

Management and Cost Accounting

Instructor's Manual

COLIN DRURY

Management and Cost Accounting

EIGHTH EDITION

Instructor's Manual



Australia • Brazil • Japan • Korea • Mexico • Singapore • Spain • United Kingdom • United States

**Management and Cost Accounting
Instructor's Manual, Eighth Edition**
Colin Drury

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Preface

This manual is complementary to the main textbook, *Management and Cost Accounting*, and the accompanying Student's Manual. Throughout the main text the illustrations have been kept simple to enable readers to understand the principles involved in designing and evaluating management and cost accounting systems. It is essential that students work through a wide range of problems to gain experience on the application of principles, but there is insufficient classroom time for tutorial guidance to meet this requirement. The Students' Manual provides this guidance by enabling students to work independently on problems and compare their answers with the suggested solutions.

In addition, tutors require feedback information on the students' understanding of the subject and the ability to solve problems independently. Tutors also require that a range of problems is available where the solutions are not generally available to students. The Instructors' Manual aims to meet these requirements. Recently some professional accountancy examining bodies have made solutions to examination questions available on their websites and other examining bodies provide published answers that can be purchased by students. To ensure that the problems are not available from published sources the problems applicable to the instructors' manual tend to be approximately ten years old and thus do not appear on publication lists or websites of the professional examining bodies. All of the questions and answers that appeared in the seventh edition have been retained in the eighth edition. However, many of these questions and answers have been updated to reflect the current environment. For example, some monetary values have been changed (e.g wage rates) and references to entries for specific years have been changed from the early years of the millennium to reflect years relating to the current edition. Lecturers should therefore exercise care when using questions that appeared in the seventh edition. A huge amount of additional questions that have not been extracted from examinations set by professional accountancy bodies is available in the accompanying ExamView®.

The solutions given in this manual are my own and not the approved solutions of the professional body setting the question. Where an essay question is asked and a full answer requires an undue repetition of the main book, either references are made to appropriate sections of the book, or an answer guide or outline is provided. Finally, I would like to thank once again, the Association of Accounting Technicians, the Institution of Chartered Accountants in England and Wales, the Chartered Association of Certified Accountants and the Chartered Institute of Management Accountants for permission to reproduce questions which have appeared in past examinations.

Part I

Solutions



An introduction to cost terms and concepts

Solutions to Chapter 2 questions

(1) (a); (2) (d); (3) (e); (4) (f); (5) (i); (6) (b); (7) (h).

Solution IM 2.1

(i) Direct materials 9	(ii) Direct labour 16	(iii) Direct expenses 10
(iv) Indirect production overhead 1 6 8 18 19	(v) Research and development costs 20	(vi) Selling and distribution costs 7 11 12 13 17
(vii) Administration costs 2 3 4 14 15	(viii) Finance costs 5	

Solution IM 2.2

(a) Variable cost per running hour of Machine XR1

Solution IM 2.3

	(£)
	25
Fixed cost	(£27 500/1100 hours)=
	(£20 000/1100 hours) =
	18.182

Cost of brain scan on Machine XRI:

	(£)
Variable machine cost (4 hours × £25)	100
X-ray plates	40
Total variable cost	140
Fixed machine cost (4 hours × £18.182)	72.73
Total cost of a scan	212.73
Total cost of a satisfactory scan (£212.73/0.9)	236.37

(b) It is assumed that fixed costs will remain unchanged and also that they are not relevant to the decision. The relevant costs are the incremental costs of an additional scan:

Machine XR1:	(£)
Variable cost per scan	140
Variable cost per satisfactory scan (£140/0.9)	155.56
Machine XR50:	(£)

Variable machine cost per scan (£64 000/2000 hours × 1.8 hours)	57.60
X-ray plates	<u>55.00</u>
Variable cost per scan	<u>112.60</u>
Variable cost per satisfactory scan (£112.60/0.94)	119.79

The relevant costs per satisfactory scan are cheaper on Machine XR50 and therefore brain scans should be undertaken on this machine.

Solution IM 2.4

(a)	Standard cost sheet (per unit)	(£)	(£)
	Direct materials 40 m ² at £5.30 per m ²		212
	Direct wages:		
	Bonding dept 48 hours at £12.50 per hour	600	
	Finishing dept 30 hours at £9.50 per hour	<u>285</u>	
			<u>885</u>
(i)	Prime cost		1097
	Variable overhead: ^a		
	Bonding dept 48 hours at £0.75 per hour	36	
	Finishing dept 30 hours at £0.50 per hour	<u>15</u>	
			<u>51</u>
(ii)	Variable production cost		1148
	Fixed production overhead ^b		<u>40</u>
(iii)	Total production cost		1188
	Selling and distribution cost ^c	20	
	Administration cost ^c	<u>10</u>	
			<u>30</u>
(iv)	Total cost		<u>1218</u>

Notes

$$^a \text{ Variable overhead rates: Bonding} = \frac{£375\,000}{500\,000 \text{ hours}} = £0.75$$

$$\text{Finishing} = \frac{£150\,000}{300\,000 \text{ hours}} = £0.50$$

$$^b \text{ Fixed production overhead rate per unit of output} = \frac{£392\,000}{9800 \text{ units}} = £40$$

The fixed production overhead rate per unit of output has been calculated because there appears to be only one product produced. Alternatively, a fixed production hourly overhead rate can be calculated and charged to the product on the basis of the number of hours which the product spends in each department.

$$^c \text{ Selling and production cost per unit of output} = \frac{£196\,000}{9800 \text{ units}} = £20$$

$$\text{Administration cost per unit of output} = \frac{£98\,000}{9800 \text{ units}} = £10$$

$$(b) \text{ Selling price per unit } £1218 \times \frac{100}{85} = \underline{\underline{1433}}$$