Examiner's report
Performance Management (PM)
June 2019

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.

General comments

The Performance Management (PM) exam is offered as a computer-based exam (CBE). The 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

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

Example 1

Which of the following statements about graphical linear programming with the objective of maximising profit is true?

(1)   If a resource constraint line does not pass through the optimum point on the graph, then the shadow price of that resource is zero
(2)   The shadow price is the maximum amount a company should pay for one more unit of a scarce resource
(3)   The slope or gradient of the objective function depends on the amount of resources available to the organisation

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

What does this test?

✓ The interpretation of linear programming graphs in limiting factor situations.

What is the correct answer?

✓ The correct answer is **A**

- If a resource constraint does not pass through the optimum point on the graph then its shadow price is zero, as adding another unit of that resource will not change the optimum solution nor the contribution earned.
- The shadow price is the maximum **extra** a company would pay for one more unit of scarce resource on top of its existing cost.
- The slope or gradient of the objective function depends on the **contribution earned** by each product.

Example 2

Maribela Co makes a range of products and sells them online. It uses activity-based costing to allocate costs to its products. Its two most successful products are ABC1 and ABC2 but it makes approximately 20 other products in its factory. The company processes and despatches 12 million orders each year over its entire product range.

Information relating to ABC1 and ABC2 is as follows:

	ABC1	ABC2
Sales volume (units)	10 million	2.4 million
Average order size (units)	8	1.2

The total packing and despatching cost pool for Maribela Co is $18 million each year.

What is the packing and despatching cost per unit of ABC1 (to two decimal places)?

A $5.54
B $0.69
C $1.50
D $0.19

What does this test?

✓ The calculation of activity-based costs

What is the correct answer?

✓ The correct answer is **D**

- The first step is to calculate the cost per unit of cost driver. In this question, the cost driver for the packing and despatching cost pool is the number of orders. Therefore $18 million/12 million orders = $1.50 per order.
- It should then be noted that the question asked for the packing and despatching cost **per unit** of ABC1. There are 8 units of ABC1 in an order therefore the cost per unit is $1.50/8 units = $0.1875, which to two decimal places is $0.19.
- If a candidate selected A then they divided $18 million by the total number of orders required for ABC1 and ABC2 only.
- If a candidate selected B then they divided $18 million by the total number of orders required for ABC1 and ABC2 only and then divided by 8 units.
- If a candidate selected C then they correctly calculated the cost per unit of cost driver but forgot to divide by the order size for ABC1.

Section B

Section B tests candidates' knowledge on a number of topics in more detail than section A, with three case questions containing five two-mark objective test questions. The range of topics covered in the June 2019 examination was:

- Cost volume profit analysis
- Activity based costing
- Target costing
- Variance analysis
- Decision making under risk and uncertainty
- 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. Close reading is also important for identifying the instructions in the question on how to round your answers.
- Cover the whole syllabus. The list above should highlight this – PM has a large syllabus which can seem daunting, but it is essential to have a broad knowledge. If, for example, a section B OT case covering variances 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 OT 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

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

- Transfer pricing
- Short-term decisions
- Variance analysis
- Performance measurement
- Divisional performance measurement
- Budgeting

Transfer pricing
Transfer pricing is not a very popular with candidates. This particular question required some calculations of transfer prices being suggested by different divisions and an optimal transfer price. Whilst candidates were able to calculate the very basic transfer price that one division suggested, as soon as they had to calculate something that involved splitting out a total overhead cost into its fixed and variable components, many candidates were unable to do it. Similarly, when it came to calculating and discussing a suitable transfer price, answers presented were often confused. Candidates should note that when a question asks them to consider a suitable transfer price from the perspective of two divisions, it is important to consider each of the divisions separately initially. This is definitely a topic area that continues to need work by PM candidates in the future. The Portable Garage Company (PG Co), published in the March/June 2018 sample questions would be a useful starting point for practice.

Short-term decisions
Short-term decisions and the application of relevant costing principles can be examined in a number of different contexts and an outsourcing decision is one of them. Questions on this area rely on candidates being able to identify which costs are relevant when deciding whether it would be better to make a product internally or instead, buy it in from an external supplier. It is important that both variable costs AND directly attributable fixed costs are included when calculating the cost of making a product internally. Only fixed costs that would be incurred irrespective of this decision should be ignored e.g. general fixed costs.

In this particular question, some candidates seemed to panic and did not look for even the easy marks, of which there were plenty. Other candidates did some calculations, but they did not use headings or explain what they were doing, so it was not possible for the marking team to tell whether the candidate was calculating the internal or the external cost. Some candidates did not read the question carefully so as to understand what the three components of the product were, or that one of those components had two parts to it. This meant that they made fundamental errors from the beginning. On the positive side, answers to the written part of the question were good. Candidates seemed to understand what outsourcing is and the non-financial implications of it, but not how to do the calculations involved in deciding whether to outsource.

There is a new article on this topic available under the PM resources on ACCA's website:

https://www.accaglobal.com/uk/en/student/exam-support-resources/fundamentals-exams-study-resources/f5/technical-articles/relevant-costs.html

Mix and yield variances

The calculation parts of questions on this area will be similar to previously published questions like Kappa Co which was one of the sample questions published in September/December 2018. The discussion elements of the question may differ depending on what aspect of performance management is tested i.e. company performance, management performance, reporting and systems etc. Candidates should note that when they are asked to explain what, for example, a mix variance is, they must mention how the variance is valued i.e. at standard cost. It is not enough to simply restate the quantities in the formula as 'explain' does mean more than just restate a formula.

As is often the case in variance questions, the most common error in the calculations is failing to flex the standard quantities to the actual production level. This always occurs on questions which examine quantity type variances. The whole basis of variance analysis relies on assessing managers for costs which they can control. Therefore, it is never useful to compare any costs to what the costs would have been if the original production levels had remained the same as budgeted. Such calculations provide no insight on performance.

Despite the aforementioned errors, questions on this area tend to be well-answered overall.

A useful article on this area can be found on the ACCA's website:

https://www.accaglobal.com/uk/en/student/exam-support-resources/fundamentals-exams-study-resources/f5/technical-articles/mat-yield.html

Performance measurement

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. Often candidates have to consider what the organisation has set out to achieve, as detailed in the scenario. Questions can take a variety of different forms, some of which are discussed below.

Balanced scorecard Questions may examine performance measurement within the context of Kaplan and Norton's balanced scorecard. Often these questions will ask a mix of knowledge and application. Examples of such questions would be The People's Bank which was published in the March/June 2018 sample questions and Jamair which was published in December 2014.

In terms of knowledge these questions often centre on the describing the four perspectives of the balanced scorecard or the use of a balanced scorecard for performance measurement in an organisation. When it comes to the application part of the question, requirements tend to focus on assessing the organisation's performance in each of the perspectives or the selection of appropriate goals and performance measures for each perspective in the context of the organisation's aims, strategies and industry. The questions which ask for goals and measures to be selected require candidates to justify their choices.

Candidates often don't understanding the difference between a goal and a measure. A goal is an objective and should begin with the word 'to'. So, using Jamair for example, under the customer perspective, a goal could be 'to reduce the number of flights cancelled.' Then, the corresponding

performance measure would be 'the number of flights cancelled.' Since the question also asked for an explanation, which was equally as important as the goal and measure, a candidate would have to go on, in this example, to say that reducing the number of flights cancelled is important as customers would not want to fly with Jamair if they were unreliable. If candidates miss putting in the justification, then marks are lost. Similar mistakes to this were made in June 2019's balanced scorecard question.

Divisional performance measurement

These questions will predominantly discursive but there will be a number of marks available for calculations too. The calculations are often quite straight forward, and candidates tend to score well on them. Where questions have marks available for pure knowledge about the different responsibility structures that can be applied to divisions e.g. profit centre, investment centre etc. answers are often poor, suggesting that candidates do not really understand the distinction between different business units. This is disappointing as these should be easy knowledge marks. Although the question in the June 2019 session was different from the December 2016 question 'Lens Co', it would be worth looking back at this question and being aware of the common errors made in that diet, particularly in relation to parts (c) and (d) of Lens Co.

For example part (c) of Lens Co asked for a brief discussion of whether it was appropriate to treat each division as an investment centre. In order to answer a requirement of this nature, it is necessary to state what an investment centre is and then very briefly discuss whether this seems to be the case for the divisions in the question. Some candidates correctly identified the fact that profit centre status was probably more appropriate in the circumstances, but some candidates did not attempt this part at all. Part (d) asked for a discussion of the problems of using ROI to measure performance. This was well answered overall although some candidates spent too long also discussing the problems of using residual income, which was not asked for. This wasted time and therefore their potential to earn marks elsewhere.

In addition, candidates should be aware that when a requirement asks for an explanation of advantages and disadvantages of a performance measure, the examining team is expecting to see an explanation and not a bullet point. For example, simply writing that an advantage of ROI is that it is a relative measure is a statement and not an explanation of why this is an advantage. An explanation would say 'ROI is a relative measure as it reflects profit relative to the size of the investment and therefore provides a better basis for comparison purposes.

Performance measurement

The term 'traditional performance measurement' could be used to describe questions, similar to Jungle Co from September 2016, where a set of financial and non-financial information is given. Candidates are then asked to discuss the financial and non-financial performance of the company in question.

In the June 2019 session, this type of performance measurement question was not well-answered on the whole. Some candidates attempted calculations for which the information simply wasn't given, for example, ROCE. The other, bigger issue was the usual one: candidates stating, for example, that 'sales have increased' without looking to suggest why this was the case.

The best answers took a logical approach, dealing with each profit and loss, and non-financial item in turn and considering why it had/had not changed and what this meant for the company. Unfortunately, candidates who took this approach were in the minority.

Budgeting

Performance management questions can focus on one or more of the budgeting techniques in the syllabus: incremental, zero-based, rolling, flexed, activity-based. At this level, there will only be a small number of marks available for pure knowledge requirements such as outlining the steps in preparing a zero-based budget. Candidates would largely be expected to discuss the budgeting approach in relation to the organisation in question, with requirements such as discussing the advantages of the company using rolling budgeting or the problems introducing a new budgeting approach is causing. In these kinds of requirements there is a tendency to list generic points rather than answer the actual question and apply those points to the scenario; answers that do this will score limited marks.

There are a series of articles available on budgeting which can be found on ACCA's website:

https://www.accaglobal.com/uk/en/student/exam-support-resources/fundamentals-exams-study-resources/f5/technical-articles.html

Exam technique

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.

Candidates should ensure that they have read all the requirements and noted the mark allocation for each requirement; this is especially important in CBE as the requirements might be split over several screens. Each requirement should be properly broken down so that it can be established what is being asked. A recommended approach to this would be that 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.

It is easier to be more focussed when answering a question using word processing and spreadsheets, as the mere fact that what has been written or calculated can be seen more clearly, which helps candidates to avoid the temptation to discuss things which are irrelevant. Also, if candidates realise that they 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.

Finally, please remember to use the spreadsheet functionality available. Totals should be calculated by inserting formulae rather than typing in the number.

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

Preparing for the PM exam may appear daunting but there are many support resources available to help candidates. There are technical articles available on the topics discussed in this report and all the past exams referred to (and many more) are available on ACCA's website. Candidates should refer to these regularly when studying for their exams. These resources are provided to help candidates develop confidence in their knowledge and understanding of PM.

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