



# Examiner's report

## MA1 Management Information

For CBE and Paper exams covering July to December 2015

### 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

Production costs of product X have been classified in various ways:

Prime costs	\$50.80 per unit
Variable costs	\$54.44 per unit
Fixed overheads	\$15.20 per direct labour hour
Direct labour	2.6 hours per unit at \$12.00 per hour
Variable overheads	\$1.40 per direct labour hour
Direct materials	\$19.60 per unit

**What is the total production cost per unit of product X?**

- A \$105.24
- B \$144.76
- C \$93.96
- D \$125.16

This question tested candidates' understanding of different groupings of production costs and their ability to identify any overlap between them. Candidates were required to determine the total production costs per unit of product which required them to avoid any duplication of costs in the list provided. The total production cost is the sum of the direct costs, variable production overheads and fixed production overheads.

Prime cost is the sum of the direct costs. Hence the figure of \$50.80 per unit is the sum of the direct labour of \$31.20 per unit (2.6 hours @ \$12.00) and the direct materials of \$19.60 per unit. Option D was incorrect because it included the direct labour as well as the prime costs. This error was made by a relatively small proportion of the candidates.

The most popular option for candidates was Option A. The figure of \$105.24 is the sum of the prime costs (\$50.80) and the variable costs (\$54.44). This was incorrect for two reasons. Firstly, the variable costs are the sum of the prime costs and the variable overheads and so the figure of \$50.80 was duplicated. Secondly, the fixed overheads of \$39.52 (2.6 hours @ \$15.20) were not included in the figure of \$105.24.

Option B (\$144.76), which was also popular with candidates, included the same mistake as Option A regarding the duplication of direct/prime costs but did correctly include the fixed overheads.

Option C (\$93.96) was the correct answer. The simplest way of determining the total production cost per unit from the data in the question was to add the variable costs of \$54.44 and the fixed overheads of \$39.52. The prime cost, direct labour, direct materials and variable overhead figures could all be disregarded because they were already included in the variable costs.

## Example 2

**Which of the following could be examples of cost centres?**

- (1) Administration department
- (2) Output from a manufacturing process
- (3) Group of production machines
- (4) Materials store

- A 2, 3 and 4
- B 1 and 4 only
- C 1, 3 and 4
- D 1, 2 and 3

This question tested understanding of what a cost centre is and the ability of candidates to identify examples.

The purpose of establishing cost centres within a business is so that those costs that cannot be directly allocated to a cost unit (i.e. the overheads of the business) can be controlled. A cost centre may be a production or service location, function, activity or item(s) of machinery.

The correct answer is Option C because an administration department, a group of production machines and a materials store could all be cost centres. The output from a manufacturing process, included in Options A and D, would not be a cost centre: it is the quantity of a cost unit. A significant proportion of candidates selected these options. Option B, which was the most popular option for candidates, although including only examples of cost centres, did not include the group of production machines.

## Example 3

The following ratios were calculated for a period:

Production volume	98%
Efficiency	105%

**On the basis of the above ratios, is each of the following statements true or false?**

- (1) Actual hours were more than budgeted hours
- (2) Standard hours of production were more than actual hours
- (3) Budgeted hours were less than standard hours of production

	True	False
A	2	1 and 3
B	2 and 3	1
C	1 and 3	2
D	1 and 2	3

This question tested candidates' interpretation, and thus understanding, of production ratios which are used to measure production performance based on direct labour hours. All four options were popular with candidates.

The production volume ratio compares the standard (expected) hours for the actual production in a period with the budgeted hours for that period. A ratio of less than 100% (as in this question) indicates that the standard hours for the actual production are less than the budgeted hours. Therefore, statement (3) is false and it follows that Options B and C are both incorrect.

The efficiency ratio compares the standard (expected) hours for the actual production in a period with the actual hours worked in that period. A ratio of more than 100% (as in this question) indicates that the standard hours for the actual production are more than the actual hours worked. Therefore, statement (2) is true and it follows that Option C is incorrect for this reason also.

It follows from the above that if standard hours were less than budgeted hours but more than actual hours then budgeted hours were more than actual hours. Therefore, statement (1) is false and it follows that Option D is also incorrect and Option A is the correct answer.

## 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, read questions carefully and think logically when answering them.