

Examiner's report

MA2 Managing Costs & Finance

December 2011



General Comments

The examination paper, the first under the new syllabus, consisted of 50 multiple-choice questions each worth 2 marks. The first sitting of a new paper is always difficult for candidates especially as, in the case of MA2, both the syllabus and the examination paper format have changed significantly from the previous equivalent paper at this level. For example, spreadsheets are now a significant aspect of the syllabus and study guide. Overall, the questions on spreadsheets were relatively poorly answered.

The four questions below, taken from the December 2011 paper and covering different aspects of the syllabus, are examples of questions that candidates found particularly difficult. This report will seek to explain, in each case, the basis for the correct answer and the incorrect options selected by many candidates.

Sample Questions for Discussion

Example 1

What will result in under-absorption of fixed production overhead?

- A** Absorption based on actual expenditure and actual volume of activity which are both below budget
- B** Actual expenditure below budget and actual volume of activity same as budget
- C** Actual volume of activity above budget and actual expenditure below budget
- D** Actual volume of activity below budget and actual expenditure same as budget

This question tested Section C1h in the Study Guide. The correct answer is Option D. However, Options A and C were by far the most popular answers with over 70% of candidates selecting these incorrect options.

Over-absorption or under-absorption occurs when the absorption rate is a pre-determined rate based on budgeted data. Option D is correct because absorption using a pre-determined rate on below budget activity would fail to fully absorb the on-budget expenditure. Option C would lead to over-absorption (not under-absorption) because of the above budgeted activity absorbing more overhead at the pre-determined rate. Option B would also lead to over-absorption because of the below budget expenditure. Option A would not lead to under-absorption, or to over-absorption, because actual costs and actual activity are used to absorb the overhead i.e. a pre-determined rate is not used.

Example 2

The budgeted financial results (in \$000) for a company's three divisions for a period are summarised below:

	Division X	Division Y	Division Z
Sales revenue	210	270	320
Costs:			
Variable	140	180	100
Fixed	<u>80</u>	<u>220</u>	<u>90</u>
Profit/(loss)	<u>(10)</u>	<u>0</u>	<u>90</u>

The senior management committee is considering whether all three divisions should continue to operate. Budgeted fixed costs would total \$280,000 if only one or two divisions were operating.

What decision should senior management make?

- A** Operate division Z only

- B** Operate divisions X and Z only
- C** Operate divisions Y and Z only
- D** Operate all three divisions

This question tested Section D2f in the Study Guide. The correct answer is Option D. However, Options A and C were by far the most popular answers with 74% of candidates incorrectly selecting these two options. This would seem to have been based on the profit/(loss) figures in the question scenario.

The key to answering the question is to recognise the changes in both contribution and fixed costs if only one or two divisions were operating. If divisions X and Y are both discontinued (Option A) then fixed costs of \$20,000 would be saved $[(80 + 90 + 130) - 280]$ but contribution of \$160,000 would be lost $[(210 + 270) - (140 + 180)]$, an incremental loss of \$140,000. If division X only is discontinued (Option C) then fixed costs of \$20,000 would be saved but contribution of \$70,000 would be lost $(210 - 140)$, an incremental loss of \$50,000. Option B would result in an incremental loss of \$70,000. Option D should be seen to be the correct answer because the smallest loss of contribution from discontinuing a division (division X \$70,000) is greater than the fixed cost saving (\$20,000).

Example 3

A capital investment project has an initial cash outflow followed by a series of cash inflows. NPV results are:

Negative when discounted at 18%
 Negative when discounted at 15%
 Negative when discounted at 12%

What will the IRR be?

- A** Below 12%
- B** Between 12% and 15%
- C** Between 15% and 18%
- D** Above 18%

This question tested Section D3d in the Study Guide. While the correct answer, Option A, was the most popular answer, candidates' selections were fairly evenly spread across the four options. This demonstrates a widespread lack of understanding of the discounting process and/or of the meaning of the IRR.

The IRR (internal rate of return) is the percentage discount rate which, when applied to the cash flows from a capital investment project, results in a zero NPV (net present value). The total of the non-discounted cash inflows from a project must exceed the initial cash outflow for the project to have any chance of being financially viable. As the percentage discount rate is increased the positive NPV is reduced until at some point it becomes negative. In the question scenario the calculated NPVs for the project are negative at 12% and, therefore, are even more negative at 15% and 18% or above 18%. In other words the point at which the NPV turned negative (the IRR) must be at a discount rate below 12% (Option A).

Example 4

Productivity data are listed in a spreadsheet in cells B2 to B8. The data needs to be ranked in descending order in Column C.

Which formula will achieve this?

- A** =RANK(B2,B2:B8,1)
- B** =RANK(C2,C2:C8,0)
- C** =RANK(B2,\$B\$2:\$B\$8,0)
- D** =RANK(B2,\$C\$2:\$C\$8,1)

This question tested Section F3a in the Study Guide. As with the previous example, while the correct answer, Option C, was the most popular answer, candidates' selections were fairly evenly spread over the four options.

The rank function uses the syntax RANK(number,reference,order). Considering 'order' first, entering zero at the end of the bracket in the RANK formula means that the ranking goes from highest to lowest value (i.e. descending order). Knowing this would enable Options A and D to be eliminated. 'Number' and 'reference' relate respectively to the cell of the number to be ranked and the range of cells containing the numbers to be ranked. They do not relate to the cells where the ranking numbers are to be displayed. Thus, in this question, the number and reference must be to cells in column B not column C. Thus Option C is the correct answer.