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# Answers

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Section C

**31 SU Co**

- (a) SP (standard price per metre:  $\$2.85/0.95$ ) \$3.00  
 SQ (standard quantity per dress:  $2.2 \text{ metres}/1.1$ ) 2 metres  
 From scenario the revised price per metre (RP) is \$2.85, the actual price per metre (AP) is \$2.85 and the revised quantity per dress (RQ) is 2.2 metres.  
 SQAP (standard quantity for actual production:  $2 \text{ metres} \times 24,000$ ) 48,000 metres  
 RQAP (revised quantity for actual production:  $2.2 \text{ metres} \times 24,000$ ) 52,800 metres  
 From the scenario the actual production level (AP) is 24,000 dresses and actual quantity of material bought and used (AQ) is 54,560 metres.

**Material price variances**

**Planning variance**

$(SP - RP) \times AQ: (\$3.00 - \$2.85) \times 54,560$  8,184 F

**Operational variance**

$(RP - AP) \times AQ: (\$2.85 - \$2.85) \times 54,560$  0

Total price variance 8,184 F

**Material usage variances**

**Planning variance**

$(SQAP - RQAP) \times SP: (48,000 - 52,800) \times \$3.00$  14,400 A

**Operational variance**

$(RQAP - AQ) \times SP: (52,800 - 54,560) \times \$3.00$  5,280 A

Total usage variance 19,680 A

**Total material variance** 11,496 A

**Tutorial note:** *These variances could have been calculated using the alternative approach as below:*

**Material price variances**

**Planning variance**

$(AP \times RQ) \times (SP - RP): 24,000 \times 2.2 \text{ metres} \times (\$3.00 - \$2.85)$  7,920 F

**Operational variance**

$(RP - AP) \times AQ: 54,560 \text{ metres} \times (\$2.85 - \$2.85)$  0

**Material usage variances**

**Planning variance**

$(SQ - RQ) \times AP \times SP: 24,000 \times (2 \text{ metres} - 2.2 \text{ metres}) \times \$3.00$  14,400 A

**Operational variance**

$((AP \times RQ) - AQ) \times RP: 24,000 \times 2.2 \text{ metres} - 54,560 \times \$2.85$  5,016 A

**Total material variance** 11,496 A

- (b) AH (actual hours worked and paid):  $24 \times 160 \text{ hours}$  3,840 hours  
 SHAP (standard hours for actual production):  $(24,000 \times 8)/60$  3,200 hours  
 RHAP (revised hours for actual production):  $(24,000 \times 10)/60$  4,000 hours

From the scenario the standard rate per hour (SR) is \$12, the standard time per dress is eight minutes and the revised time per dress is 10 minutes.

**Labour efficiency variances**

**Planning variance**

$(SHAP - RHAP) \times SR: (3,200 - 4,000) \times \$12$  9,600 A

**Operational variance**

$(RHAP - AH) \times SR: (4,000 - 3,840) \times \$12$  1,920 F

Total labour efficiency variance 7,680 A

- (c) The production manager did not have any control over the change in the design of the dress as this change was requested by the client. Similarly, it was not his fault that the company accountant responsible for updating standard costs was off sick and therefore unable to update the standards. Therefore, the production manager should be judged only by those variances over which he has control, which are the operational variances.

#### **Materials**

No operational variance arose in relation to materials price, since the actual price paid was the same as the revised price. A planning variance of \$8,184F does arise but the production manager cannot take the credit for this, as the material chosen by GPST for the new dresses just happens to be cheaper.

As regards usage, an adverse variance of \$5,280 arose. This suggests that, even with the revised quantity of material being taken into account, staff still used more than 2.2 metres on average to produce each dress. This is probably because they had to learn a new sewing technique and they probably made some mistakes, resulting in some wastage. The manager is responsible for this as it may have been caused by insufficient training. However, the labour efficiency variances below shed some more light on this.

#### **Labour**

The labour efficiency operational variance was favourable, which suggests good performance by the production manager. Staff took less than the expected revised 10 minutes per dress. However, when looked at in combination with the material usage operational variance above, it could be inferred that staff may have rushed a little and consequently used more material than necessary.

When both of the operational variances are looked at together, the adverse materials usage \$5,280 far outweighs the favourable labour efficiency variance of \$1,920. Consequently, it could be concluded that, overall, the manager's performance was somewhat disappointing.

## **32 The People's Bank**

- (a) The balanced scorecard approach looks not only at the financial performance but also non-financial performance. In order to maintain a competitive edge, organisations have to be very aware of the changing needs of their customers. In the case of The People's Bank, this has involved identifying specific categories of customers which have particular needs, like SMEs in a commercial context, or like the disabled or visually impaired in a non-commercial context. This permits these needs to be addressed.

The People's Bank has a vision and strategy which goes far beyond just making money. They want to help the community and disadvantaged people and give something back to customers also. Hence, by using the balanced scorecard, performance measures which address whether the Bank is being successful in pursuing their vision can be incorporated.

In addition, from a purely business perspective, if employees and customers are valued and internal processes are efficient, an organisation should have more chance of achieving long-term success anyway. So, even putting aside the social objectives The People's Bank has, the balanced scorecard can be useful to The People's Bank to measure these other aspects of future success too.

- (b) The performance of the bank will be considered under each of the headings used in the balanced scorecard:

#### **Financial perspective**

The People's Bank has had a year of mixed success when looking at the extent to which it has met its financial targets. Its return on capital employed (ROCE) shows how efficiently it has used its assets to generate profit for the business. The target for the year was 12% but it has only achieved an 11% return. The People's Bank's interest income, however, was in fact \$0.5m higher than its target, which is good. This may have been achieved by offering slightly better interest rates to customers than competing banks, as the interest margin The People's Bank achieved is slightly lower than target. The most likely reason for the under target ROCE is therefore probably the investment which The People's Bank has made in IT security and facilities for the disabled and visually impaired. Whilst this may have reduced ROCE, this investment is essentially a good idea as it helps The People's Bank pursue its vision and will keep customers happy. It will also, in the case of the IT security investment, prevent the bank and its customers from losing money from fraud in the future.

The other performance measure, the amount of new lending to SMEs, is a little bit disappointing, given The People's Bank's stated value of making a difference to communities. The failure to meet this target may well be linked to the fact that an insufficient number of staff were trained to provide advice to SMEs and consequently, fewer of them may have been successful in securing additional finance.

#### **Customer perspective**

With regard to its customers, The People's Bank has performed well in the year. It has exceeded its target to provide mortgages to new homeowners by 6,000. This is helping The People's Bank pursue its vision of helping new homeowners. It has also managed to beat the target for customer complaints such that there are only 1.5 complaints for every 1,000 customers, well below the target of 2. This may be as a result of improved processes at the bank or improved security. It is not clear what the precise reason is but it is definitely good for The People's Bank's reputation.

The bank has also exceeded both of its targets to help the disabled and visually impaired, which is good for its reputation and its stated value of making services more accessible.

**Internal processes**

The number of processes simplified within the bank has exceeded the target, which is good, and the success of which may well be reflected in the lower customer complaints levels. Similarly, the investment to improve IT systems has been a success, with only three incidences of fraud per 1,000 customers compared to the target of 10. However, perhaps because of the focus on this part of the business, only two new services have been made available via mobile banking, instead of the target of five, which is disappointing. Similarly, it is possible that some of the new systems have prevented the business from keeping its CO<sub>2</sub> emissions to their target level.

**Learning and growth**

The People's Bank has succeeded in helping the community, exceeding both of its targets relating to hours of paid volunteer work and number of community organisations supported by volunteers or funding. These additional costs could have contributed to the fact that the bank did not quite meet its target for ROCE.

However, the bank has not quite met its targets for helping small businesses and helping the disadvantaged. As mentioned earlier, the shortfall in training of employees to give advice to SMEs may have had an impact on The People's Bank's failure to meet its target lending to SMEs. As regards the percentage of trainee positions, the target was only just missed and this may well have been because the number of candidates applying from these areas was not as high as planned and the bank has no control over this.

Overall, the bank has had a fairly successful year, meeting many of its targets. However, it still has some work to do in order to meet its stated values and continue to pursue its vision.

Section C

*Maximum marks    Marks awarded*

**31 SU Co**

<b>(a)</b> Standard price	1
Standard quantity	0.5
SQAP	0.5
RQAP	0.5
Price planning variance	1.5
Usage planning variance	1.5
Usage op variance	1.5
	<u>7</u>
 <b>(b)</b> Actual hours	1
SHAP	0.5
RHAP	0.5
Planning variance	1.5
Operating variance	1.5
	<u>5</u>
 <b>(c)</b> Controllability	1
Variances/performance	6
Other/conclusion	1
	<u>8</u>
	<u><b>20</b></u>

**32 The People's Bank**

<b>(a)</b> Discussion	<u>4</u>
 <b>(b)</b> Financial	4
Customer	4
Internal	4
Learning	4
	<u>16</u>
	<u><b>20</b></u>



# F5 Examiner's commentary on March/June 2017 sample questions

This commentary has been written to accompany the published sample questions and answers and is written based on the observations of markers. The aim is to provide constructive guidance for future candidates and their tutors, giving insight into what the marking team is looking for, and flagging pitfalls encountered by candidates who sat these questions.

## Question 31

This was a fairly typical variances question, in a similar style to long variances questions from previous sittings. Unfortunately it is a topic which candidates regularly find difficult, as was the case here. As a result, I shall go into some detail about how best to approach this type of question.

As with any long question, it is good practice to read the first couple of lines of the scenario to find out what sort of business we are looking at, before looking at the requirement(s) to establish the topic being tested.

In this case we are told about two companies – the School Uniform Company (SU) and one of its customers, the Girls' Private School Trust (GPST).

The first requirement is to “Calculate the material variances in as much detail as the information allows for the month of February.” It is clear then, that we need to know material variances. The question is not specific however, and we don't know which variances are required – this is one of the key skills that are being tested. There are several variances we might be able to calculate here – the “basic” price and usage variances and the more advanced planning and operational variances or mix and yield. We won't know which until we read the scenario in more detail.

The second requirement is more specific – to “Calculate the labour efficiency variances in as much detail... for the month of February.” This is more of a clue – the labour efficiency variance is again the “basic” variance. The only detail we could go into is either to calculate planning and operating variances, or productive efficiency and idle time variances. Again though, we will need to read the scenario to determine which we can calculate – the fact that this part of the question carries 5 marks should rule out the possibility that only the basic variance is required.

The final requirement is to “assess the performance of the production manager for the month of February.” The fact that we are calculating variances means that it's very likely that we can use these to assess the manager's performance, however it's essential to read the scenario to determine what they can and cannot control, so that we assess their performance fairly. There may also be details in the scenario about decisions the manager has made, and we can use those to assess performance too.

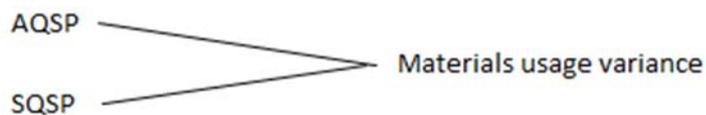
Now that we know what the requirements are, we can actively read the scenario to find the details we need. We know that materials and labour variances are involved, so should be on the lookout for information about both standard and actual usage and prices for material, and rates and hours for labour.

Reading through, the second paragraph gives us detail about materials for our product (a spring/summer dress). We are told some very important information – firstly that the design has changed, and now requires more material than previously – the standard cost card will need to be revised to allow for this, and any usage variance should be analysed between the planning variance caused by the change in design, and the operational variance which we can use to assess the production manager. Secondly, a new material is being used, which is cheaper than the previous material. It is worth noting here that the new material was chosen by GPST – a customer of SU, therefore this decision was not made by the production manager. This is crucial for two reasons – firstly this

cannot be used to assess the production manager's performance for part (c) and secondly an uncontrollable change from the original standard means that we should split our materials price variance into planning and operational components – the 5% reduction in price constitutes the planning variance.

The next paragraph gives details about labour time, which we know we will need to calculate our efficiency variance. Again, the change in design has had an effect on time taken – the new design will take 2 minutes longer to make. Again, this will cause a planning variance – the original standard will need to be revised to allow for this extra time, as the production manager should not be criticised for the change in design, which was not their decision. We are also told that there was no idle time, ruling out any idle time variances.

Next we are given budgeted and actual production. Actual production levels are essential in working out variances, as they compare actual figures to the flexed budget (based on actual production). The budgeted production figure is less important here, although it could be noted that actual production was 20% under budget, which may have a knock-on effect on profits. It is worth noting that the most common error when calculating variances of this type is to use budgeted production to calculate standard usage. For example, taking the basic materials usage variance – many candidates write this as:



ie the difference between the actual quantity of material at the standard price, and the standard quantity of material at the standard price. It is the SQ that causes the problems – it means the standard (expected) quantity of material to make ACTUAL production. So in our case, actual production was 24,000 units – the original standard amount per unit was 2m, so SQ would be  $2m \times 24,000 = 48,000m$ . Similarly, the revised standard quantity would be  $2.2 \times 24,000 = 52,800m$ . You would never use the budgeted quantity to calculate standard usage, as you're comparing it to the actual quantity of material used to make ACTUAL production.

In the final paragraph, we are told that the production manager is responsible for purchasing and production issues. This means that they can have some control over the materials price variance, as well as materials usage and labour efficiency variances, so we can use these to assess their performance.

Finally, we are told that the standard cost card has not been updated to reflect the changes in the design. This confirms that we need to calculate planning and operational variances, as discussed throughout – comparing actual performance to the standard cost card for the old design will lead to some variances which are not controllable by the production manager.

In answering parts (a) and (b) it's obviously essential to know the variances calculations. It was clear that most did – the main reason scores were low on both parts were that only the basic variances were calculated. Whilst some credit could be given for this, there were 12 marks available in total – for 6 variances – materials price (planning and operational), materials usage (planning and operational) and labour efficiency (planning and operational). Calculating just the 3 basic variances would not score a passing mark.

Coupled with that, it was much easier to score well on part (c) if you had already determined what was controllable and what was not. Easy marks could be gained here for explaining that the materials usage and

labour efficiency planning variances were due to the change in design, and therefore not controllable, and the materials price planning variance was due to GPST's decision to change the material – again, not controllable. You could then look at the operational variances and, based on whether they were adverse or favourable, decide whether the production manager had performed well or not. Remember that in many cases the variances have some interconnectivity. For example here, the operational labour efficiency variance was favourable, showing that the workers worked faster than expected. However the operational material usage variance was adverse, meaning that more material was used to make the actual production of 24,000 dresses than expected. This could have been because the workers were rushing, and therefore more material was wasted. Identifying possible cause and effect relationships like this will lead to a lot of credit being given.

When assessing performance it is also useful to give a conclusion. This should be in line with your previous findings – using total operational variance here would be a useful yardstick.

### Question 32

This was a performance assessment question, involving the use of the balanced scorecard. Performance on this question was reasonably strong, although poor exam technique in addressing the specific requirement did let some candidates down.

Part (a) was a short requirement asking why the balanced scorecard would be more useful to the People's Bank than using solely financial performance measures. Although there were only four marks available, it did highlight some candidates' weakness in not being able to use the information in the scenario to help them answer the question. Most were able to identify the generic point that the balanced scorecard gives a more rounded view by looking at a wider range of performance measures (financial and non-financial) as well as internal and external factors. However, the scenario gives us more help and shows us how important these non-financial factors are to the bank – the 3 values given highlight this. If their performance was assessed purely on profit they would never strive to meet those values, or looking at it another way they might be judged to have failed by spending money on improving customer accessibility or simplifying their processes.

Part (b) was a more traditional performance assessment question. However, exam technique was crucial here. The note in the requirement says to use each of the four headings of the balanced scorecard to structure your answer. Candidates who ignored this found it much harder to score well on this question, as it was harder to see how their points corresponded to the perspectives of the balanced scorecard. It was pleasing to see though, that the majority did use the headings suggested (which were given in the scenario). Similarly, the requirement specifically asked candidates to use the bank's vision and values to assess performance. Therefore, a sensible approach would be to take each perspective, use the performance measures given and details in the scenario to see how they link to the bank's vision and values. The other key skill in these questions is to identify linkages between measures – cause and effect relationships.

For example on the Financial perspective we can see that new lending to SMEs was significantly (10%) down on target. The first point you should make is that this is not in line with the bank's third value – to support SMEs. This alone will be given credit, and similar points should be made for each heading, however even more credit can be given if you go on to say that the drop in new lending to SMEs is due to the fact



that fewer colleagues have been trained to provide advice to SMEs (under learning and growth). Other similar linkages could be that fewer complaints were made than expected, possibly due to more simplified processes or fewer incidences of fraud. These points do not require a great deal of technical knowledge, but require candidates to analyse the information given quickly and understand how they affect one another.

Finally, a long discussion question like this should finish with a brief, overall conclusion. This should be in line with your findings – sometimes it will be very clear that performance has been good or bad, otherwise you might have to say something like “with the exception of the financial perspective, The People’s Bank has performed well in meeting its vision.”