



Examiner's report

F5 Performance Management

March 2018

General comments

The F5 Performance Management exam is offered in both computer-based (CBE) and paper formats. The structure is the same in both formats but our model of delivery for the CBE exam means that candidates do not all receive the same set of questions. In this report, the examining team share their observations from the marking process to highlight strengths and weaknesses in candidates' performance, and to offer constructive advice for future candidates.

- Section A objective test questions – we focus on two specific questions that caused difficulty in this sitting of the exam
- Section B objective test case questions – here we look at the key challenge areas for this section in the exam
- Section C constructed response questions - here we provide commentary around some of the main themes that have affected candidates' performance in this section of the exam, identifying common knowledge gaps and offering guidance on where exam technique could be improved, including in the use of the CBE functionality in answering these questions.

This sitting was the first in which the majority of candidates sat the CBE format of the exam. While this did not seem to have a detrimental effect on candidates' performance, it was disappointing to see that many did not take advantage of the CBE software available to answer more quickly, as well as present their answers in a more professional manner.

It was very pleasing to see that once again almost all candidates attempted all of the questions. Section A questions aim to provide a broad coverage of the syllabus, and future candidates should aim to revise all areas of the F5 syllabus, rather than attempting to question spot. The following two questions are reviewed with the aim of giving future candidates an indication of the types of questions asked, guidance on dealing with exam questions and to provide a technical debrief on the topics covered by the specific questions selected.

Sample Questions for Discussion

Here we take a look at two Section A questions which proved to be particularly difficult for candidates.

Example 1

Log Co has an operating gearing ratio of 33.33%. Its sales are currently \$100m and its operating profit is \$20m.

Operating gearing is calculated by dividing fixed costs by variable costs.

What will its operating profit be its sales increases by 15%?

A \$27m

- B \$26m
- C \$23m
- D \$21m

What does this test?

- ✓ The calculation of operating profit

What is the correct answer?

- ✓ The correct answer is **B**
 - In order to calculate the operating profit, the total cost must be calculated first. As sales are \$100m and profit is \$20m, the total cost will be \$80m. Given the operational gearing is 33.33%, the fixed cost to variable cost will be in the ratio of 1:3. The fixed cost can be calculated as $\frac{1}{4} \times \$80m = \$20m$ and the variable cost will be \$60m. Contribution will be \$40m before the increase in sales. After the 15% increase in sales the new contribution will be $1.15 \times \$40m = \$46m$ and the new operating profit will be $\$46m - \$20m (FC) = \$26m$
 - Selecting option A calculates the fixed cost as $\$80m/3 = \$26.67m$ which gives the variable cost of \$53.33m and a contribution of \$46.67m. A 15% increase on this is \$7m, hence \$27m
 - Selecting option C meant that existing operating profit was increased by 15%
 - Selecting option D meant that an increase of 33.33% of 15% = 5% x \$20m = \$21m

Example 2

A bank has developed a new type of account called the Gold Account. Development and advertising costs were \$50,000.

At the start of each of the next four years, 1000 customers are expected to open a Gold Account and to pay the bank \$300 each year that they use it. Of the 1,000 customers who open a Gold Account, 500 are expected to close the account after one year and 500 after two years.

The bank estimates it will cost \$400 per customer to administer the Gold Account in the customer's first year reducing to \$50 per customer in the second year.

Ignoring the time value of money, what is the lifecycle profit per customer of the Gold Account?

- A \$8.33
- B \$25.00
- C \$12.50
- D \$16.67

What does this test?

- ✓ The calculation of a lifecycle profit in a service industry

What is the correct answer?

- ✓ The correct answer is **B**

- The account runs for 4 years
 - Year 1 1,000 new customers
 - Year 2 1,000 new customers 500 from year 1
 - Year 3 1,000 new customers 500 from year 2
 - Year 4 1,000 new customers 500 from year 3
500 from year 4
- | | | |
|-------|--------------|--------------|
| Total | 4,000 | 2,000 |
|-------|--------------|--------------|

From the above, since customers are joining every year for the 4 years there will be a total of 4000 customers that will cost the bank \$400 per customer in the first year and 2000 customers in total that will cost \$50 per customer in the second year

Calculation of profit over the life cycle will be as follows:

First year 4,000 x (\$300 - \$400)

Second year 2,000 x (\$300 - \$50)

Less the development and advertising costs (\$50,000)

Total Profit \$50,000

Divided by 4,000 customers

Lifecycle profit per customer \$12.50

- Selecting option A the total profit of \$50,000 is divided by 6,000 customers = \$8.33
- Selecting option C the development and advertising costs has been omitted - \$100,000 divided by 4,000 customers = \$25
- Selecting option D - combines both mistakes as above - \$100,000 divided by 6,000 customers = \$16.67

Section B

Section B tests students' knowledge on a topic in more detail than section A, with three case questions of 5 two-mark objective test questions. The range of topics covered in the December 2017 examination was:

- Costing
- Linear programming
- Variances

- Throughput accounting
- Short-term decisions
- Budgeting

A few key points that came out of section B were:

- Read the case scenario and requirements very carefully. This goes for the whole exam, but any objective test question is 'all or nothing' – if you misread the requirement or miss a vital piece of information from the scenario and get the answer incorrect you score zero for that question. This applies also to instructions on how to round your answers.
- Cover the whole syllabus. The list above should highlight this – F5 has a large syllabus which can be daunting, but it is essential to have a broad knowledge. If, for example, a section B case covering learning curves comes up and you haven't covered this in your studies, the 10 marks available are left to chance.
- Be able to apply your knowledge of theories/techniques to the scenario given as in the case questions these areas will often be examined in the context of the case. It is important that you are able to apply the logic of a concept or theory to a problem and so you need to understand the method and why you are doing the calculations and not just focus on how to do the calculations.

Section C

Due to more candidates attempting the CBE format, a wider range of syllabus areas were examined. Candidates were presented with questions drawn mainly from the areas of:

- Learning curves
- Transfer Pricing
- Budgeting
- Performance management
- CVP analysis

Learning Curves

Learning curves have been examined more in Sections A and B in recent sittings, however the ability to apply the theory to any type of question is crucial in this subject. It was clear from this question that while many candidates could learn the methods and techniques, a full understanding of how to apply it was sadly lacking.

The learning curve formula is one of the few provided on the formula sheet in the exam, so it was no surprise to see that candidates were confident using that. What let most candidates down was the fundamental knowledge that the learning curve calculations are based on cumulative, i.e. total production. Therefore if one unit is produced in January, and three in February, the crucial number from a learning curve perspective at the end of February is that we've produced four units in total.

This lack of understanding led many candidates astray in the first part of the question, from which they were unable to recover and make an attempt at the later sections. This, again, is more of an exam technique issue which will be discussed towards the end of this report.

Transfer Pricing

This is a topic that candidates have traditionally struggled with. Unfortunately this sitting was no exception. Fortunately, transfer pricing questions often allow candidates to pick up easy marks for showing divisional profits under a current transfer pricing arrangement, as was the case in this sitting. Essentially this is a low-level question where marks can be given for calculating simple items like material and labour costs, as well as total profit. Full marks were common, but poor exam technique (discussed later) did sometimes mean that easy marks were missed.

Once the more advanced side of transfer pricing came in, it was clear that very few candidates understood the theory. When asked to suggest a profit maximising strategy, most candidates were comfortable discussing the selling and buying division's point of view, but very few realised that from the company's perspective (whose profit we are trying to maximise), internal contribution is irrelevant – the question becomes a make v buy decision.

Similarly, when asked to give a minimum transfer price, many candidates were able to recall that this would be marginal cost + opportunity cost, but very few could apply this knowledge to the information given.

It is recommended that the following questions are reviewed: [March/June 2016 \(Q4\)](#), [June 2015 \(Q2\)](#) and [June 2014 \(Q3\(b\)\)](#). The latter question is a particularly good one for testing understanding of transfer pricing issues.

Budgeting

Budgeting is another commonly examined F5 topic, and lends itself well to the discursive side of Section C. As is usually the case, candidates were well prepared for this, and able to provide strong responses, both for the calculations and analysis. The main reason some candidates did not score as highly as others was due to poor exam technique, in not addressing the requirement completely or correctly.

Performance management

This area of the syllabus can be examined in a variety of ways, and this sitting was no exception. Topics included divisional performance, not-for-profit organisations and the more traditional profit-making companies.

Traditionally, candidates have performed well in this area, and this was shown to be the case here. The breadth of the F5 syllabus can be daunting, but candidates were able to tackle topics such as the 3 E's or Fitzgerald and Moon's Building Block model. This is an essential part of passing F5 – having a broad knowledge of the syllabus. Being unable to score on a 6-10 mark question because you haven't covered that area of the syllabus in your revision plan is very hard to recover from, so it was pleasing to see that the majority of candidates could pick up marks here.

The most common reason candidates do not score top marks on these questions is a lack of depth to their answers. When asked the question ‘Comment on the performance of...’ you should be looking to give more than ‘This is good,’ or ‘This is worse than last year.’ To really score well on these questions, you should try to look for reasons WHY the performance is good/bad. Use the information given in the scenario to explain the numbers – either that you are given or that you calculate. You will be told about decisions made, or market conditions, or some event which will cause the performance to behave in a particular way. Link the numbers to this, and the rewards will come! Too many candidates did not do this, making it harder to award commentary marks.

To give a simple example, see the September/December 2017 sample questions, published [here](#). Question 32 is a divisional performance question involving calculation of ROI and RI for two divisions. Part (a) (ii) asked candidates to discuss the performance of the division, including the main reasons why their ROI results differ from each other. Poor answers would make blank comments such as ‘Division E has higher capital employed than Division C,’ for example. This is true, but doesn’t use the information given in the scenario. Note (1) tell us firstly that one division has invested heavily in the year – thereby increasing net assets (and reducing ROI) and also increasing depreciation costs, so reducing profit (and reducing ROI). A much better answer would use this information to explain the difference.

CVP Analysis

This topic has been on the F5 syllabus for several years now, and it was pleasing to see that so many candidates were familiar with the key concepts. Common calculations like breakeven point and margin of safety were tackled with relative ease. Most, when presented with a breakeven chart, were able to identify and calculate key information. The main reason that it was hard to award some marks in this area was on the commentary – just like for the performance management questions discussed above, answers were often bland, with little insight into why one option might be better than another.

Exam technique

Exam technique is so important in F5 that in many cases it is the difference between passing and failing. It is clear from marking the scripts that most candidates have spent a great deal of time and effort learning the syllabus and the methods required. Unfortunately in many cases poor exam technique makes it almost impossible to reward this effort.

By far the most common mistake I see when marking is a candidate not addressing the requirement fully. Many requirements ask for two or three different things. Full marks can only be awarded if all of these are attempted. The problem is that easy marks are often missed out on by not attempting all of the requirements.

Another regular problem is candidates giving up because they are stuck on one part of the question. This is a tricky one, because in an exam there’s nobody to ask, and it can be frustrating and pressurised. This is why practising exam questions to time is so important – it at least allows

you to practise under some sort of pressure. However, for Section C questions, it is important to soldier on. Take [Q31\(a\) from Sep/Dec 2017](#). This covers both of the problems mentioned – the requirement in full is:

(a) Calculate the optimum (profit-maximising) selling price for Parapain and the resulting annual profit which TR Co will make from charging this price.

Without going into the detail of the solution (you can find that [here](#)), there are two requirements here – firstly, what is the selling price, and secondly, what is the profit. Many candidates will have gone through the effort of working out the selling price, and then moved on without calculating the profit. This is a shame, because calculating the selling price is relatively difficult, and calculating profit should be straightforward – anyone who can calculate an optimum selling price using the MR=MC method should be able to calculate profit!

The other side of this problem is those who couldn't calculate the selling price. These things happen under exam pressure – maybe you can't remember a step, or find a key piece of information in the scenario. However, given a selling price, sales volume and fixed costs, any F5 student should be able to calculate profit. Let's say you know that fixed costs are \$500,000, you think sales volume is 250,000 (it isn't, but it doesn't matter!) and you can't work out the selling price. Many candidates will move on at this point, but you shouldn't. Ok, you won't get the marks for calculating the selling price, but make an assumption. Tell your marker – assuming the selling price is \$10, variable cost is \$5 per unit, then contribution = $(10-5) \times 250,000 = 1,250k$, and profit = contribution - fixed costs which is 750k. The method is correct, so you will be awarded credit for calculating profit correctly.

This is just one example, but it came up a few times on different questions in the March 2018 sitting. If you know the method, but don't have a number that you need, make it clear to your marker what you're doing and credit will be given. It also means that you have something to talk about in any discursive elements of the question. Obviously this only works for Section C questions, but it can really make a difference to a marginal score.

It is so important to read the requirement carefully – make sure you're addressing every part of the requirement, and also that you are actually answering the question you've been asked. To take another example, [Q32 from March/June 2017](#), requirement (a):

(a) Explain why the balanced scorecard approach to performance measurement is more useful to measure performance for The People's Bank than a traditional approach using solely financial performance measures.

Many candidates here would see this requirement and read "balanced scorecard... more useful..." They would then list the advantages of the balanced scorecard they've learned. While this will touch on the same points that the [answer](#) makes, it is only half of the requirement – we need to **Explain** (not list) why the balanced scorecard is specifically better than just using financial measures. The verbs used in the requirement are very important, and an article explaining what they mean is referenced in the final section of this report.

The F5 exam is also quite time-pressured – part of good exam technique is time management. Whilst it may be tempting to spend more time on the written questions, then guess the OTs if you run out of time, I'd advise against this. Some of the OTs will be less time consuming than others and if you don't leave enough time you could miss out on easy marks you would otherwise have scored. An extra 10 minutes on Section C might improve your score by 2-3 marks, but could've been spent getting 3 short questions correct for 6 marks.

Word processing and spreadsheet technique

For many candidates, this was the first sitting in which they used the CBE software. Unfortunately this was clear from many of the answers, with candidates exhibiting poor technique which was shown when CBEs were first introduced.

In the spreadsheet software, it was disappointing to see that many candidates were not using the software's functionality to help them. It should be much quicker to answer numeric questions using a spreadsheet rather than paper, as the calculations can be automated and any mistakes quickly corrected. Unfortunately it was clear that many had not practised using the software, and were unfamiliar with how to use simple functions like SUM to perform their calculations. A large number of answers had been worked out on a calculator and then typed into the cell, which would both take time and introduce human error. Using a formula in a cell is not only quicker, it also allows the marker to see what you have done, and give more credit in the event of a small error.

Use of the word processing software was better, with answers often made clearer through the use of headings and white space. However, it did seem that many candidates wrote less than they may have done using paper. It is important to ensure that you fully explain your points in the written parts of questions, in order to gain full credit.

Guidance on the CBE software can be found [here](#).

Guidance and Learning Support resources to help you succeed in your exam

Preparing for the F5 exam may appear daunting but there are many resources available to help you. You should refer to these throughout your studies.

You should make sure you have made use of all of the resources found under [technical articles](#) for F5 – these include technical articles, study support videos and exam technique resources – all developed with you in mind.

It is essential to practise as many exam standard questions as you can in the lead up to your exam. We strongly recommend that you use an up to date question and answer bank from one of our [Approved Content Providers](#) but if this is not possible then work through the most recent past exams on our website. However, please note if you are using the past exams that these are **not** updated for syllabus changes or changes to the exam format and so should be used with caution – so check the latest [syllabus and study guide](#) for changes.

It is essential that you have a good understanding of the verbs typically used in ACCA exam questions. Take a look at the article [What is the examiner asking?](#) Which sets out some of the most commonly used verbs, and ensures that you understand how these are used in the F5 questions.

Work through the F5 resource *A guide to using the examiner's report* if you are sitting the exam for the first time or *A guide to reflection* if you are retaking your exam. Both of these interactive tools can be found under the [technical articles page](#) for F5. These have been developed to sit alongside the self-study guide and the retake guide respectively, and provide you with further pointers for using the examiner's reports for previous sittings.