



Examiner's report

MA2 – Managing Costs and Finance

September 2019 – August 2020

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 MA2 examination consists of 50 objective test questions, each worth 2 marks. The purpose of this report is to provide illustrations of questions which have posed problems for candidates.

The six sample questions below cover different aspects of the syllabus. The approach to correctly answering each question is explained. In addition, some 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

A company has calculated its profits using both marginal and absorption costing principles. Marginal costing reported a profit of \$200,000 whereas absorption costing reported a profit of \$180,000. The company's fixed production overhead absorption rate is \$40 per unit. Actual production for the period was 5,000 units.

How many units must have been sold in the period?

units

The correct answer is 5,500 units

Marginal costing profit is \$200,000 and absorption costing profit is \$180,000 therefore there is a difference of \$20,000 in profit. As marginal costing profit is higher this means that inventory levels have reduced in the period, which means that sales levels were higher than production levels.

The \$20,000 difference in the profits is calculated as (fixed production overhead rate x reduction in inventory), therefore the reduction in inventory is $(\$20,000 \div \$40) = 500$.

Actual sales in the period must have been $5,000 + 500 = 5,500$.

This is because the absorption method allocates a proportion of the fixed overheads to both the actual units sold and the closing inventory, whilst the marginal method treats all of the fixed costs as a period cost.

Example 2

At an output level of 10,000 units a company budgets for fixed production costs of \$2,000 and variable production costs of \$5,000. In period 1 when actual production was 11,000 units the total production cost was \$8,000. The company uses flexed budgets for comparison purposes.

What was the total production cost variance for period 1?

Choices:

1. \$300 Adv
2. \$300 Fav
3. \$500 Adv
4. \$500 Fav

The correct answer is 3. \$500 Adv

	Budget	Flexed Budget	Actual	Variance
Units	10,000	11,000	11,000	
	\$	\$	\$	\$
Fixed Production Cost	2,000	2,000		
Variable Production Cost	5,000	5,500		
Total Production Cost	7,000	7,500	8,000	500 Adverse

Variable costs change in response to activity levels while fixed costs remain the same. For example, direct materials are variable costs because the more goods you make, the more materials you need.

In this question the company budgets fixed production costs of \$2,000 and variable production costs of \$5,000 for an output level of 10,000 units. The variable cost equates to \$0.50 per unit (\$5,000 ÷ 10,000).

In the flexed budget column, the fixed production cost stays at \$2,000 irrespective of the volume as it is fixed. The variable cost is flexed according to the actual volume of 11,000, so (\$0.50 x 11,000) = \$5,500. Therefore the total flexed production cost for 11,000 units is \$7,500.

The total production cost variance is therefore \$500 Adverse; which is the difference between the actual total production cost of \$8,000 and the flexed budget total production cost of \$7,500.

Example 3

Which of the following short-term investments are negotiable instruments?

- (1) Certificate of deposit
- (2) Bank deposit account
- (3) Government stock

Choices:

- 1. 1 only
- 2. 1, 2 and 3
- 3. 3 only
- 4. 1 and 3 only

The correct answer is choice 4. 1 and 3 only

A negotiable instrument is a document guaranteeing the payment of a specific amount of money, either on demand, or at a set time. Examples are certificates of deposit, promissory notes, bills of exchange and government stocks (gilts).

Example 4

At the beginning of a year a company had 3,000 employees. During the year 1,000 new employees were recruited but 600 of these were to replace employees who had resigned during the year. The remainder were to staff an expansion of the business.

What was the labour turnover rate for the year (to one decimal place)?

Choices:

- 1. 18.8%
- 2. 17.1%
- 3. 15.0%
- 4. 17.6%

The correct answer is choice 1. 18.8%

The formula to calculate the labour turnover is:

(average number of leavers who are replaced/average number of employees) x 100%

The average number of leavers who were replaced is given in the question as 600. The average number of employees is not given but can be calculated as:

$(\text{number of employees at the start of the year} + \text{number of employees at the end of the year}) / 2$

The number of employees at the start of the year was 3,000. 1,000 new employees were recruited and 600 left which means the number of employees at the end of the year was 3,400. The average number of employees is therefore $(3000 + 3,400)/2 = 3,200$.

The labour turnover rate is $(600/3,200) \times 100\% = 18.8\%$.

The other options all correctly used 600 as the average number of leavers who were replaced, but all used the wrong figure for average number of employees.

Option 2 used $(3000 + 4000) / 2 = 3,500$.

Option 3 used $(3,000 + 1,000) = 4,000$.

Option 4 used $(3,000 + 1,000 - 600) = 3,400$.

Example 5

If sales volume increases by 10% with no change to other variables, is each of the following statements TRUE or FALSE?

	True	False
1. Total contribution rises by 10%		
2. Contribution per unit rises by 10%		
3. Total profit increases by 10%		
4. Fixed production costs increase by 10%		

The correct answer is 1. True, 2. False, 3. False, 4. False

Many candidates can struggle with this style of question. The question asks for the impact on various elements from a 10% increase in sales volume, but no other figures are given. The easiest way to tackle this is for the candidate to set up a profit statement with their own figures and work through the impact of the change on each element, for example:

	Per unit (\$)	Sales units	Total (\$)
Sales	100		
Variable cost	(30)		
Contribution	70	x 1,000	70,000
Fixed production costs			(20,000)
Profit			50,000

Consider the impact of a 10% increase in sales volume on each of the figures in the profit statement.

Sales per unit, variable cost per unit and contribution per unit will not change. The volume will increase by 10% from 1,000 to 1,100, so the total contribution will increase from \$70,000 to \$77,000 (an increase of 10%). The fixed production costs will not change. Overall the profit will increase from \$50,000 to \$57,000 (an increase of 14%):

	Per unit (\$)	Sales Units	Total (\$)
Sales	100		
Variable cost	<u>(30)</u>		
Contribution	70	x 1,100	77,000
Fixed production costs			<u>(20,000)</u>
Profit			<u>57,000</u>

From the options given in the question, the only one which is true is 1. the total contribution will increase by 10%. Contribution per unit and fixed production costs do not change and profit increases by 14%.

Example 6

Which TWO of the following could cause an adverse material cost variance against a flexed budget?

Choices:

1. The buyer has not negotiated well with suppliers
2. More units were made than budgeted
3. The budgeted kilograms per unit was too low
4. The budgeted cost did not allow for quantity discounts

The correct answers are 1. and 3.

The best way to tackle this type of question is to read through each choice and decide if it is a correct statement, remembering that two are correct.

1. The buyer has not negotiated well with suppliers. If a buyer has not negotiated well with suppliers, it suggests that the price obtained is higher than was expected. Paying a higher price than expected would result in an adverse material cost variance.

2. More units were made than budgeted. This one can often catch candidates out. Remember the variance is calculated by comparing the actual costs against the flexed budget. The flexed budget is the budget for the actual level of production, therefore more units being made than budgeted is taken account of when flexing the budget; it does not cause an adverse variance.

3. The budgeted kilograms per unit was too low. If the budgeted kilograms per unit was too low, then more material would be used in production than expected. This would result in an adverse material cost variance.

4. The budgeted cost did not allow for quantity discounts. If the budgeted cost did not allow for quantity discounts but discounts were received, then the cost of the material would be lower than budgeted. This would result in a favourable material cost variance.

Summary

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.