



Think Ahead

Managing Costs & Finance (MA2) September 2023- August 2024 Examiner's 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 those sitting the exam in the future.

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General Comments

The intention of this report is that, when considered in conjunction with previous reports, candidates at future sittings will have a resource which maximises their chance of success.

The most effective way to use these reports is to consider both the technical content of each question, and the approach to answering the question – noting that different question types will require slightly different approaches.

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 six 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.

Example 1

Which TWO of the following reasons would explain why a maximum inventory control level was exceeded?

Choices:

1. Usage in the lead time was lower than the predicted minimum usage
2. A purchase order was delivered more quickly than usual
3. The re-order level was higher than the safety inventory
4. The minimum inventory control level has been reduced

The two reasons that would explain why a maximum inventory control level was exceeded are **1 & 2**:

Usage in the lead time was lower than the predicted minimum usage

If the actual usage during the lead time is lower than the predicted minimum usage, the inventory will not be depleted as expected, leading to higher inventory levels and potentially exceeding the maximum inventory control level.

A purchase order was delivered more quickly than usual

If a purchase order arrives sooner than expected, the inventory levels will increase more rapidly, potentially exceeding the maximum inventory control level.

The other choices are incorrect:

The re-order level was higher than the safety inventory is incorrect because it does not directly cause the maximum inventory level to be exceeded. The re-order level being higher than the safety inventory simply means that the company maintains a higher buffer stock, but it does not necessarily lead to exceeding the maximum inventory level.

The minimum inventory control level has been reduced is incorrect because reducing the minimum inventory control level would not directly cause the maximum inventory level to be exceeded. It would simply mean that the company is willing to hold less inventory before reordering.

Example 2

A company manufactures a single product, which has a selling price of \$10 per unit. The break-even point is \$270,000 in sales value. The margin of safety ratio is 25%.

What is the margin of safety in sales units?

Choices:

1. 9,000
2. 33,750
3. 27,000
4. 36,000

The correct answer is 1. 9,000

1. The first step is to calculate the break-even point in units:

$$\begin{array}{lcl} \text{break-even sales revenue / selling price} & = & \text{break-even units} \\ \$270,000 / \$10 & = & 27,000 \text{ units} \end{array}$$

2. The second step is to consider how the margin of safety is calculated as a percentage, and insert the values provided here:

$$\begin{array}{lcl} \frac{\text{budgeted units} - \text{breakeven units}}{\text{budgeted units}} & = & \text{margin of safety \%} \\ \frac{\text{budgeted units} - 27,000}{\text{budgeted units}} & = & 0.25 \end{array}$$

3. The third step is to find the budgeted units, by rearranging the expression above, with X denoting the unknown value of budgeted units:

$$\begin{aligned}\frac{X - 27,000}{X} &= 0.25 \\ X - 27,000 &= 0.25X \\ 0.75X &= 27,000 \\ \text{budgeted units, } X &= 27,000 / 0.75 \\ &= 36,000\end{aligned}$$

4. Once you have the budgeted units and break-even units, the final step is to calculate the margin of safety in units. This is equal to the difference between budgeted units and break-even units:

$$\begin{aligned}\text{margin of safety} &= 36,000 - 27,000 \\ &= 9,000 \text{ units}\end{aligned}$$

Example 3

A company is considering a new one-year contract which will require three skilled employees. The company has two options:

- (1) It could recruit the three employees for the duration of the contract at a total cost of \$90,000.
- (2) It could retrain existing employees who currently each earn \$20,000 per year, at a total training cost of \$10,000. The total replacement cost of these employees, if they were used on the new contract, would be \$75,000.

What is the total relevant labour cost for this contract?

\$ []

The correct answer is 85,000

The company will select the lowest cost option, which will give the relevant cost:

- (1) Employing three employees for the duration will cost \$90,000.
- (2) The replacement cost of the employees currently employed is \$75,000, but it is also necessary to include the cost of the training that they would require of \$10,000. This equals a total of \$85,000, which is the lower of the two options.

The current salary cost of the existing employees, of \$20,000 per year each, will be unchanged by the decision to retrain them and hence is not a relevant cost.

Example 4

Which TWO of the following statements are features of a certificate of deposit?

Choices:

1. Interest rate varies over the term of the deposit
2. Funds are deposited for a fixed term
3. Can be sold to another investor before maturity
4. Financial instrument issued by local government

The correct answer is 2 & 3.

Certificates of deposit are fixed income investments that generally pay a set rate of interest over a fixed time period.

They can be sold to a third party before the maturity date.

1 and 4 are incorrect answers:

A certificate of deposit is not issued by the government - it is issued by a bank or a credit union.

Interest rates on certificates of deposit are typically fixed, meaning that the same rate is earned over the entire term of the deposit.

Example 5

A college has 10,000 full-time students and 8,000 part-time students. A part-time student is considered to be equivalent to 40% of a full-time student. College costs in the most recent year were \$2,376,000.

What was the cost per full-time equivalent student in the most recent year?

\$ []

The correct answer is 180

The college has 10,000 full-time students and 8,000 part-time students. A part-time student is deemed to be equivalent to 40% of a full-time student.

To carry out the calculation it is necessary to calculate the total number of full-time equivalent students.

The number of part-time students should be multiplied by their % equivalent to arrive at a full-time equivalent:

$$8,000 * 0.4 = 3,200$$

The college has 10,000 full-time students and now 3,200 equivalent pro-rata students. That makes 13,200 in total for full-time equivalent students.

College costs in the most recent year were \$2,376,000 so divide this by 13,200 to get a cost per full-time equivalent student.

$$\text{\$2,376,000} / 13,200 = \text{\$180}$$

Example 6

A manufacturer buys raw materials for cash, carries high levels of finished goods inventory and sells to customers on long credit terms.

Which of the following circumstances would adversely affect the manufacturer's short-term cash flow?

- (1) High levels of inflation
- (2) A period of high growth in production and sales

Choices:

- 1. 1 only
- 2. 2 only
- 3. Neither 1 nor 2
- 4. Both 1 and 2

The answer is 4. Both 1 and 2

Both circumstances would adversely affect the manufacturer's short-term cash flow:

- (1) High levels of inflation: This would increase the cost of raw materials and other inputs, leading to higher cash outflows. Additionally, if the manufacturer is selling on long credit terms, the cash inflows would not keep pace with the rising costs, thereby straining the short-term cash flow.
- (2) A period of high growth in production and sales: While growth is generally positive, it requires more working capital to finance the increased levels of inventory and receivables. If the manufacturer does not have sufficient short-term financing to support this growth, it could lead to cash flow problems.

Conclusion

Based on the performance of candidates in these questions, it can be observed that there were two major reasons for incorrect choices being made. The first is that there was a lack of awareness / understanding of fundamental issues in the syllabus such as the decision-making and costing techniques. The second is that the questions were not read carefully enough, which led to confused thinking or key points being ignored.

Candidates preparing for future sittings are strongly encouraged to ensure that they have developed a clear understanding of the key points of each area of the syllabus and that they read carefully and think logically when attempting questions.