

Examiner's report

MA2 Managing costs and Finance

For CBE and Paper exams covering July to December 2016

The ACCA logo is a black square with the letters 'ACCA' in white, bold, sans-serif font.

General Comments

The examination consists of 50 objective test questions, each worth 2 marks. The purpose of this report is to provide illustrations of questions which have especially posed problems for candidates.

The three sample multiple-choice questions below cover different aspects of the syllabus. The approach to correctly answering each question is explained and the common incorrect approaches, along with the misunderstandings which they indicate, are highlighted. Answering objective test questions requires candidates to have both a clear understanding of the subject matter being examined and a logical approach.

Sample Questions for Discussion

Example 1

Average bed occupancy, in a hospital ward with 20 beds, was 90% over a 30-day period. Costs in the period totalled \$194,400.

What was the cost per patient per day?

- A \$6,480
- B \$324
- C \$5,832
- D \$360

This question tests item C5e in the Study Guide on the subject of service costing.

The correct answer to this question is D and is calculated by taking the costs for the period and then dividing by the number of beds actually occupied in the period.

The calculation of beds occupied is found by taking the number of beds available multiplied by the days in the period, which is then adjusted for the level of occupancy.

So $20 \text{ beds} \times 30 \text{ days} \times 0.9$ for the occupancy adjustment gives 540 occupied beds in the period. Thus the cost per patient day is calculated as $\$194,400 / 540 \text{ beds}$ which is \$360 per day.

Some candidates chose A and incorrectly divided the cost by the number of days available in the period as \$6,480 ($\$194,400 / 30 \text{ days}$).

Whilst others wrongly divided the cost by the total bed capacity available, not what was actually occupied so they took $\$194,400 / (20 \text{ beds} \times 30 \text{ days}) = \324 and thus selected B.

A few chose C, they incorrectly adjusted the 30 days for occupancy by dividing the 30 by 0.9 as follows, $\$194,400$ by $(30 \text{ days} / 0.9)$ which gave \$5,832 in error.

Example 2

A company has been offered a job at short notice. If the job is not accepted, 25 direct labour hours of existing labour, at \$15 per hour, would be paid but would be idle. A total of 70 direct labour hours are required for the job. The remaining hours would be found by declining other work with a contribution of \$10 per direct labour hour.

What is the relevant cost of direct labour in deciding whether the job should be accepted?

- A \$1,050
- B \$1,500
- C \$825
- D \$1,125

This question tests item C3b in the Study Guide regarding calculating unit costs in Job Costing. Whereby cost is determined for different manufactured jobs. A mark-up is then applied to each total job cost (manufacturing and non-manufacturing costs) in order to achieve a target profit margin.

The correct answer is Option D. However, Options A and C were by far the most popular answers. Option D correctly takes the 45 hours needed to complete the job that isn't available as idle. This is currently paid at \$15 per hour which is (45 hours x \$15 per hour) giving \$675. The idle time is ignored because the staff will be paid for the idle time anyway, irrespective of whether the company takes the potential contract on. The cost is therefore not incremental. We then add to the cost of labour the lost contribution of \$10 per hour for the 45 hours diverted from the declined work, which is (45 hours x \$10 per hour) \$450. In total the relevant cost of direct labour is \$1,125

A majority of candidates selected A, which wrongly considers the total hours required for the job at the current labour rate, so takes all 70 hours x \$15 per hour which is \$1,050. This ignores the relevant cost principle for idle time and the lost contribution from the declined work.

Selecting C incorrectly includes the idle time cost on the 25 hours available as idle at \$15 per hour which is \$375 (25 hours x \$15 per hour) and adds this to the lost contribution on the extra hours needed to complete the job of 45 hours x \$10 per hour which is \$450, calculating \$825 in total.

A small proportion of candidates selected B which considers correctly the lost contribution of \$10 per hour on the 45 hours diverted from declining other work which is \$450, as relevant. But then incorrectly adds to this, the total hours required for the job as 70 hours at \$15 per hour rather than just the extra 45 required. \$450 + \$1050 which is \$1,500 in error.

Example 3

100 units of a product are produced per batch. Each finished unit of the product contains 0.54 kilograms (kg) of raw material after wastage of 10% of input.

What weight of raw material is required to produce 20 batches of product?

- A 1,188 kg
- B 1,080 kg

- C 972 kg
- D 1,200 kg

The correct answer of D but the majority of candidates selected the other options.

The correct method takes the 100 units per batch and multiplies it by the 20 batches. This is the number of units which is needed after the wastage of 10%, so 2000 units of good quality output.

It is then adjusted to work out how much production is required knowing we will lose 10% of input as waste. Divide the 2000 units required by 0.9 to adjust for the input wastage expected.

$2000/0.9 = 2222.222 \times 0.54$ kg is 1200kg and this is the kg of input required knowing there will be a 10% waste

Answer A wrongly takes waste and adds it on in error. So $100 \text{ units} \times 20 \text{ batches} \times 1.1$ (for the 10% loss) $\times 0.54$ kg which is 1,188kg

Answer B ignores waste altogether and takes $100 \text{ units} \times 20 \text{ batches} \times 0.54$ kg which is 1,080kg

Answer C incorrectly removes waste at 10% from the output. So $100 \text{ units} \times 20 \text{ batches} \times 0.9$ (for the 10% loss) $\times 0.54$ kg which is 972 kg.

Summary

The three multiple-choice questions illustrated in this report reveal a number of misunderstandings, confusion or a lack of knowledge amongst candidates regarding the particular topics being examined. In many cases this may be symptomatic of a more widespread problem which can only be overcome by a rigorous study program and by practicing objective test questions. Candidates preparing for future examinations should try to ensure that they develop a clear understanding of the different areas of the syllabus and think logically when answering them. A failure to read questions carefully is also apparent at times.