Examiner's report

FMA/MA Management Accounting
For CBE exams covering September 2017 to June 2018

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.

In considering the technical content, candidates should make sure that they have a clear understanding of that content. Whilst not every candidate will use exactly the same approach, it is important to ensure that a logical and sequential approach is applied, based on relevant technical knowledge.

The examination consists of two sections. Section A of the exam contains 35 objective test questions – each worth 2 marks and section B contains 3 MTQs worth ten marks each. All questions are compulsory.

Sample Questions for Discussion

Example 1

A process is subject to a normal loss of 12% of input. Losses can be sold for $5 per kg. In the last period 10,000 kg of material costing $100,000 was input to the process. Conversion costs for the period were $50,000 and output was 9,200 kg.

What is the credit to the statement of profit or loss from the abnormal gain account in the last period?

A $4,260
B $4,818
C $4,545
D $6,818

What does this test?

✓ The calculation of abnormal gain

What is the correct answer?

✓ The correct answer is **C**

- This is arrived at as follows: First calculate the expected output from the input of 10,000 kg= (100%-12% of Normal loss)= 8,800 kg
- Since the actual output was 9,200kg and expected output is 8,800kg, then the abnormal gain is 400kg

- The cost per kg of output must be calculated next:

Material input (10,000 kg) =	$100,000
Conversion	= $50,000
Total cost	$150,000
Less Normal loss	
(12%*10,000*$5)	($6,000)
Net Total cost of output	$144,000

- The cost per kg of output =(($ 144,000/10,000 kg x 88%(expected output)) = $16.36
- The net value of the abnormal gain after the amount for the normal loss is deducted from the cost per kg output = ($16.36 - $5.00) x 400 kg = $4,545.

- **Selecting option D**, ignored the $5 per unit value of process losses in both calculating the cost per unit and in calculating the net value of abnormal gains.
- Their answer was arrived at as follows
- Cost per kg = ($100,000 + $50,000)/(10,000kg x 88%) = $17.045
- Abnormal gain = 400 kg as above
- Value of abnormal gain = 400 kg x $17.045 = $6,818
- **Selecting option B**, in this case the sales value of losses was accounted for to arrive at a net value for the abnormal gain of = 400 kg x ($17.045 - $5.00) = $4,818
- **Selecting option A**, incorrectly calculates the cost per kg based upon actual output rather than normal output.
- The cost per kg = ($100,000 + $50,000 – (10,000 units x 12% x $5))/9,200 kg = $15.65
- The abnormal gain = 9,200 kg - 10,000 kg x 88% = 400 kg
- The net value of the abnormal gain = ($15.65 - $5.00) x 400 kg = $4,260.

Example 2

A company borrows $10,000 repayable in five years' time and immediately uses the loan to repay its overdraft.

What will be the effect on the company's capital gearing and current ratios?

	Capital gearing	Current ratio ratio
A	Increase	Increase
B	Increase	Decrease
C	Decrease	Increase
D	Decrease	Decrease

What does this test?

✓ The financial performance (profitability, liquidity, activity and gearing)

What is the correct answer?

✓ The correct answer is **A**

- The capital gearing ratio is calculated as non-current liabilities ÷ ordinary shareholders funds (this is sometimes described as the debt to equity ratio)
  or
  non-current liabilities ÷ (ordinary shareholders funds + non-current liabilities) (sometimes described as debt to equity + debt ratio)
- A five year bank loan will increase the company's non-current liabilities. Under either definition above this will increase capital gearing.
- The current ratio is calculated as current assets ÷ current liabilities
- A reduction in overdraft will reduce a company's current liabilities will therefore increase the value of the current ratio.

From the selections made by candidates it appears that many candidates did not know the definitions of the ratios involved, or that they were unable to process the data in the question. The Technical Articles section of the
F2/FMA section of the ACCA website contains a short article that defines and explains the ratios that candidates need to know for this exam. Candidates are recommended to read the article below. http://www.accaglobal.com/uk/en/student/exam-support-resources/fundamentals-exams-study-resources/f2/technical-articles/ratio-analysis.html.

For those having difficulty in processing the data given in the question I would suggest that they "invent" some simple numbers to represent the existing position and then process the data in the question to see the effect on the ratios. This approach is useful in many ratio analysis problems.

For example

	Existing position (assumed)	Changes	New position
	$000	$000	$000
Non-current liabilities	30	+10	40
Ordinary shareholders' funds	100		100
Current assets	40		40
Current liabilities	20	-10	10
Capital gearing (D/E)	**30.00%**		**40.00%**
Current ratio	**2.00**		**4.00**

Example 3

The following observations of output and cost have been made:

Output (units)	Cost
8,000	$39,400
20,000	$68,000

It is known that at output levels above 15,000 units, variable cost per unit drops by $1 per unit for all subsequent units produced.
What is the variable cost for each unit of output above 15,000 units?

A $1·80
B $0·97
C $2·80
D $3·40

What does this test?

✓ High low analysis.

What is the correct answer?

✓ The correct answer is **A**

- Since the variable cost is $1 lower per unit after 15,000 units, the total cost for 20,000 units must be adjusted first before using the high low method. Therefore, the total cost for 20,000 would be $68,000 + (20,000-15,000)units x $1=$73,000
- Variable cost per unit can then be calculated as (assuming that there is no change in variable cost)
  = ($73,000 - $39,400) / (20,000 units – 8,000 units) = $2.80
- Variable cost per unit after 15,000 units would then need to adjusted for the $1 lower as = $2.80 - $1.00 = $1.80.

- Selecting **option B,** incorrectly calculates the change in cost for the high low calculation, as follows
  Variable cost per unit (up to 15,000 units)
  = ($68,000 - $39,400 - $5,000) / (20,000 units – 8,000 units) = $1.97
  Variable cost per unit after 15,000 units = $1.97 - $1.00 = $0.97
- Selecting **option C** correctly calculates the variable cost per unit for output levels up to 15,000 units but failed to adjust for the $1 per unit decrease after 15,000 units. Using a partially complete answer as an alternative is a tactic commonly used by objective testing examiners. I encourage candidates to check that their calculations are fully complete before selecting their answer.
- Selecting **option D**, calculates the average cost per unit at 20,000 units (($68,000/ (20,000 units-8,000 units) = $3.40) rather than variable cost per unit after 15,000 units as required.

The syllabus clearly indicates that candidates need to be able to calculate semi-variable costs, stepped fixed costs and changes in variable cost per unit when using the high low technique. Candidates need to practise the calculations required in this area.

Section B

Section B contains 3 questions, one from each of syllabus areas C Budgeting, D Standard Costing and E Performance Measurement. This approach will continue in future papers. 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.
- An apparent difficulty with questions presented in spreadsheet format
- A difficulty with questions involving the reconciliation of actual and budgeted figures via standard costing variances.

Summary

Future candidates are advised to:

- Study the whole syllabus, as the exam will cover the whole syllabus.
- Practise as many questions as possible in different formats, number entry questions appear to be a particular 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 Examiner’s Reports