



Think Ahead

Management Accounting (FMA/MA) September 2020- August 2021 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 two sections. Section A of the paper contains 35 objective test questions – each worth 2 marks, and section B contains 3 MTQs worth ten marks each. All questions are compulsory. The paper is a two-hour examination. A pilot paper reflecting this structure is available on the ACCA website together with several MTQs. Calculation questions account for approximately one half of questions in both Section A and Section B. Candidates' performance on calculation questions is normally worse than on narrative questions.

Example 1

A project will cost \$11.5 million. The forecasted revenue arising for two possible economic conditions are shown in the table below:

Economic Condition	Probability (p)	Revenue (r) \$ million	(p x r) \$ million
Adverse	0.3	8	2.4
Favourable	0.7	15	10.5
		Expected value	12.9

Which TWO of the following statements are CORRECT?

Choices:

1. The forecast suggests that the project will make a profit of \$1.4 million
2. The forecast suggests that the project could make a loss of \$9.1 million
3. The forecast suggests that the project could make a loss of \$3.5 million
4. If the two economic outcomes were forecast as being equally likely, the expected revenue would match the cost

The correct answer is that statement 3 and statement 4 are correct.

Statement 1 is incorrect. The expected profit is \$1.4 million (\$12.9m - \$11.5m), which represents the average profit if the same project were undertaken many times. On any particular occasion however, the outcome will be either a loss of \$3.5m (\$8m – \$11.5m), or a profit of \$3.5m (\$15m - \$11.5m). An actual outcome of \$1.4m is not possible.

Statement 2 is incorrect. Again, as shown above the only possible outcomes are a loss of \$3.5m or a profit of \$3.5m.

Statement 3 is correct because as shown above, a loss of \$3.5m is a possible outcome.

Statement 4 is correct because $(\$8m \times 0.5) + (\$15 \times 0.5) = \$11.5m$, which is equal to the cost of the project.

Example 2

Consider the following statements about the normal distribution:

- (1) The total area under the standard normal distribution curve is 1
- (2) In any normal distribution, the mean and the median are the same

Are each of the statements true or false?

	True	False
Statement 1		
Statement 2		

The correct answer is both statements are true.

The standard normal distribution is constructed to have an area under the curve of 1.

The normal distribution is symmetrical and therefore the median is equal to the mean.

An examination of the standard normal distribution tables given in the examination will confirm these facts.

Example 3

One unit of a product requires three kg of material, and the expected cost of materials is \$4 per kg. Labour will be paid at \$12 per hour and each employee will make four units per hour. Budgeted fixed overheads are \$800,000 per period and are to be absorbed using budgeted labour hours, which are 40,000.

What is the standard total absorption cost per unit?

The correct answer is \$20.

This is an example of a “fill in the blank question”. Candidates are advised to check their workings carefully as careless arithmetic errors are easy to make. Also make sure that the answer is input in the correct format.

	\$
Direct material: 3 kg x \$4 per kg	12
Direct labour: \$12 per hour x 0.25 hours	3
Fixed overheads \$800,000/40,000 hours x 0.25 hours	<u>5</u>
Standard absorption cost per unit	<u>20</u>

Example 4

The standard fixed production overhead absorption rate in a factory is \$20 per machine hour. 1,760 machine hours were worked in a period during which the fixed production overhead variances included:

Capacity \$3,600 Favourable
Volume \$2,400 Adverse

What were the budgeted machine hours?

Choices:

1. 1,580 hours
2. 1,640 hours
3. 1,880 hours
4. 1,940 hours

The correct answer is 1. 1,580 hours.

The fixed overhead volume variance is the difference between standard hours required for actual production and budgeted hours, multiplied by the standard fixed overhead absorption rate.

The fixed overhead capacity variance is the difference between actual hours worked and budgeted hours, multiplied by the standard fixed overhead absorption rate.

Standard hours for actual production are not given, so we cannot solve the question by analysing the volume variance. However, we do know actual machine hours used, so the question can be solved by analysing the capacity variance.

Capacity variance = (Actual hours – Budgeted hours) x standard fixed overhead per hour

Capacity variance = \$3,600 favourable

(Actual hours – Budgeted hours) x standard fixed overhead per hour = \$3,600 favourable

Of the elements in the capacity variance, we know the actual hours (1,760) and the standard fixed overhead per hour (\$20). Insert these figures in to the calculation and solve for the budgeted hours:

$$(1,760 \text{ hours} - \text{Budgeted hours}) \times \$20 = \$3,600$$

From this calculate the budgeted hours: $(1,760 - (\$3,600/\$20)) = 1,580$ hours

Incorrect answers:

Choice 2 is a result of taking the volume variance given as a favourable capacity variance.

Choice 3 is a result of taking the volume variance given as an adverse capacity variance.

Choice 4 is a result of treating the capacity variance given as adverse rather than favourable.

Example 5

The following statements relate to overhead costing methods:

- (1) Overheads are allocated to cost pools
- (2) Recognises the diversity and complexity of operations
- (3) Tends to apportion too great a share of overheads to high volume products
- (4) Uses both production volume-related and transaction-based cost drivers

Which of the statements relate to traditional absorption costing and which to activity-based costing?

	Traditional absorption	Activity based
1. Statement 1		
2. Statement 2		
3. Statement 3		
4. Statement 4		

The correct answer is:

Traditional absorption	Activity based
	Statement 1
	Statement 2
Statement 3	
	Statement 4

Activity based costing recognises that overheads are driven by the different activities that organisations undertake. In order to charge costs to products overheads are first allocated to cost pools (statement 1) and overhead costs are then related to cost drivers. ABC recognises that production volume is not the only driver of overhead cost in the modern business world. Cost drivers could be volume of production or activities such as machine set ups, quality control inspections, fulfilling customer orders etc. (statements 2 and 4).

Traditional absorption costing assumes that production volume is the only driver of overhead cost. As a result, high volume products often bear high amounts of overhead cost. The complexity of the production process is ignored. This sometimes results in complex low volume products being charged too little overhead and relatively simple high-volume products being charged too much overhead. (statement 3)

Example 6

The results for a division are as follows:

	\$
Sales	24,000
Direct costs	<u>(10,000)</u>
Contribution	14,000
Allocated costs (directly relating to the division)	(2,000)
Apportioned head office costs	<u>(1,000)</u>
Divisional profits	<u>11,000</u>

\$80,000 capital employed is controllable by the division.

What is the controllable return on investment for the division for the period (to the nearest %)?

Choices:

1. 15%
2. 18%
3. 14%
4. 16%

The correct answer is 1. 15%.

Controllable profits are calculated by subtracting costs controllable by the division from the division's revenues. Generally direct costs are controllable at divisional level (for example the costs of direct materials used). Allocated costs refer to the assignation of a whole item of cost (for example indirect worker's wages) to a single responsibility centre. These costs are controllable at divisional level. Apportioned costs refer to costs (in this case head office costs) spread over two or more responsibility centres. Divisions have no control over head office expenditure.

Controllable profit is therefore \$12,000. ($\$24,000 - \$10,000 - \$2,000$).

Controllable ROI is 15% ($\$12,000/\$80,000$).

Incorrect answers:

Option 2 fails to recognise allocated costs as controllable. ($\$14,000/\$80,000$).

Option 3 mis-classifies apportioned head office cost as controllable. ($\$11,000/\$80,000$).

Option 4 mis-classifies apportioned head office cost as controllable and fails to recognise allocated costs as controllable. ($\$13,000/\$80,000$)

Comments on Section B performance

Section B contains 3 questions, one from each of syllabus areas C Budgeting, D Standard Costing and E Performance Measurement. The balance of MCQ questions in section A reflects this weighting so as to preserve the overall balance of the paper. The pilot paper reflects the weightings and this balance of questions will be used in future papers.

Common problems with section B questions include the following:

- An inability to calculate payback, NPV and IRR
- An inability to calculate standard cost variances
- An inability to calculate residual income and ROCE
- A difficulty with questions presented in spreadsheet format
- A difficulty with questions involving the reconciliation of actual and budgeted figures via standard costing variances

Future candidates are advised to:

- Study the whole syllabus because the paper will cover the full syllabus
- Practise as many objective testing questions as possible, number entry questions appear to be a weakness
- Read questions very carefully in the examination
- Ensure that their calculations are complete before selecting their answer to multiple choice questions
- Try to attempt the “easy” examination questions first
- Try not to spend too much time on apparently “difficult” questions
- Attempt all questions in the examination (there are no negative marks for incorrect answers)
- Consider the “reasonableness” of their answers in section B (an inventory days figure of 27 million days is unlikely)
- Read previous Examiners’ Reports