



# Examiner's report

## F5 Performance Management

### September 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

Mabel Co manufactures and sells tables and chairs in a standard mix of one table to four chairs. The following information is available:

| Product                     | Table | Chair |
|-----------------------------|-------|-------|
| Variable cost per unit (\$) | 120   | 16    |
| Contribution to sales ratio | 0.4   | 0.6   |

Annual fixed costs are \$100,000.

**What is the break-even point in sales revenue (to the nearest hundred dollars)?**

- A \$210,500
- B \$178,600

- C** \$200,000  
**D** \$204,500

*What does this test?*

- ✓ The calculation of a break-even point in a multi-product situation.

*What is the correct answer?*

- ✓ The correct answer is **D**
- To calculate break even revenue in a multi-product situation requires the annual fixed costs to be divided by the weighted average contribution to sales ratio. To do this firstly the selling price of both products need to be determined. The selling price of a table is calculated as the variable cost divided by 1 – the C/S ratio:  $\$120/(1-0.4) = \$200$ . The selling price of a chair is  $\$16/(1-0.6) = \$40$ . Once the selling prices are determined the contribution of each product can be calculated. For a table this will be  $\$200 \times 0.4 = \$80$  and for a chair this will be  $\$40 \times 0.6 = \$24$ . Now we have the selling price and contribution for both products we can calculate the weighted average C/S ratio. Sales revenue based on the sales mix will be  $(1 \times \$200) + (4 \times \$40) = \$360$  and contribution will be  $(1 \times \$80) + (4 \times \$24) = \$176$ ; this gives a C/S ratio of 0.489. Therefore the break even revenue is  $\$100,000/0.489 = \$204,499$  and to the nearest hundred dollars is  $\$204,500$
  - Selecting option A would have been based on calculating the weighted average C/S ratio using incorrect weightings
  - Selecting option C would have meant that a straight average of the product's C/S ratios was used
  - Selection option D would have been arrived at by weighting the C/S ratios by units

### Example 2

**Which of the following should be categorised as environmental failure costs by an airline company?**

- (1) Compensation payments to residents living close to airports for noise pollution caused by their aircraft
- (2) Air pollution due to the airline's carbon emissions from their aircraft engines
- (3) Penalties paid by the airline to the government for breaching environmental regulations

- A** 2 only  
**B** 1, 2 and 3  
**C** 1 and 3 only  
**D** 2 and 3 only

*What does this test?*

- ✓ The understanding of the categorisation of environmental costs.

*What is the correct answer?*

✓ The correct answer is **B**

- Environmental failure costs are costs incurred as a result of environmental issues being created either internally or outside the company. These can be financial or societal costs. Compensation, penalties and air pollution are all environmental failure costs.
- This is a good example of why covering the whole syllabus is important. Environmental management accounting is often an area which is overlooked.

### **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
- Cost-volume-profit (CVP) analysis
- Variance analysis
- Short-term decisions

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.
- 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 Throughput Accounting 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
- Pricing
- Budgeting
- Limiting factors

### **Performance management**

This is a wide area of the syllabus, and candidates could be asked to discuss both financial and non-financial performance, either in the context of the whole business or looking at divisions within a business.

Due to the wide range of possible questions, there is no 'one size fits all' approach to these questions, however there are some techniques which can be used to maximise your marks. Syllabus knowledge is important – financial ratios may be specifically requested in the analysis, and even if not will give more weight to a discussion. There are also two key models – the Balanced Scorecard and Fitzgerald and Moon's Building Block Model – which can help structure a discursive answer.

Performance on these questions was generally good. Candidates were aware of the key financial performance measures – ROI and RI calculations in particular proving familiar to most. There was also a good attempt to adjust figures to allow for controllability, which was encouraging to see.

One area for improvement would be on the discursive side. There is often a lot of information to take in, which can lead to answers consisting of a calculation followed by "this is good," or "this has improved from last year," for example. This adds nothing to the calculation. More credit will be given for discussions which give reasons for any movement or difference. This is where reading the scenario carefully helps overcome the information overload – the scenario will tell you what decisions or events have taken place during the year – use this to determine which calculations might be important.

For example if the scenario talks about a decision to spend more money on advertising during the year, think about the affects this should have – there (hopefully) should be an increase in revenue, so can we calculate percentage increase in revenue, or change in market share? An increase in costs will have an effect on profitability – has our profit margin fallen? Linking these ideas together will show a good understanding of how decisions can affect a business' financial and non-financial results.

### **Pricing**

The pricing decision was tested – both as a calculation and discussion. As has been the case in the past, responses were mixed on the calculations. The  $MR=MC$  optimum price method is one that is regularly examined in Section A or B; however it can be incorporated into longer questions. Although it can seem daunting to less mathematically minded candidates, the steps required can be learned and practiced, and any fears regarding the algebra can be overcome well in advance of the exam.

On the discursive side, it was clear that most candidates were familiar with the different pricing strategies available, and able to discuss the appropriateness of these in different situations.

There are many resources available on the ACCA's website to help practice – for example the past exam papers contain many different examples of questions that have been asked over the last few years. For example, the June 2015 past paper includes a 15 mark pricing question which would have helped candidates prepare for this one.

### **Budgeting**

This is usually a more popular area of the syllabus, and this sitting was no different – candidates are mostly familiar with the different approaches to budgeting, and comfortable discussing them. There was some evidence that some candidates' basic knowledge was lacking – areas such as flexed budgets, which are assumed knowledge from F2, caused problems. A sound knowledge of the basics is essential, and will make it easier to attempt some of the more complicated questions.

### **Limiting factors**

Candidates normally score well in this area, however responses were disappointing. Key factor analysis (single limiting factors) is another technique which can be learned and practised. The majority of candidates based their rankings on contribution per unit, rather than contribution per unit of limiting factor – a fundamental error that shows a lack of understanding of the problem. Similarly, many based their decision on profit rather than contribution, including fixed costs in their calculation. As fixed costs are by nature fixed, they are not relevant to the decision and should therefore be ignored.

Once again the presence of a minimum production level was also ignored by most candidates. These are a regular occurrence in this type of question, and candidates should be on the look-out for them, and ensure that the minimum levels are dealt with before the products are made in order of rank.

### **Exam technique**

For calculations, it is important to explain your workings – in section C, if you make a mistake early in your calculations, you can still pick up credit if your method is correct. However, if the numbers are wrong, it's harder to work out if the method is correct without explanation. Try to spend a little bit of time explaining to your marker what you're trying to work out, and they'll be able to give you credit where it's due.

Along those lines, if you get stuck at the start of a calculation, don't give up! You may know the method to solve a problem, but are stuck on one small aspect. It's better to assume a value and carry on than just give up. For example many questions finish with a relatively straightforward requirement like calculation of profit – you wouldn't want to miss out on that because you couldn't do a harder bit. So if you're asked to find an optimum production plan and the maximum profit, for example, you know that the final profit will be total contribution less fixed costs – make sure you at least complete that part, with your (possibly incorrect) numbers. Note that this doesn't apply to Section A/B questions – they're either right or wrong.

One key reason why candidates weren't able to gain full credit for their work on discussion questions is that they didn't address the requirement. This took two main forms. Firstly, overlooking

the second part of a requirement; it's worth spending time reading the requirement really carefully – and ensuring you've covered all parts of it before you move on. Secondly, not addressing the verb in the requirement; one example this sitting was a question asking candidates to **Explain** advantages and disadvantages of a performance measure. The majority of candidates simply listed several (perfectly valid) advantages and disadvantages. It was hard to award credit for these answers, as they did not address the requirement – an explanation would expand on the statement, often with a 'because' to explain **why** it is the case.

The reverse is true – for example **briefly comment** is looking for one or two short sentences. If you write half a page of valid commentary, you'll have picked up the maximum marks available, but wasted time that could have been spent on other questions.

### **Word processing and spreadsheet technique**

From an exam technique point of view, candidates seem more comfortable with the word processing software than the spreadsheet. Use of headings, underlining and bold text makes answers clearer and more structured, and as a result, candidates often score well with full answers being produced.

Use of the spreadsheet software is much more varied. The spreadsheet software should make calculation questions much quicker, and reduce calculation errors that can be caused. Unfortunately some candidates are either not aware of how to use the spreadsheet, or choose not to use its functionality through force of habit. Many simply use it as a word processing tool – performing calculations themselves (on a calculator) and typing the answer into the spreadsheet, when a simple SUM formula would do the work for them.

Rather than go into detail of how to use a spreadsheet here, there are resources on ACCA's website giving more guidance on how to use the spreadsheet software. A video introducing the main functionality and how to make best use of these in F5 can be accessed [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.