about what pricing strategies would really be suitable. For example, to suggest 'market skimming' was hardly appropriate for a company that is struggling with sales. Good answers to part (c) were hard to find.

Part (d) was similarly not well answered. It required a discussion of marginal cost plus pricing and the implication that such a pricing strategy would have for the mark-up on the products. The main points it was looking for were that marginal cost plus pricing is simpler than full cost plus pricing and takes away some of the uncertainty that unknown sales volumes cause when using full cost plus pricing. If marginal cost plus pricing is used, however, the mark up must be sufficiently high to cover both the company's fixed cost and also its required profit. This latter point should have been obvious but was mentioned by a minority of candidates.

##### Question Two

The second question on the paper covered the area of variances. Part (a) was a written requirement asking for a discussion of a production director's performance over the last month and part (b) was a numerical requirement asking for the calculation of a set of variances for the following month. On the whole, this question was the most well answered question on the paper.

It was good to see an improvement in the variance analysis discussion that was performed in part (a) of the question this time round, compared to December 2009's variance analysis question. Fewer candidates made meaningless comments such as "the material price variance is favourable, which is good." Good comments tended to be along the lines of "whilst there has been a favourable material price variance, this is because cheaper, lower quality materials were used, which, in turn, has led to an adverse material usage variance" (although admittedly, few answers were quite as succinctly constructed as this, but the understanding was there!)

Part of the skill in part (b) was in identifying the variances that needed to be calculated. It was good to see that most candidates were able to do this, although a few missed the labour idle time variance. The calculations were performed with a reasonable degree of accuracy as well, showing that candidates were far better prepared than in previous sitting.

### Question Three

This question was a predominantly numerical question about linear programming, with a written part (c) about overtime payments. This was probably the least-well answered question on the paper overall. This is not really surprising, since I find that few students enjoy linear programming, and I think this comes from a fear of anything too mathematical.

Part (a) was fairly straightforward. The question showed a graph on which the optimum production point had already been identified. The requirement then asked candidates to find the optimum production mix and maximum contribution. This should have been really well answered and I think the reason why it wasn't is because candidates did not expect to be given the optimal production point in a question. They expected to have to find it themselves. Because of this, they didn't read the question properly and many candidates performed lots of calculations trying to find the optimal production point! It is so important to read questions carefully in all exams. An expectation of what the requirement will read, based on past questions must not be developed as, when this happens, candidates inevitably don't answer the question that is currently being answered. A good attempt at part (a) would have been to solve the 2 simultaneous equations for the critical constraints at point B, in order to arrive at the optimum quantity of W and L to be produced. Then, these numbers needed to be put into the objective function in order to find contribution. It is essential to show all workings. Where workings are not shown, full marks cannot be given. Also, it was not sufficient to simply try and read the optimum quantities off the graph. The requirement said "find by appropriate calculation...."

Part (b) tested shadow price calculations. Some candidates gave perfect answers to this but admittedly, these candidates were in the minority. Most answers were poor and this is clearly an area that needs to be revisited. A common error was finding a total shadow price of \$14 for fabric and tailor time jointly, rather than calculating them separately. Such answer scored poorly.

Part (c) then tested candidates' understanding of shadow prices. If part (b) was poorly answered, part (c) was really poorly answered! Many candidates could perform the calculations in part (b) but did not, on the whole, understand that the shadow price is the premium OVER AND ABOVE the normal price that could be paid for extra tailor time. Again, this area clearly needs revisiting.

Part (d) asked for the new optimum production plan if the maximum demand for W fell to 200. Candidates needed to appreciate that whilst fabric remained a critical constraint, maximum demand for W now became the other critical constraint rather than tailor time. Therefore, the constraints for fabric and W now needed to be solved in order to find the optimum production mix. It was surprising to see that candidates who completed part (a) correctly could not do part (d) as essentially, the technique required was the same.

### Question Four

This question was 50% numerical (parts (a) and (b)) and 50% discursive. It covered the area of costing within the context of a transfer pricing situation. Whilst part (a) required candidates to derive a price based on variable cost plus, part (b) asked what the increase or decrease in that price would be if full cost plus pricing was used. As with question 1, these numerical parts were quite well answered by most candidates. However, a disappointing number of answers included the fixed costs within part (a) and part (b) which defied the purpose of the whole question really.

That having been said, most answers were good. Moving on to part (c), a discussion of whether fixed costs should be included in a transfer price was required. The quality of answers was really poor. The question was looking for a couple of key points, for example, that including fixed costs guarantees a profit for the seller but invites manipulation of overheads and passes on inefficiencies from one part of the business to another. Also, that this strategy causes fixed costs of one division to be turned into a variable cost for another division.

Similarly, part (d) rarely produced answers scoring full marks. It asked whether retail stores should be allowed to buy in from outside suppliers. Key points in any answer should have been that the overall profitability of the

company is key, as is goal congruence; these points were rarely made. Thankfully, many candidates did spot the more obvious points such as the fact that the quality and reliability of any external supplier would need to be assessed.

#### **Question Five**

The final question on the paper covered the area of performance measurement. Part (a) examined the calculation of bonuses for a manager based on a set of given targets; answers to this were good on the whole. Part (b) required a discussion of the extent to which the three targets set were controllable by managers. For a narrative requirement, this was fairly well answered overall. A minority of candidates did misread the requirement though and instead gave commentary on the extent to which the targets had been met in the year. Part (c) asked for a description of ways in which the manager could manipulate the situation in order to make sure he gets his bonus. Again, there were some good answers here, with only a minority of candidates talking about manipulating profits, which wasn't relevant to a business where profit based targets weren't being used.

#### **Summary**

Overall, this exam session showed that candidates are getting better at the numbers involved in F5 but that the discussion areas still need substantial improvement.