SOLUTIONS MANUAL Sixth Edition Management Accounting for Decision Makers Peter Atrill Eddie McLaney

Instructor's Manual

Management Accounting for Decision Makers

Sixth edition

Peter Atrill Eddie McLaney

For further instructor material please visit: www.pearsoned.co.uk/atrillmclaney

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Lecturers adopting the main text are permitted to download and photocopy the manual as required.

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SECTION A

Authors' Note to Tutors

Using the book

The book is designed to provide readers with a sound introduction to management accounting. It assumes no previous knowledge of the subject and recognises that students using it may come from a wide variety of backgrounds. The book, therefore, tries to avoid technical jargon and does not assume a high level of numerical ability from students. It has been class tested by students on various courses and we have modified and refined the material to take account of their comments. We have also taken account of the comments made by lecturers who used the first four editions of the book and of specially commissioned reviews.

The book aims to encourage an active approach to learning by providing activities and self-assessment questions at appropriate points. This approach is designed to stimulate thought concerning particular issues and to give the readers the opportunity to test their understanding of the principles covered.

The book is supplemented by a password-controlled lecturers' website and a student's website available to all readers.

The structure of the book allows the tutor to deliver the subject in a number of ways. It can be used as recommended reading for a traditional course based on lectures and tutorials. There are review questions and exercises at the end of each chapter that can be used as the basis for tutorials. It could also provide the basis for a distance learning approach for part-time or off-campus students. For these students, the interactive nature of the book may be extremely useful where access to a tutor is restricted. The book can also be used as the basis for an open learning approach for full-time campus-based students. We have successfully used it in this way at the University of Plymouth Business School. Accounting 'surgeries' have also been provided to give students the opportunity for one-to-one help with any problems they face.

The book is appropriate for modules that are designed to be covered in 100 to 150 hours of study. For full-time students, this will often be covered in one academic year.

PowerPoint slides

The diagrams in the book, along with other diagrams and materials, are available as PowerPoint slides to help in delivering lectures and tutorials and these can be downloaded from the lecturers' website.

Practice/assessment material

The **activities**, whose solutions immediately follow them, and **self-assessment questions**, whose solutions are at the end of the book, form an integral part of it. In addition, there are various other practice/assessment materials. At the end of each chapter there are four **review questions**. These are short, narrative questions involving recall, explanation and brief discussion. The solutions to these are given at the end of the book. At the end of all chapters, except Chapter 1 (where there are two), there are eight **exercises**. These are questions, many involving calculations, which are similar in nature to examination-style questions. The solutions to five of these are given at the end of the book and are, therefore, accessible to students. Solutions to the other three are in the following pages of this manual and are not accessible to students.

On the lecturers' website, in addition to this Instructor's Manual with solutions to selected end-of-chapter **exercises** and **case studies**, there are:

- **two progress tests** with solutions. These tests comprise multiple-choice questions, missingword questions and questions that are similar to the end-of-chapter exercises. One test corresponds to chapters 1 to 5, and the other to chapters 6 to 11.
- supplementary questions (nine of them) with solutions.
- case studies.
- tutorial/seminar questions with solutions.
- general comments for students on case study assignments.

None of this material, except the case study comments, is accessible to students.

On the student website, there are five types of materials:

- general comments for students on case study assignments.
- revision exercises, similar in style to the end-of-chapter exercises, with solutions.
- **multiple-choice questions**, typically 10 for each chapter. These are intended to be tackled online, where they will be automatically graded.
- **missing-word questions**, typically 10 for each chapter. These too can be attempted and graded online.

The multiple-choice questions and missing-word questions are intended to provide students with a quick assessment of their mastery of the material of each chapter.

The solutions to all of this material, except to the multiple-choice and missing-word questions, are fully annotated in order to give the necessary feedback to students.

We intend to expand the number and scope of the practice/assessment materials on a continuing basis.

Peter Atrill and Eddie McLaney, *Management Accounting for Decision Makers*, 6th Edition, Instructor's Manual

We hope that you and your students will find the book both accessible and interesting. We should much appreciate any suggestions you may have on how the book and supplementary material may be improved.

Peter Atrill

Eddie McLaney

SECTION B

Solutions to Exercises

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Solution to Exercise 2.4

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The relevant cost of **skilled labour** as such is zero because the staff will be employed and paid irrespective of the contract. However, if the contract is undertaken, the business will lose sales in the alternative activity. The effective cost of this will be the lost sales revenue net of the 'other costs' that will be saved, which amounts to £17 an hour (that is, £9 + £8). So, cost is

$$27 \text{ hours} \times £17 = 459$$

Semi-skilled staff are being paid anyway, so their wages are not relevant. The additional cost to be incurred will be the wages paid to the unskilled labour taken on to replace them. Thus:

$$14 \text{ hours} \times £7 = 98$$

As **unskilled labour** will be specifically employed for the contract, the relevant hourly wage rate is £7. Thus:

20 hours
$$\times$$
 £7 = 140

Depreciation is not a relevant cost, the machine will depreciate irrespective of its use. The relevant cost is the opportunity cost of the **rental income forgone:**

175

The £300 already spent on **the specialised study** is a sunk cost and is not relevant. The relevant cost is the forgone opportunity to sell the results:

250

Rent and rates would have to be paid anyway and are therefore not relevant

Minimum price £1.172

Solution to Exercise 2.5

Product X

Relevant cost of Product X

(a) For sales of up to 1,500 tonnes

Since Product A's market seems to be limited to 500 tonnes, there can be no opportunity cost relating to Product A of producing up to 1,500 tonnes of Product X. (The business currently holds 2,000 tonnes of the raw material.) This means that the relevant cost per tonne of Product X will be:

Opportunity cost of disposing of the material (£36), plus the relevant outlay cost (£80) = £ $\underline{116}$ a tonne.

(b) For sales between 1,500 and 2,000 tonnes

Clearly, the business would choose to produce Product A were Product X sales to be 1,500 or less, rather than sell the material for £36 a tonne. This is because, by spending £60 more (£96 in total), it can be sold as Product A for £105 a tonne. Any sales of Product X above 1,500 tonnes would be at the expense of product A. The opportunity cost of not making Product A is £105 less £60 = £45.

Thus, the relevant cost of Product X will be:

Opportunity cost of using the material (£45), plus the relevant outlay cost (£80) = £125 a tonne.

(c) For sales above 2,000 tonnes

To make more than 2,000 tonnes of Product X, the company will have to buy in additional inventories of the raw material at £48 a tonne.

Thus, the relevant cost of Product X will be:

Outlay cost of buying the inventories (£48), plus the relevant outlay cost (£80) = £128 a tonne.