



Examiner's report

F5 Performance Management

June 2017

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.

Section A

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

A company is making product P with the following cost card:

| | | |
|--------------------|-----------|-------------|
| | \$ | \$ |
| Selling price | | 100 |
| Material | 25 | |
| Labour | 30 | |
| Variable overheads | 20 | |
| Fixed overheads | <u>10</u> | |
| | | <u>(85)</u> |
| Profit | | <u>15</u> |

Each unit of P takes one hour to make and the available labour and machinery are fully used in its current production of P. The company is considering making a new product, Q, but would have to divert labour and machine use from product P.

What is the relevant total cost per hour for labour and variable overheads which should be included in the cost of product q?

A \$25

- B \$75
- C \$50
- D \$65

What does this test?

- ✓ The analysis of relevant cash flows for a decision.

What is the correct answer?

- ✓ The correct answer is **B**
 - The relevant cost of diverting labour away from existing production when the resource is being used at full capacity is the variable cost of a labour hour + opportunity cost. The opportunity cost in this case would be the contribution of product P lost for every hour diverted away from its production. As each unit of P takes one labour hour the opportunity cost per labour hour is \$25 and the cost per labour hour must be \$30 (from the cost card). Therefore the relevant cost of labour is \$55. Note that the question asks for the total relevant cost of labour and variable overheads. As these overheads are variable they are incurred when production happens and so are relevant and the variable overheads cost per hour is \$20 (from the cost card). The total relevant cost of labour and variable overheads is \$75.
 - Selecting option A would have only recognised the lost contribution of product P.
 - Selecting option C ignored the opportunity cost element and included only the labour and variable overheads costs per hour.
 - Selection option D included the labour and variable overheads costs per hour but used the profit of \$15 as the opportunity cost instead of contribution.

Example 2

Which of the following statements is NOT consistent with the theory of constraints?

- A There is no inventory of work in progress or finished good held
- B Raw materials are converted into sales as quickly as possible
- C Operations prior to the bottleneck operate at the same level as the bottleneck
- D Conversion costs and investment costs are kept to a minimum

What does this test?

- ✓ The understanding of the principles underpinning the theory of constraints in throughput accounting

What is the correct answer?

- ✓ The correct answer is **A**
 - Holding no inventory of work in progress or finished goods is NOT consistent with the theory of constraints as the theory of constraints specifies that a small amount of buffer inventory should be maintained prior to the bottleneck activity so that the bottleneck never has to be slowed down or delayed.
 - The other three statements are all consistent with the theory of constraints.

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 June 2017 examination was:

- Costing
- Pricing
- Risk
- Cost-volume-profit (CVP) analysis
- Learning curves
- Budgeting
- Variance analysis
- Limiting factors

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

- Read the requirement very carefully. This goes for the whole exam, but any objective test question is 'all or nothing' – if you misread the requirement and get the answer incorrect you score zero for that question. Looking at Example 2 from Section A in this report if you miss the 'NOT consistent' this can make the question very difficult.
- Graphs are still important! Although you won't be asked to draw graphs any more, you can and will be asked to interpret them. It is therefore essential that you understand what the various graphs/diagrams are showing e.g. CVP graphs, linear programming graphs, decision trees etc.
- 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 Risk 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.

Section C

Candidates were presented with questions drawn mainly from the areas of:

- Performance management
- Variance analysis
- Relevant costing
- Transfer pricing
- Budgeting

Performance management

This area of the syllabus requires candidates to be able to analyse a business' performance from a variety of perspectives (including financial and non-financial factors), and explain the performance over a given timeframe or against budget or in comparison to a competitor. There were three questions covering this subject area in the June exams, covering performance management in a variety of settings. The businesses in question included a large private company, a public sector organisation and a not for profit organisation. Whilst in one question the focus was on ascertaining the extent to which the organisation had achieved its objectives over the period, another was from a divisional performance perspective and involved appraising an investment, similar in this regard to Lens Co from December 2016's published exam.

In performance management questions, calculations are often required and the question will state how many marks are available for calculations. It should be noted that subtracting one number from another is not enough to earn a calculation mark. For example, if the number of complaints received one year was 50 and the next year it was 60, it is not sufficient to simply say that there were 10 more complaints in the second year, this will not earn any calculation marks. Candidates are expected to state the percentage increase in complaints in order to earn marks, which in this case would be a 20% increase ($[(60-50)/50] \times 100$). Similarly, if there are only 4 marks available for calculations, there is no need to do 30 calculations as this number of calculations would never be expected in order to earn only 4 marks. The marks given reflect the time that should be spent on this part of the question.

As regards discussion marks, it is never going to be sufficient to simply say, for example, that 'the number of complaints rose by 20%, *this is bad*.' The calculations already show the movement, the commentary must give some further insight into this in order to earn marks. A rise in the number of complaints is obviously bad, the question is, why has it happened and what is the impact.

In order to set out the expectations of the candidates clearly, questions will sometimes ask candidates to set out their answers using headings taken from the question. The purpose of doing this is to help ensure that candidates actually answer the specific question being asked. In this sitting, the majority of candidates did do this where asked, however, there were still a worrying number of people who totally ignored this instruction. This meant that it was very difficult for them to earn many marks as we then found that they were simply not answering the requirement and instead discussing performance far too generally. The requirements of a performance management question will vary and, as always, candidates must read the requirements carefully.

Again, as regards reading requirements, if a question asks for a discussion of the advantages or disadvantages of a particular measure, such as return on investment or residual income, an answer must reflect the requirements. So, for example, if the question asks about residual income only, then it is not appropriate to keep talking about return on investment or vice versa.

Furthermore, when assessing an organisation's performance, it is not necessary to make recommendations for improvements needed UNLESS THE QUESTION specifically asks for them. Candidates end up wasting valuable time by answering a question that is not actually there and which cannot therefore earn marks. Similarly, when discussing performance, candidates should note the fact that this means bringing in both positive and negative aspects of performance. This will involve more than simply writing out large parts of the scenario as well. Candidates should of course refer to the scenario but, when doing so, they must always add value to whatever they are writing about.

Finally, as regards PBE responses vs CBE responses to calculative parts of questions, candidates should endeavour to use the formula function in the spreadsheets rather than performing calculations on their calculators and then simply typing the numbers in. Markers can see the formula behind the cell so there is no need to worry about writing out every single working for fairly simple calculations. As regards discussion, CBE answers tend to be more concise and succinct than hand written answers which is related to the clarity of seeing a typed answer on screen rather than a hand written answer on a page. It is also easier and tidier to add or remove points in the CBE exam. This is definitely an advantage of using CBE.

Variance analysis

Variances are a regular F5 topic, and they were examined in March 2017 in section C as well, albeit it in relation to planning and operational variances. Although variances are generally not a popular topic, mix and yield variances tend to be more popular than planning and operational variances and it was mix and yield variances that were examined this sitting.

As regards the calculations, these were fairly well done overall. The most common error, however, was to use standard cost per unit rather than standard cost per kg. A similar question to look at would be question 5 from the December 2014 published exam questions. This required candidates to calculate material mix and yield variances, although the focus of the written requirements was different in December 2014. Whilst written requirements will often focus on discussing performance after calculating the variances, this is not always the case, and the actual requirements of the question on the day must be carefully broken down and answered. In this question, as in one of the performance management questions, candidates tried to give lots of advice and this wasn't actually asked for in the requirements, so time spent doing this was wasted.

Relevant costing

Specifically, the relevant costing question was a 'minimum price' decision i.e. calculate the minimum cost for a contract and explain why all costs have been included or excluded. It followed a very similar format to a question that again was to be found in the published December 2014 exam, question 3. This again highlights the importance of thorough preparation. There are many resources available on the ACCA's website which will help you prepare and past exam questions are one of the best ways to help you cover the syllabus and get used to the style of the questions.

Candidates were able to score some marks in this question by doing the basics well i.e. identifying relevant and non-relevant costs and calculating the minimum cost. However, the question was clear in its requirement to explain clearly why costs had been included **or excluded** in the relevant cost statement and it was here that candidates fell down. The biggest reasons for marks being lost is because explanations were only given for the costs included and **weren't given for the costs EXCLUDED**. It highlights the importance of reading the requirements carefully.

As regards the numbers, the most common error was using financial accounting principles to value inventory rather than using relevant cost principles. Also, whilst most answers correctly recognised that the supervisor's costs were NOT relevant, many erroneously included general overheads even though an apportionment of general overheads (not specific) is never relevant to a relevant cost statement.

Budgeting

The budgeting question involved both the preparation of some budgets, in which inflation had to be taken into account and an expected value calculated, and a discussion of zero based budgeting. As regards the discussion parts of this question, it was similar to question 5 on June 2015's published exam.

As is often the case with these types of questions, the numerical parts of the question were performed quite well, although candidates did need to split costs out into two parts before inflating them and some of them struggled to do this. In terms of the discussion, referring to the published December 2015 question 5, which asked for the main stages of zero-based budgeting, candidates still seem to think that a general discussion of what a zero-

based budget is will suffice when the stages are asked for and it will not. There are several widely accepted stages in the preparation of a zero-based budget and where these are asked for; they must be clearly set out. The last part of the December 2015's ZBB question asked for the benefits of ZBB to the Lesting Regional Authority and the June 17 question was similar. It is important to note that questions of this type are not generic in nature; they are asking for the benefits FOR THE PARTICULAR ORGANSATION IN THE SCENARIO. Candidates who ignore the precise nature of such requirements will struggle to score well on these types of questions.

Transfer pricing

Finally, the other topic examined in June 2017 was transfer pricing, always an unpopular choice with students. It required some calculations of both transfer prices being suggested and an optimal transfer price. Whilst candidates were able to calculate a very basic transfer price, as soon as they had to calculate something that involved calculating a manufacturing overhead, many of them were unable to do it. Similarly, when it came to calculating and discussing a suitable transfer price, answers were really poor. This is definitely an area that needs to be worked on by F5 candidates in the future.

Exam technique on CBE and paper exams

As always, exam technique is an important aspect of success in any exam. Throughout this report the importance of reading and interpreting requirements very carefully has been reiterated many times; failure to do this is often the cause of poor scores. The tendency for some candidates is to answer the question that they want to get rather than answering the question which they have been given.

As the number of candidates sitting F5 by CBE continues to grow, two potential points arise. Firstly, it takes a little more effort to make sure that the requirements are properly broken down when reading them as they can be split over several screens. So, at the start of an answer, candidates should do a small plan in which they have broken down a requirement and asked themselves how many things they are being asked to do, making sure that they consider all aspects of the requirement. Secondly, however, it is easier to be more focussed when answering a question using word processing skills and spreadsheets, as the mere fact that you can see more clearly what you have written helps avoid the temptation to discuss things that are irrelevant. Also, if you realise that you have missed a point out from an earlier part of a question, it is easier to go back and insert it in the correct place. This would have been particularly useful in the performance management question that required candidates to answer the question using the headings taken from the scenario.

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. There are many technical articles available on the topics in this report. In addition all the past exams referred to are available for your use. You should refer to these throughout your studies. Please make sure that you visit the ACCA's website and look at everything available to you. There are also plenty of support materials to help you feel confident about taking your exams on CBE.

<http://www.accaglobal.com/uk/en/student/exam-support-resources/fundamentals-exams-study-resources/f5.html>