



Examiner's report

MA2 Managing Costs & Finances

For CBE and Paper exams covering July to December 2014

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 set which have especially posed problems for candidates.

The questions below, covering different aspects of the syllabus, set out the approach that should be taken to answering each question correctly and also highlight common incorrect approaches that many candidates have taken and the misunderstandings that they indicate. 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

Two joint products (A and B) are manufactured from a common process. Data for a period includes:

| | Product A | Product B | Total |
|--------------------------|-----------|-----------|-----------|
| Weight of output | 3,000 kg | 5,000 kg | 8,000 kg |
| Selling price per kg | \$20 | \$12 | |
| Final sales value | \$60,000 | \$60,000 | \$120,000 |
| Joint process costs | | | \$60,000 |
| Further processing costs | \$15,000 | \$5,000 | \$20,000 |

Using the net realisable value method of apportionment, what percentage of the joint process costs would be apportioned to Product A?

- A 50.0%
- B 37.5%
- C 62.5%
- D 45.0%

This question tests item C4h in the Study Guide on the subject of accounting for joint products. The question specifically requires the net realisable value method to be used to apportion the joint process costs, rather than final sales value (an alternative method also based on relative sales values) or weight of output (a method which ignores relative sales values and instead bases the cost apportionment on relative output volume). Despite this, apportionment based on weight of output (Option B) has been the option most frequently chosen by candidates $[(3,000 \div 8,000 \text{ kg}) \times 100 = 37.5\%]$.

Net realisable value is the final sales value of the output less the further processing costs. This provides an estimated market value of the incomplete products at the split off point in a situation where the products cannot be sold at that point. The correct answer, using net realisable value, is Option D $\{[(\$60,000 - \$15,000) \div (\$120,000 - \$20,000)] \times 100 = 45.0\%\}$. Many candidates, however, simply used the relative final sales values (Option A), which fails to adjust for the value added by further processing $[(\$60,000 \div \$120,000) \times$

100 = 50.0%], or the relative selling prices (Option C) which in addition ignores the weighting of the differing output of the two products ($[\$20 \div \$32] \times 100 = 62.5\%$)

Example 2

A new machine, costing \$100,000, has an estimated realisable value of \$25,000 after five years. The expected profit from investment in the machine is \$25,000 per year, net of straight-line depreciation.

What is the payback period?

- A 4.0 years
- B 3.0 years
- C 1.875 years
- D 2.5 years

This question tests item D2f in the Study Guide. The question covers the payback period, one of the methods used to appraise the viability of capital investment (long-term) projects. Candidates' answers demonstrated confusion about how payback is calculated. Fundamentally, the payback method uses cash flows, rather than accounting profits, to determine how long it will take to recover the capital initially invested in a long-term project.

The correct answer (Option D) requires depreciation, which is not a cash flow, to be added back to the expected annual profit figure provided in the question. Straight-line depreciation is \$15,000 per annum $[(\$100,000 \text{ investment} - \$25,000 \text{ residual value}) \div 5 \text{ years}]$ and so the annual cash inflow is \$40,000 (\$25,000 profit + \$15,000 depreciation). The payback period is 2.5 years $(\$100,000 \div \$40,000)$.

A much more popular, but incorrect, answer has been Option A which simply divides the investment amount by the annual profit net of depreciation $(\$100,000 \div \$25,000 = 4.0 \text{ years})$. Another popular, but incorrect, answer is Option B which not only uses the annual profit, rather than cash flow, but also uses the net investment amount $(\$100,000 \text{ investment} - \$25,000 \text{ residual value} = \$75,000)$. Thus $\$75,000 \div \$25,000 = 3.0 \text{ years}$. Using the net investment figure fails to recognise that the residual value will not be received until the end of Year 5. Finally, Option C, the least popular answer chosen by candidates, is based correctly on cash flows but uses the net investment amount $(\$75,000 \div \$40,000 = 1.875 \text{ years})$.

Example 3

An overhead cost budget for the next calendar year includes:

- Depreciation charged on a straight-line basis at \$11,200 per month;
- Machine maintenance of \$5,900 per quarter, payable in advance in January, April, July and October.

The remaining overheads, of \$207,600 for the year, are budgeted to be incurred at an even rate per month, payable one month in arrears. The expected accrued overhead, at the end of the calendar year prior to the budget year, is \$16,800.

What amount of overhead should be included in the cash budget for January?

- A \$23,200
- B \$22,700

- C \$33,900
- D \$28,500

This question tests item E3c in the Study Guide on the preparation of cash budgets. A similar principle to that applied in Example 2, regarding the irrelevance of depreciation to cash flow, needs to be applied in this question. For cash budgeting, the relevant amounts relating to non-current assets is when the investment expenditure takes place not when, or how, accounting depreciation is applied. Considerable confusion amongst candidates has again been demonstrated.

Thus, in this question, the depreciation of \$11,200 per month is irrelevant for the cash budget. Also irrelevant, for the cash budget for January, are the remaining overheads of \$207,600 for the year because they do not become payable until February (i.e. payable one month in arrears). The relevant data for the cash budget are the accrued overhead from the previous year of \$16,800 and the quarterly machine maintenance of \$5,900 because they will both be paid in January. The correct answer, which has not been the most popular option, is Option B ($\$16,800 + \$5,900 = \$22,700$).

The answer most frequently selected by candidates is Option C which also includes depreciation ($\$16,800 + \$5,900 + \$11,200 = \$33,900$). Options A and D have also been commonly chosen by candidates. Option A includes one twelfth of the remaining overheads for the budget year rather than the accrued overhead from the previous year [$(\$207,600 \div 12) + \$5,900 = \$23,200$]. Option D incorrectly includes budget year remaining overheads, rather than the accrued overhead from the previous year, but also adds depreciation and ignores the machine maintenance [$(\$207,600 \div 12) + \$11,200 = \$28,500$].

Summary

The objective test questions illustrated in this report reveal a number of misunderstandings, confusion or a lack of knowledge, that many candidates have demonstrated 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. It is also essential that candidates read questions carefully. Failure to do so may also be a factor at times in candidates taking incorrect approaches to answering objective test questions.

Candidates preparing for future examinations should try to ensure that they develop a clear understanding of the different areas of a syllabus, that they read questions carefully and think logically when answering them.