## $1 / 20$ 40050


P. Stevens

# Work Out 

Accounting
GGSE

## The titles <br> in this <br> series

For examinations at 16+

Accounting
Biology
Chemistry
Computer Studies
Economics
English
French
German

For examinations at 'A' level
Applied Mathematics
Biology
Chemistry
English Literature
For examinations at college level
Dynamics
Elements of Banking
Mathematics for Economists

Human Biology
Mathematics
Numeracy
Physics
Sociology
Spanish
Statistics

Physics
Pure Mathematics
Statistics

Operational Research
Engineering Thermodynamics

MACMILLAN<br>WORK OUT<br>SERIES

## Work Out

## Accounting

GGSE

## P. Stevens

M
MACMILLAN

All rights reserved. No reproduction, copy or transmission of this publication may be made without written permission.

No paragraph of this publication may be reproduced, copied or transmitted save with written permission or in accordance with the provisions of the Copyright Act 1956 (as amended).

Any person who does any unauthorised act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

First published 1986
Reprinted with corrections 1986 (twice)
This edition 1987

Published by<br>MACMILLAN EDUCATION LTD

Houndmills, Basingstoke, Hampshire RG21 2XS
and London
Companies and representatives
throughout the world

Typeset by TecSet Ltd, Wallington, Surrey

British Library Cataloguing in Publication Data
Stevens, P.
Work out accounting GCSE.-2nd ed.(Macmillan work out series)

1. Accounting-Examinations, questions, etc.
I. Title II. Stevens, P. Work out
principles of accounts 657 '. 076

HF5661
ISBN 978-0-333-44012-4 ISBN 978-1-349-09460-8 (eBook)
DOI 10.1007/978-1-349-09460-8

To Darren and Dawn

## Contents

Acknowledgements ..... ix
Organisations Responsible for GCSE Examinations ..... ix
Introduction ..... 1
1 Principles of Double-entry Book-keeping ..... 2
1.1 Introduction ..... 2
1.2 Types of account ..... 2
1.3 Rules of double-entry book-keeping ..... 3
1.4 An illustration of the account ..... 4
1.5 Balancing off the account ..... 4
1.6 Purchases and sales returns ..... 5
1.7 Worked example ..... 5
1.8 Further exercises ..... 7
2 The Trial Balance ..... 11
2.1 Introduction ..... 11
2.2 Purpose of the trial balance ..... 13
2.3 Worked examples ..... 13
2.4 Further exercises ..... 15
3 Trading and Profit and Loss Accounts ..... 16
3.1 Explanation ..... 16
3.2 The trading section ..... 16
3.3 The profit and loss section ..... 17
3.4 Preparation of trading, profit and loss account ..... 17
3.5 Other trading account expenses ..... 18
3.6 Worked examples ..... 18
3.7 Further exercise ..... 20
4 Balance Sheet ..... 21
4.1 Purpose ..... 21
4.2 Preparation of the balance sheet ..... 21
4.3 Balance sheet equation ..... 22
4.4 Capital and revenue expenditure ..... 23
4.5 Worked examples ..... 23
4.6 Further exercises ..... 25
5 Cash Book and Cash Discounts ..... 26
5.1 Cash book ..... 26
5.2 Cash discounts ..... 27
5.3 Cash discounts in the cash book ..... 27
5.4 Petty cash ..... 28
5.5 Worked examples ..... 28
5.6 Further exercises ..... 34
6 Bank Reconciliation ..... 39
6.1 Introduction ..... 39
6.2 Types of differences ..... 39
6.3 Identifying the differences ..... 40
6.4 Preparing the reconciliation ..... 40
6.5 Worked example ..... 40
6.6 Further exercises ..... 42
7 Day Books and VAT ..... 45
7.1 Introduction ..... 45
7.2 Cash book ..... 45
7.3 Petty-cash book ..... 45
7.4 Purchases day book ..... 45
7.5 Purchases returns day book ..... 46
7.6 Sales day book ..... 46
7.7 Sales returns day book ..... 47
7.8 The journal ..... 47
7.9 Value added tax ..... 47
7.10 Worked examples ..... 48
7.11 Further exercise ..... 49
8 Errors and Suspense Accounts ..... 51
8.1 Errors not affecting the trial balance ..... 51
8.2 Correction of errors ..... 51
8.3 Suspense accounts ..... 53
8.4 Worked examples ..... 53
8.5 Further exercises ..... 57
9 Bad Debts and Bad Debts Provision ..... 59
9.1 Writing off bad debts ..... 59
9.2 Making a provision for future bad debts ..... 59
9.3 Adjusting the provision ..... 60
9.4 Worked examples ..... 60
9.5 Further exercise ..... 62
10 Control Accounts ..... 64
10.1 Introduction ..... 64
10.2 Control accounts and double-entry ..... 64
10.3 Maintaining control accounts ..... 65
10.4 Transferring accounts ..... 65
10.5 Sectionalisation of ledgers ..... 65
10.6 Sales and purchases ledgers ..... 66
10.7 Worked examples ..... 66
10.8 Further exercises ..... 69
11 Depreciation and Disposal of Assets ..... 72
11.1 Introduction ..... 72
11.2 Meaning of depreciation ..... 72
11.3 Total depreciation charge ..... 72
11.4 The balance sheet value of fixed assets ..... 72
11.5 Methods of depreciation ..... 73
11.6 Other factors ..... 74
11.7 Accounting entries ..... 75
11.8 Fixed asset disposals ..... 75
11.9 Assets purchased/sold during year ..... 76
11.10 Worked examples ..... 76
11.11 Further exercises ..... 79
12 Year End Adjustments ..... 83
12.1 Introduction ..... 83
12.2 Accrued expenses ..... 83
12.3 Prepayments ..... 84
12.4 Sundry stocks ..... 84
12.5 Summary ..... 85
12.6 Worked examples ..... 85
12.7 Further exercises ..... 90
13 Departmental Accounts ..... 96
13.1 Introduction ..... 96
13.2 Expenses ..... 96
13.3 Preparation of departmental accounts ..... 96
13.4 Worked examples ..... 97
13.5 Further exercise ..... 101
14 Incomplete Records ..... 102
14.1 Introduction ..... 102
14.2 Statement of affairs ..... 102
14.3 Trading and profit and loss account from incomplete records ..... 103
14.4 Goods stolen or lost ..... 105
14.5 Worked examples ..... 106
14.6 Further exercises ..... 111
15 Income and Expenditure Accounts ..... 117
15.1 Introduction ..... 117
15.2 Accumulated fund ..... 117
15.3 Members' subscriptions ..... 117
15.4 Bar trading account ..... 118
15.5 Other club activities ..... 119
15.6 Receipts and payments account ..... 119
15.7 Worked examples ..... 119
15.8 Further exercises ..... 124
16 Partnership Accounts: 1 ..... 129
16.1 Definition ..... 129
16.2 The partnership agreement ..... 129
16.3 Capital accounts ..... 129
16.4 Partners' current accounts ..... 130
16.5 Partners' loan accounts ..... 130
16.6 Profit and loss appropriation account ..... 130
16.7 Worked examples ..... 130
16.8 Further exercises ..... 135
17 Partnership Accounts: 2 ..... 142
17.1 Introduction ..... 142
17.2 Goodwill ..... 142
17.3 Goodwill on amalgamation of businesses ..... 143
17.4 Goodwill on admission of new partner ..... 143
17.5 Writing off goodwill ..... 143
17.6 Worked examples ..... 144
17.7 Further exercises ..... 147
18 Manufacturing Accounts ..... 151
18.1 Introduction ..... 151
18.2 Types of cost ..... 151
18.3 Opening and closing stocks ..... 151
18.4 Transfer price of finished goods produced ..... 152
18.5 Manufacturing accounts for separate products ..... 153
18.6 Fixed and variable costs ..... 153
18.7 Worked examples ..... 153
18.8 Further exercises ..... 157
19 Stock Valuation ..... 163
19.1 Introduction ..... 163
19.2 Bases of stock valuation ..... 163
19.3 Valuation of stocks at cost ..... 164
19.4 Choice of method ..... 165
19.5 Effect on profits ..... 165
19.6 Worked examples ..... 166
19.7 Further exercises ..... 167
20 Comprehension and Interpretation of Accounts ..... 171
20.1 Introduction ..... 171
20.2 Return on capital employed (ROCE) ..... 171
20.3 Profitability ratios ..... 171
20.4 Asset efficiency ratios ..... 172
20.5 Liquidity ratios ..... 173
20.6 Worked examples ..... 174
20.7 Further exercises ..... 177
21 Accounts of Limited Companies ..... 180
21.1 Introduction ..... 180
21.2 Share capital ..... 180
21.3 Debentures ..... 181
21.4 Dividends ..... 181
21.5 Retained profits ..... 181
21.6 General reserve ..... 181
21.7 Shareholders' funds ..... 182
21.8 Profit and loss appropriation account ..... 182
21.9 Worked examples ..... 182
21.10 Further exercises ..... 186
22 Forecasts and Budgets ..... 190
22.1 Introduction ..... 190
22.2 Preparation of plans ..... 190
22.3 Worked examples ..... 190
22.4 Further exercises ..... 193
23 Funds Flow Statements ..... 198
23.1 Purpose of funds flow statements ..... 198
23.2 Preparation of the funds flow statement ..... 198
23.3 Worked examples ..... 200
23.4 Further exercise ..... 202
24 Multiple Choice Questions ..... 204
24.1 Introduction ..... 204
24.2 Worked examples ..... 204
24.3 Further exercises ..... 208
Index ..... 212

## Acknowledgements

The University of London Entrance and School Examinations Council accepts no responsibility whatsoever for the accuracy or method in the answers given in this book to actual questions set by the London Board.

Acknowledgement is made to the Southern Universities' Joint Board for School Examinations for permission to use questions taken from their past papers but the Board is in no way responsible for answers that may be provided and they are solely the responsibility of the authors.

The Associated Examining Board, the University of Oxford Delegacy of Local Examinations, and the Scottish Examination Board wish to point out that worked examples included in the text are entirely the responsibility of the author and have neither been provided nor approved by the Board.

The author and publishers wish to thank the following who have kindly given permission for the use of copyright material: The Associated Examining Board, The Scottish Examination Board, the Southern Universities' Joint Board, The University of London School Examinations Board, The University of Oxford Delegacy of Local Examinations for questions from past examination papers.

Every effort has been made to trace all the copyright holders, but if any have been inadvertently overlooked, the publishers will be pleased to make the necessary arrangement at the first opportunity.

## Organisations Responsible for GCSE Examinations

In the United Kingdom, examinations are administered by the following organisations. Syllabuses and examination papers can be ordered from the addresses given here:

Northern Examining Association (NEA)

Joint Matriculation Board (JMB)
Publications available from:
John Sherratt \& Son Ltd
78 Park Road, Altrincham
Cheshire WA145QQ

## Yorkshire and Humberside Regional Examinations Board (YREB)

## Scarsdale House

136 Derbyside Lane
Sheffield S8 8SE
North West Regional Examinations
Board (NWREB)
Orbit House, Albert Street
Eccles, Manchester M30 0WL

North Regional Examinations Board
Wheatfield Road, Westerhope
Newcastle upon Tyne NE5 5JZ

Associated Lancashire Schools Examining Board<br>12 Harter Street<br>Manchester M1 6HL

Midland Examining Group (MEG)

University of Cambridge Local
Examinations Syndicate (UCLES)
Syndicate Buildings, Hills Road
Cambridge CB1 2EU
Southern Universities' Joint Board (SUJB)
Cotham Road
Bristol BS6 6DD

Oxford and Cambridge Schools
Examination Board (O \& C)
10 Trumpington Street
Cambridge CB2 1QB
East Midland Regional Examinations
Board (EMREB)
Robins Wood House, Robins Wood Road Aspley, Nottingham NG8 3NR

## West Midlands Examinations Board (WMEB)

Norfolk House, Smallbrook
Queensway, Birmingham B5 4NJ

## London and East Anglian Group (LEAG)

University of London School
Examinations Board (L)
University of London Publications Office
52 Gordon Square
London WC1E 6EE

London Regional Examining Board (LREB)
Lyon House
104 Wandsworth High Street
London SW 18 4LF

East Anglian Examinations Board (EAEB)
The Lindens, Lexden Road
Colchester, Essex CO3 3RL

Southern Examining Group (SEG)
The Associated Examining Board (AEB)
Stag Hill House
Guildford, Surrey GU2 5XJ

## Southern Regional Examinations Board (SREB)

Avondale House, 33 Carlton Crescent
Southampton, Hants SO9 4YL
University of Oxford Delegacy of Local Examinations (OLE)
Ewert Place, Banbury Road
Summertown, Oxford OX2 7BZ
South-East Regional Examinations
Board (SEREB)
Beloe House, 2-10 Mount Ephraim Road
Royal Tunbridge Wells, Kent TN 1 1EU

## South-Western Examinations

Board (SWExB)
23-29 Marsh Street
Bristol BS1 4BP

Scottish Examination Board (SEB)
Publications available from:
Robert Gibson and Sons (Glasgow) Ltd
17 Fitzroy Place, Glasgow G3 7SF

## Welsh Joint Education Committee (WJEC)

245 Western Avenue
Cardiff CF5 2YX
Northern Ireland Schools Examinations Council (NISEC)

Examinations Office
Beechill House, Beechill Road
Belfast BT8 4RS

## Introduction

## How to Use this Book

This book is primarily intended for students who have already studied some book-keeping. However, since all the principles and techniques are illustrated in the relevant chapters, it is not a prerequisite to have any previous knowledge.

You are recommended to read a chapter, understanding each technique which is being explained, before proceeding to the next point. You should then study the worked examples and solutions, making sure that you fully understand how the solutions have been arrived at, and why.

Only when you are sure you have completed this stage should you proceed to the Further Exercises. These should be attempted without reference to the answers that follow; use the answers given to compare with your own, to ensure that you have fully understood the subject matter.

The book contains over 100 questions from past papers set by various examination bodies, and if you successfully work through these, you will be adequately prepared to achieve success in your examination.

## Revision

Before you start to revise, find out exactly which syllabus you are following and obtain a copy of it. The book contains many questions from the most recent examination papers of various examination boards. However, having worked through these, you may wish to obtain copies of past papers from your own examination board. Certainly the best way to check your revision progress in Accounting is to work carefully through as many typical questions as you possibly can. Take a topic at a time, make certain that you understand fully the key points of theory and then attempt a range of questions.

## The examination

In practical accounting examinations it is vital that you allocate the time you spend on each question according to the number of marks awarded for the question. Calculate how long you can afford to spend on each question and do not spend more time on it.

## 1 Principles of

 Double-entry Book-keeping
### 1.1 Introduction

Book-keeping is concerned with recording business transactions. The principle of double-entry book-keeping is based upon every transaction having two aspects or two parts, and for this reason two entries are made in the books of account in respect of each transaction.

Entries are made in a business's books of account, whether they be handwritten or computerised, by setting up various accounts and making debit and credit entries to those accounts. These terms are abbreviated to Dr. (debit) and Cr . (credit). Debits and credits can be likened to pluses and minuses or positives and negatives, which, in fact, is exactly what they are in computerised systems.

What we must do when making accounting entries is to decide (a) which accounts are affected and (b) whether the entries to those accounts are debit or credit. It is the basic principle of double-entry book-keeping that the answer to the above questions will always result in the amounts being debited to an account (or accounts) being equal to the amounts being credited to another account (or accounts). In order to formulate rules for debits and credits, we must categorise the accounts we keep into types of account.

### 1.2 Types of account

## (a) Assets

Assets are things which we own - for example, buildings, motor vehicles and cash. Debtors are also an asset, since they represent something of value to the business - that is, an amount due to it.
(b) Liabilities

Liabilities are amounts owed by the business to other people.
(c) Expense

Expense accounts include such things as rent, electricity and purchases of goods for resale.
(d) Income

Income accounts record amounts of revenue to the business, such as sales, rents receivable and commission receivable.

### 1.3 Rules of double-entry book-keeping

Since the double-entry system is at the heart of book-keeping, you should understand the rules for it and commit them to memory.

| Type of account | debit | credit |
| :--- | :--- | :--- |
| Assets/Expenses | to increase | to decrease |
| Liabilities/Income | to decrease | to increase |

Let us now apply these rules to some typical business transactions.
(i) The owner starts the business by introducing $£ 5,000$, which he pays into a business bank account. The entry is

Dr. bank (an asset) to increase it Cr. capital (a liability) to increase it

The capital account represents the owner's account with the business. The concept may seem strange at first, but you must remember that you are keeping the books of the business, not the owner's personal books, and the capital introduced by the owner is amount due to the owner from the business.
(ii) The business purchases goods for resale, paying by cheque $£ 1,000$ :

Dr. purchases (an expense) to increase it Cr. bank (an asset) to decrease it
(iii) The business purchases goods for resale on credit to the value of $£ 2,000$ from A. Brown:

Dr. purchases (an expense) to increase it Cr. A. Brown (a liability) to increase it
(iv) The business sells goods for cash $£ 500$ :

Dr. bank (an asset) to increase it Cr. sales (an income) to increase it

The table below gives some further examples.

| Transaction | Account to be debited | Account to be credited |
| :--- | :--- | :--- |
| Sold goods on credit to B. Jones: $£ 600$ | B. Jones | Sales |
| Bought van for cash: $£ 1,500$ | Van | Cash |
| Bought desk on credit from Office <br> Supplies Ltd: $£ 200$ | Office Furniture | Office Supplies Ltd |
| Paid wages | Wages | Cash |
| Paid rent by cheque: $£ 200$ | Rent | Bank |
| Sold goods on credit to C. White: $£ 300$ | C. White | Sales |
| Paid electricity bill by cheque: $£ 50$ | Electricity | Bank |
| C. White paid the amount owing by him | Bank | C. White |
| by cheque: $£ 300$ |  |  |

Make sure that you have understood how the rules have been applied to each of the above transactions before proceeding.

### 1.4 An illustration of the account

The ledger account is divided into two sides - a left-hand side, the debit side, and a right-hand side, the credit side. The name of the account must be clearly stated at the top. Below is the bank account as it would appear using the transactions in Section 1.3.

| Dr. | Bank account |  |  |  | Cr. |
| :--- | :--- | ---: | :--- | :--- | ---: |
| Date |  | $£$ | Date | £ |  |
| Jan.6 | Capital | 5,000 | Jan. 7 | Purchases | 1,000 |
| Jan. 8 | Sales | 500 | Jan.11 | Rent | 250 |
| Jan. 15 | C. White | 300 | Jan.13 | Electricity | 50 |

You should notice how each side has a column to record the following:
(i) The date.
(ii) The name of the account to which the opposite entry is made - that is, the account credited where the bank account is debited and the account debited where the bank account is credited.
(iii) The amount or figures column. In practice this would record pounds and pence, but the pence have been omitted here for illustrative purposes.

The headings 'Dr.' and 'Cr.', while shown here, are often omitted in practice and are therefore usually not shown in the remainder of the book.

### 1.5 Balancing off the account

So far we have recorded debit and credit entries on our account. Looking to the bank account in Section 1.4 above, we cannot readily see the balance of our bank account. A computerised system will usually print the balance of the account after each transaction, but in a manual system we must calculate the balance, or balance off the account, as we call it.

Looking again to the bank account in Section 1.4, we can total each side of the account and calculate that
debit entries total $£ 5,800$
credit entries total $£ 1,300$
Debit entries therefore exceed credit entries by $£ 4,500$ ( $£ 5,800$ less $£ 1,300$ ). We can say, then, that the account has a debit balance of $£ 4,500$. If the total of credit entries exceeds the total of debit entries, then the account has a credit balance.

The balancing-off process will now be described. On the credit side of the account we write the amount of the debit balance with the description 'balance $\mathrm{c} / \mathrm{d}^{\prime}(\mathrm{c} / \mathrm{d}=$ carried down). Next the entries are totalled for both the debit side and the credit side. These totals should be equal, since the amount written in as balance on the credit side was calculated to achieve just that. Finally, the balance which we have calculated is written in on the appropriate side of the account (that is to say, a debit balance on the debit side) with the description 'balance $\mathrm{b} / \mathrm{d}^{\prime}$ ( $\mathrm{b} / \mathrm{d}=$ brought down).

The above process is now illustrated.

| Bank account |  |  |  |  |
| :--- | :--- | ---: | :--- | ---: |
| Date | $£$ | Date | $£$ |  |
| Jan. 6 | Capital | 5,000 | Jan. 7 Purchases | 1,000 |
| Jan. 8 | Sales | 500 | Jan. 11 Rent | 250 |
| Jan. 11 | C. White | 300 | Jan. 13 Electricity | 50 |
|  |  |  | Jan. 15 Balance c/d | 4,500 |
|  |  | $\overline{5,800}$ |  | $\overline{5,800}$ |
|  |  |  |  |  |

Notice how the balance is usually carried down at the close of business on one day, and brought down at the start of business on the next day.

### 1.6 Purchases and sales returns

A purchases returns account is used to record the value of goods returned by a business to its suppliers. When goods are returned, the creditor's account is debited in order to decrease the liability to him and the purchases returns account is credited.

The sales returns account is used to record the value of goods returned to a business by its customers. When goods are returned, the debtor's account is credited in order to decrease the asset and the sales returns account is debited.

### 1.7 Worked example

## Example 1.1

We shall now look at a typical examination question and illustrate how the entries will appear in the books of account.

|  | B. Brown started business with $£ 5,000$ in a bank account. His purchases of stock on credit during the month were: |
| :---: | :---: |
|  | £ |
| 8 December | T. Smith 400 |
| 12 December | R. Gray 300 |
| 19 December | B. Coals 140 |
| His sales of stock on credit during the month were: |  |
|  | £ |
| 8 December | R. Pike 600 |
| 20 December | T. Trout 700 |
| 29 December | R. Pike 400 |
| Cash sales during the month, all paid into the bank, totalled $£ 900$. Other purchases and payments by cheque were: |  |
|  | £ |
| 8 December | Rent 40 |
| 19 December | Electricity 130 |
|  | Motor van 1,000 |
| 20 December | Packing paper 140 |
| 29 December | R. Pike settled his account in full by cheque and Brown paid Smith, Gray and Coals in full by cheque. Brown purchased additional furniture and fittings on credit from Office Supplies Ltd for $£ 500$. |

Solution 1.1
Capital


Purchases

|  |  | $£$ | $£$ |  |
| :--- | :--- | :--- | :--- | :--- |
| Dec. 8 | T. Smith | (2) | 400 |  |
| Dec. 12 | R. Gray | (3) | 300 |  |
| Dec. 19 | B. Coals | $(4)$ | 140 |  |

T. Smith

| Dec. 29 | T. Smith | (14) | £ | Dec. 8 | Purchas |  | £ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | R. Gray |  |  |  |  |  |
| Dec. 29 | R. Gray |  | £ |  |  |  | £ |
|  |  | (15) | 300 | Dec. 12 | Purchases | (3) | 300 |
|  |  | B. Coals |  |  |  |  |  |
|  |  |  | £ |  |  |  | £ |
| Dec. 29 | B. Coals | (16) | 140 | Dec. 19 | Purchases | (4) | 140 |



You should notice how the entry records the following: (a) the date; (b) the other account to which an entry is made; (c) the reference (you should use this to understand the entries); and (d) the amount.

### 1.8 Further exercises

## Question 1.1

Marion decides to open a boutique and rents a shop for the purpose. The following are her business transactions.

Jan. 7 She pays $£ 4,000$ into a business bank account
Jan. 8 She pays $£ 3,000$ for fixtures and fittings for the shop
Jan. 10 She buys on credit clothes costing $£ 2,600$ from Wholesale Clothing Ltd
Jan. 11 She pays into the bank the first week's takings of $£ 1,650$

Jan. 12 She buys more clothes on credit from Good Supplies Ltd £1,100
Jan. 14 She pays rent of $£ 1,100$
Jan. 18 She pays into the bank the second week's takings of $£ 1,800$
Jan. 20 She pays an electricity bill of $£ 50$ by cheque
Jan. 21 She pays $£ 40$ for stationery
Jan. 25 She banks the week's takings of $£ 1,295$
Jan. 28 She pays Wholesale Clothing Ltd the amount due to them
Jan. 29 She returns soiled clothes to Good Supplies Ltd £50
Jan. 31 She values stock of clothes at cost $£ 1,000$
Set out all of the accounts in the books of Marion's boutique business and balance off the bank account.

Answer 1.1


| Purchases returns |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | £ |  |  | £ |
|  |  |  | Jan. 12 | Good Supplies Ltd | 50 |
|  |  | Good Supplies Ltd |  |  |  |
| Jan. 12 | Purchases returns | £ |  |  | £ |
|  |  | 50 | Jan. 12 | Purchases | 1,100 |
|  |  | Electricity |  |  |  |
| Jan. 20 | Bank | £ |  |  | £ |
|  |  | 50 |  |  |  |
|  |  | Stationery |  |  |  |
|  |  | £ |  |  | £ |
| Jan. 21 | Bank | 40 |  |  |  |

## Question 1.2

Enter the following transactions into the books of D. Margrave for the month of September.
Sept. 1 Cash in hand $£ 150$
Sept. 2 Bought $£ 350$ of goods on credit from C. Russell
Sept. 3 Paid electricity $£ 40$
Sept. 4 Cash sales $£ 140$
Sept. 5 Paid wages $£ 80$
Sept. 11 Cash takings $£ 165$
Sept. 15 Bought office furniture $£ 60$
Sept. 18 Cash sales $£ 150$
Sept. 21 Sold goods to P. Lynch on credit £50
Sept. 25 Paid advertising $£ 50$
Sept. 27 Cash sales $£ 140$

Answer 1.2

Cash

| £ |  |  |  |  | £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sept. 1 | Capital | 150 | Sept. 3 | Electricity | 40 |
| Sept. 4 | Sales | 140 | Sept. 5 | Wages | 80 |
| Sept. 11 | Sales | 165 | Sept. 15 | Office furniture | 60 |
| Sept. 18 | Sales | 150 | Sept. 25 | Advertising | 50 |
| Sept. 27 | Sales | 140 | Sept. 30 | Balance c/d | 515 |
|  |  | 745 |  |  | 745 |
| Oct. 1 | Balance b/d | 515 |  |  |  |
| Capital |  |  |  |  |  |
|  |  | £ |  |  | £ |
|  |  |  | Sept. 1 | Cash | 150 |
| C. Russell |  |  |  |  |  |
| £ |  |  |  |  | £ |
|  |  |  | Sept. 2 | Purchases | 350 |

Purchases


Note: The reason for only balancing off the cash account at this stage will become clear in the following chapters.

## 2 The Trial Balance

### 2.1 Introduction

So far we have concerned ourselves with the posting of transactions to the ledger accounts, and we have seen how we balance off the cash account. The next stage in the book-keeping process is to examine the balances which exist on all of the accounts which we have opened. Looking to worked example 1.1 in Chapter 1, we shall now examine the balance on each of the accounts in the books of $B$. Brown.

## (a) Capital

There is only one entry on this account, a credit entry for $£ 5,000$. Hence, the account has a credit balance of $£ 5,000$, representing the liability of the business to the owner.

## (b) Bank

The debit entries total $£ 6,900$, as compared with credit entries totalling $£ 2,150$. If we deduct $£ 2,150$ from $£ 6,900$, we arrive at $£ 4,750$, which is the debit balance on the account representing the amount of money which, according to our records, we have in our bank account.

## (c) Purchases

There are three debit entries totalling $£ 840$. A debit balance of $£ 840$ representing our total purchases to date.
(d) T. Smith

On this account the amount of the debit entry equals the amount of the credit entry. We can therefore say that the account has a nil balance. This reflects the fact that there is now neither an amount owing to T. Smith nor an amount owing from T. Smith, since we purchased goods from him and at a later date we settled that debt.
(e) R. Gray

Exactly the same comments apply as for T. Smith.

## (f) B. Coals

Exactly the same comments apply as for R. Gray and T. Smith.

## (g) Sales

The credit entries totalling $£ 2,600$ with no debit entries means a credit balance of $£ 2,600$, reflecting our total sales to date, both for cash and on credit.
(h) R. Pike

As with T. Smith's account, the debit entries in total equal the credit entry and there is therefore a nil balance on the account, reflecting the fact that after the transactions entered there is neither an amount owing to nor an amount owing from R. Pike.

## (i) T. Trout

A single debit entry of $£ 700$ on this account means that there is a debit balance of $£ 700$, representing the amount due from T. Trout - i.e. T. Trout is a debtor for that amount to the business.

## (j) Rent

A single debit entry of $£ 40$ means that there is a debit balance of $£ 40$, representing the total expense on this item during this period.

## (k) Electricity

The same comments apply as for rent. A debit balance of $£ 130$, representing the amount spent on electricity during the period.
(1) Motor Van

A debit balance of $£ 1,000$ represents the book value of the asset motor van.
(m) Packing Paper

Another expense account, this time with a debit balance of $£ 140$, representing the business's expenditure on this item.

## (n) Furniture and Fittings

A debit balance of $£ 500$, representing the book value of the asset furniture and fittings.
(o) Office Supplies Ltd

A credit balance of $£ 500$, representing the liability of the business to Office Supplies Ltd.

### 2.2 Purpose of the trial balance

Having ascertained the balance on our various accounts, we are now in a position to progress a stage further in the book-keeping process.

You will recall from the first chapter that the whole basis of double-entry book-keeping is a system of debit and credit entries of equal amounts. If we have adhered to this rule, it should be obvious that if we list the debit and credit balances the totals of each should be equal. This is the whole purpose of the trial balance - to check the arithmetical accuracy of our book-keeping. If our totals of debit balances and credit balances are equal (i.e. our trial balance agrees), then we have proved the arithmetical accuracy of our book-keeping.

You should note two things in particular regarding the trial balance.
(i) It is not part of the double-entry system of book-keeping.
(ii) The following errors will not be revealed by the trial balance: (a) a posting of the correct amount to the correct side of an account but to the wrong account; (b) a posting of the wrong amount to both the debit of one account and the credit of another (provided that it is the same wrong amount in both cases); (c) failure to enter a transaction anywhere in the books.

The subject of errors is dealt with fully in Chapter 8.

### 2.3 Worked examples

Example 2.1
From the books of B. Brown illustrated in Chapter 1 prepare the trial balance of B. Brown's business as at 31 December.

## Solution 2.1

|  | $\mathrm{Dr}$ | $\mathrm{Cr} .$ <br> £ |
| :---: | :---: | :---: |
| Capital |  | 5,000 |
| Bank | 4,750 |  |
| Purchases | 840 |  |
| Sales |  | 2,600 |
| T. Trout | 700 |  |
| Rent | 40 |  |
| Electricity | 130 |  |
| Motor van | 1,000 |  |
| Packing paper | 140 |  |
| Furniture and fittings | 500 |  |
| Office Supplies Ltd |  | 500 |
|  | £8,100 | £8,100 |

## You should notice:

(i) The debit balances and credit balances both total $£ 8,100$ - i.e. our trial balance agrees and thus the arithmetical accuracy of our book-keeping has been proved.
(ii) The accounts with a nil balance (e.g. T. Smith) have been omitted, since these can now be considered closed.

## Example 2.2

The following were the balances in the books of G. Green as at 31 March 1985, omitting the capital account. You are asked to prepare the trial balance at 31 March 1985, the capital account being included as the balancing figure.

|  | $£$ |
| :--- | ---: |
| Bank overdraft | 2,416 |
| Heating | 213 |
| Sales | 16,134 |
| Purchases | 11,210 |
| Commission income | 1,367 |
| Cash in hand | 110 |
| Debtors | 4,130 |
| Creditors | 2,695 |
| Owner's drawings | 600 |
| Postage and stationery | 715 |
| Premises | 26,900 |
| Repairs to buildings | 620 |

Note: There are two or three new accounts mentioned here, but you should be able to work out whether they are debit or credit balances from the rules which you have already learned.

## Solution 2.2

|  | $\begin{aligned} & \text { Dr. } \\ & \mathfrak{f} \end{aligned}$ | $\begin{aligned} & \text { Cr. } \\ & \mathfrak{£} \end{aligned}$ |
| :---: | :---: | :---: |
| Bank overdraft (1) |  | 2,416 |
| Heating | 213 |  |
| Sales |  | 16,134 |
| Purchases | 11,210 |  |
| Commissions received |  | 1,367 |
| Cash in hand | 110 |  |
| Debtors | 4,130 |  |
| Creditors |  | 2,695 |
| Owner's drawings (2) | 600 |  |
| Postage and stationery | 715 |  |
| Premises | 26,900 |  |
| Repairs to buildings | 620 |  |
| Capital (3) |  | 21,886 |
|  | £44,498 | £44,498 |

## NOTES

(1) Bank overdraft is a liability to the bank - i.e. a credit balance.
(2) Owner's drawings represents money withdrawn from the business by the owner - i.e. he becomes a debtor of the business for this amount although it will usually be set off later against his capital.
(3) Balancing figure as required in the question.

You should notice how the debit balances are either (a) assets (e.g. premises, debtors, cash) or (b) expenses (e.g. heating, purchases, repairs) and also that credit balances are either (a) liabilities (e.g. creditors) or (b) income (e.g. sales, commission received).

### 2.4 Further exercises

## Question 2.1

From the books of Marion's boutique in Question 1.1 in Chapter 1 extract a trial balance as at 31 January 1985.

## Answer 2.1

Trial balance of Marion's boutique at 31 January 1985

|  | $\begin{aligned} & \text { Dr. } \\ & \mathfrak{f} \end{aligned}$ | $\mathrm{Cr} .$ £ |
| :---: | :---: | :---: |
| Bank | 1,955 |  |
| Wholesale Clothing | - |  |
| Sales |  | 4,745 |
| Rent | 1,100 |  |
| Capital |  | 4,000 |
| Furniture and fittings | 3,000 |  |
| Purchases | 3,700 |  |
| Purchases returns |  | 50 |
| Good Supplies Ltd |  | 1,050 |
| Electricity | 50 |  |
| Stationery | 40 |  |
|  | £9,845 | £9,845 |

## Question 2.2

From the books of D. Margrave in Question 1.2 in Chapter 1 extract a trial balance as at 30 September 1985.

## Answer 2.2

Trial balance of D. Margrave at 30 September 1985

|  | $\begin{aligned} & \text { Dr. } \\ & \mathfrak{f} \end{aligned}$ | $\mathrm{Cr} \text {. }$ £ |
| :---: | :---: | :---: |
| Cash | 515 |  |
| Capital |  | 150 |
| C. Russell |  | 350 |
| Purchases | 350 |  |
| Electricity | 40 |  |
| Sales |  | 645 |
| Wages | 80 |  |
| Office furniture | 60 |  |
| P. Lynch | 50 |  |
| Advertising | 50 |  |
|  | £1,145 | £1,145 |

# 3 Trading and Profit and Loss Accounts 

### 3.1 Explanation

The trading and profit and loss account is prepared to calculate and show in detail the profit or loss for an accounting period of the business. It is divided into two sections (or accounts) - the trading section and the profit and loss section.

### 3.2 The trading section

The trading section shows the gross profit, which is the difference between sales and cost of goods sold or cost of sales. The sales figure will be the value of sales to the customers of the business, as posted to the credit of the sales account in the ledger and transferred to the trading and profit and loss account. The value of any goods returned by customers, as posted to the sales returns account, will be deducted from the total sales figure to arrive at a net sales figure.

The cost of goods sold requires further consideration. If a business sells all the stock which it purchases during a trading period, then the cost of goods sold is the amount paid for purchases of goods for resale. Where, however, the business has stock remaining at the end of a period, we must deduct this closing stock valuation from our purchases to arrive at a cost of goods sold figure. We now have

| Purchases | x |
| :--- | :---: |
| less closing stock | $\underline{(\mathrm{x})}$ |
| Cost of goods sold | $\underline{T}$ |

The closing stock of a business is available to sell in the following accounting period and we must therefore include the closing stock figure in the following period's cost of goods sold calculation. The calculation then would be for the next period's cost of goods sold figure

| Opening stock (last period's closing stock) | x |
| :--- | :--- |
| add purchases | x |
| sub-total | $\mathrm{S} / \mathrm{T}$ |
| less closing stock | $\underline{(x)}$ |
| Cost of goods sold | $\underline{T}$ |

We have not yet examined the purchases figure. The purchases figure will be the value of purchases of goods for resale from suppliers, less the value of any goods returned to those suppliers. Additionally, it should include the cost of bringing those goods to their existing state and condition; a common example of such a cost would be carriage inwards.

### 3.3 The profit and loss section

The profit and loss section shows the net profit of the business, which is defined as
gross profit
add other income (e.g. rents, commission)
less other expenses (not included in cost of goods sold)
Other expenses will be selling and administrative expenses.

### 3.4 Preparation of trading, profit and loss account

We have seen how the gross profit and net profit are calculated, which it is important to understand. However, you must also understand the mechanics of the preparation of a trading and profit and loss account using the double-entry system of book-keeping. It is important to note that this account is part of the doubleentry system.

We have already seen that we need the values from the following accounts to calculate gross and then net profit: sales, purchases, carriage inwards, income accounts and expense accounts. The rule is that we must transfer to the trading and profit and loss account the balance on all expense and income accounts i.e. all accounts which are not asset or liability accounts (look back to Section 1.2 if you are not clear on these definitions).

We can now illustrate how two of these accounts will now appear in the ledger, using the example in Chapter 1.

| Purchases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1985 |  | £ | 1985 |  | £ |
| Dec. 8 | T. Smith | 400 | Dec. 31 | Trading account | 840 |
| Dec. 12 | R. Gray | 300 |  |  |  |
| Dec. 19 | B. Coals | 140 |  |  |  |
|  |  | £840 |  |  | £840 |
|  |  | Electr | city |  |  |
| 1985 |  | £ | 1985 |  | £ |
| Dec. 19 | Bank | 130 | Dec. 31 | Profit and loss account | 130 |
|  |  | $\overline{£ 130}$ |  |  | $\underline{£ 130}$ |

From the above it can be seen that accounts with debit balances will appear as a debit entry on the trading and profit and loss account. Accounts with a credit balance will appear as a credit entry on the trading and profit and loss account.

Finally, we must consider the entries to record the closing stock valuation. The entry which you may find easier to remember rather than work out the reasons for is

Dr. Stock
Cr. Trading account
We debit stock, because we want to record an asset on the books (remember debit an asset to increase it). The explanation of the credit entry is that by recognising
the closing stock we are reducing our cost of goods sold and thus increasing our income. Our stock account will then appear as follows:

Stock
£
Dec. 31 Trading account 100
The debit balance remains on the stock account until the end of the next trading period, when it is transferred to the debit of that year's trading and profit and loss account.

When the net profit has been calculated, which will be the balance on the profit and loss account after posting all expenses and income, we transfer that profit to the owner's capital account. The entry is then

Dr. Profit and loss account
Cr. Capital account

### 3.5 Other trading account expenses

So far we have recorded in the trading account the cost of purchases as adjusted by the opening and closing stocks, and in the case of a simple trading business this will be all that is entered in that account. However, any costs incurred in bringing goods into a saleable condition and to their place of sale should be charged to the trading account. Such items will include carriage inwards, warehouse costs and packing costs. It is important, therefore, to know the type of business for which we are preparing accounts, in order to decide whether expenses are (a) trading account items, which will be included in the cost of sales calculation and affect gross profit, or (b) profit and loss account items, which affect only the net profit.

We shall now work through some examples, which you should study carefully: in particular, note the differences between the alternative presentations.

### 3.6 Worked examples

## Example 3.1

From the trial balance produced in Section 2.3 prepare a trading and profit and loss account of B. Brown for the year ended 31 December 1985. Closing stock is $£ 200$.

## Solution 3.1

Trading and profit and loss account of B. Brown for year ended 31 December 1985

|  |  |  | $£$ |
| :--- | ---: | :--- | ---: |
| Purchases | 840 |  | 2,600 |
| Packing | 140 | Closing stock | 200 |
| Gross profit c/d | 1,820 |  |  |
|  | $\underline{£ 2,800}$ | $\underline{£ 2,800}$ |  |


| Rent | 40 | Gross profit b/d | 1,820 |
| :--- | ---: | ---: | :--- |
| Electricity | 130 |  |  |
| Net profit (transferred to capital account) | $\underline{1,650}$ |  |  |
|  | $\underline{£ 1,820}$ | $\underline{£ 1,820}$ |  |

Alternatively, we could prepare the account in vertical format to make it more readable for non-accountants. It would then appear as follows:

Trading and profit and loss account of B. Brown for year ended 31 December 1985

|  |  | $£$ |
| :--- | ---: | :---: |
| Sales |  | 2,600 |
| Purchases | 840 |  |
| less closing stock | $\underline{200}$ |  |
|  | $\underline{640}$ |  |
| Packing paper | $\underline{140}$ |  |
| Cost of goods sold |  | $\underline{780}$ |
| Gross profit |  | 1,820 |
| less |  |  |
| Rent | $\underline{40}$ |  |
| Electricity | $\underline{130}$ | $\underline{170}$ |
| Net profit |  |  |

## Example 3.2

From the following trial balance, taken from the books of G. Green at 31 December 1985, prepare a trading and profit and loss account. Closing stock at 31 December 1985 is $£ 1,000$.

|  | $\begin{aligned} & \text { Dr. } \\ & £ \end{aligned}$ | $\mathrm{Cr} .$ £ |
| :---: | :---: | :---: |
| Sales |  | 6,000 |
| Sales returns | 500 |  |
| Capital |  | 7,000 |
| Motor vehicle | 5,700 |  |
| Purchases | 3,500 |  |
| Purchases returns |  | 400 |
| Carriage inwards | 610 |  |
| Carriage outwards | 405 |  |
| Rates | 1,000 |  |
| Insurance | 40 |  |
| Debtors | 500 |  |
| Drawings | 300 |  |
| Creditors |  | 300 |
| Bank | 45 |  |
| Opening stock 1 January 1985 | 1,100 |  |
|  | £13,700 | £13,700 |

Solution 3.2

Trading and profit and loss account of G. Green for year ending 31 December 1985

|  |  |  | £ |
| :---: | :---: | :---: | :---: |
| Sales ( $£ 6,000-500$ ) |  |  | 5,500 |
| Opening stock |  | 1,100 |  |
| Purchases (£3,500-400) | 3,100 |  |  |
| add Carriage inwards | 610 | 3,710 |  |
|  |  | 4,810 |  |
| less Closing stock |  | 1,000 |  |
| Cost of goods sold |  |  | 3,810 |
| Gross profit |  |  | 1,690 |
| less |  |  |  |
| Carriage outwards (1) |  | 405 |  |
| Rates |  | 1,000 |  |
| Insurance |  | 40 | 1,445 |
| Net profit (transferred to | ital) |  | £245 |

NOTE
(1) Carriage outwards is a selling expense and therefore appears in the profit and loss section of the account.

### 3.7 Further exercise

## Question 3.1

From the following trial balance, taken from the books of Darren Guymer, draw up a trading and profit and loss account for the year ending 30 November 1985.

|  | Dr. <br> $£$ | Cr. |
| :--- | ---: | ---: |
| Capital |  | 50,000 |
| Cash at bank | 6,000 |  |
| Cash in hand | 104 |  |
| Debtors | 15,000 |  |
| Creditors |  | 14,150 |
| Stock (1 Dec. 1984) | 40,000 |  |
| Motor van | 8,000 |  |
| Sales |  | 210,000 |
| Purchases | 194,621 |  |
| Purchases returns |  | 610 |
| Sales returns | 650 |  |
| Carriage | 150 |  |
| Carriage outwards | 410 |  |
| Telephone | 805 |  |
| Insurance | 610 |  |
| Sundry expenses | 410 |  |
| Wages | 8,000 |  |
|  | $£ 274,760$ | $£ 274,760$ |

Stock at 30 November 1985 was $£ 74,100$
Answer 3.1

Gross profit $£ 49,289$
Net profit £39,054

## 4 Balance Sheet

### 4.1 Purpose

We saw in Chapter 3 that the trading and profit and loss account is prepared to show the profit or loss of the business for an accounting period. The balance sheet is prepared to show the financial position of the business at the end of that accounting period. To achieve this we show the amounts on the asset and liability accounts in the books of the business. You should note that it is not part of the double-entry system; the balances on the asset and liability accounts are carried forward to the next accounting period, as illustrated in Section 1.5 for the bank account. Before preparing the balance sheet, all of the asset and liability accounts should be balanced off as illustrated there.

### 4.2 Preparation of the balance sheet

In order to prepare a balance sheet in good format, we must consider the asset and liability accounts under certain headings and terms which we must understand and be able to define. We shall now look at those terms.

## (a) Capital

We learned in Section 1.2 that capital is a liability account and, in the widest sense of the word, it is a liability representing the liability of the business to the owner. In other words, it is the owner's investment in the business. Because of this latter definition, often, when we talk about liabilities, we mean only liabilities to third parties and not the owner's capital account.

As we have already seen, an entry is made to the capital account when the owner introduces capital into the business. In Chapter 3 we saw another instance requiring a posting to the capital account - that is, when the profit and loss account is closed and the balance is transferred to the owner's capital account. The only other occasion when this account is posted to is when the owner withdraws cash or stock from the business. If cash is withdrawn, the entry is

Dr. Capital (to reduce the liability account)
Cr. Cash (to reduce the asset cash)
If stock is withdrawn, the entry is
Dr. Capital (to reduce the liability account)
Cr. Purchases (to reduce the expense)

An alternative to making the posting direct to the capital account is to debit a drawings account and to transfer the balance from the drawings account at the end of the accounting period to the capital account.

It is worth noting that the three instances mentioned above are the only occasions where entries are made to the capital account. In summary, they are: (a) when the owner introduces capital; (b) when the profit and loss account is closed by transferring the balance (net profit) to the capital account; (c) when the owner withdraws cash or stock from the business.

## (b) Current Liabilities

Current liabilities represent amounts payable within a period of 12 months from the balance sheet date. They will include bank overdrafts, since banks reserve the right to demand immediate payment.
(c) Long-term Liabilities

Long-term liabilities represent amounts payable more than 12 months after the balance sheet date.

## (d) Fixed Assets

Fixed assets are those assets which are held for continuing use in the business with a view to profits being earned from that use. Examples are premises, fixtures and fittings, and motor vehicles.

## (e) Current Assets

We can define current assets as assets which we intend to turn into cash within a relatively short period of time or which are already cash, including bank balances. Examples are stock, debtors and bank balances.

## (f) Working Capital or Net Current Assets

Working capital is defined as current assets less current liabilities, and, as will be explained in Chapter 20, is an important figure in comprehending and interpreting balance sheets.

## (g) Net Assets

Net assets represent the difference between total assets and liabilities to third parties. They will therefore be equivalent to fixed assets plus working capital.

### 4.3 Balance sheet equation

Because we have followed the double-entry system of book-keeping as described in Chapter 1, if our books are arithmetically correct, the following equation will be true:

$$
\text { capital }+ \text { liabilities }=\text { assets }
$$

or, rewritten,

$$
\text { capital }=\text { assets less liabilities }
$$

While we follow the double-entry system of book-keeping this equation will always be true. In the worked examples which follow you should notice how it is true for those answers. Also compare and note the differences between the two formats.

### 4.4 Capital and revenue expenditure

We have so far mentioned that expense account balances are transferred to the profit and loss account and that asset account balances are carried forward to the next accounting period. Since the profit calculation will change if we classify an item wrongly as either an expense or an asset, the importance of correct classification cannot be over-emphasised. In order that the account be treated correctly, we must accurately classify initial expenditure as either capital or revenue expenditure.

Capital expenditure is the money spent on buying fixed assets or adding to their value. Revenue expenditure is the money spent on running the business on a day-to-day basis. For example, building an extension on to an existing building is capital expenditure; repairing the roof would be revenue expenditure. Capital expenditure is debited to a fixed asset account which appears on the balance sheet, whereas revenue expenditure is debited to an expense account which is transferred to the profit and loss account.

### 4.5 Worked examples

## Example 4.1

From the trial balance produced in Section 2.3 prepare a balance sheet for B. Brown as at 31 December 1985.

## Solution 4.1

Balance sheet of B. Brown as at 31 December 1985

|  | £ |  | £ |
| :---: | :---: | :---: | :---: |
| Capital balance 1 Jan. 1985 add net profit | 5,000 | Fixed assets |  |
|  | 1,650 | Furniture and fittings | 500 |
| Capital balance 31 Dec. 1985 | 6,650 | Motor van | $\underline{1,000}$ |
|  |  |  | 1,500 |
| Current liabilities Creditors |  | Current assets |  |
|  | 500 | Stock 200 |  |
|  |  | Debtors 700 |  |
|  |  | Bank $\quad \underline{4,750}$ | 5,650 |
|  | £7,150 |  | £7,150 |

Alternatively - again for better presentation and for the benefit of non-accountants having to read balance sheets - we could prepare it in a vertical format.
Balance sheet of B. Brown as at 31 December 1985

| Fixed assets |  | £ |
| :---: | :---: | :---: |
| Furniture and fittings |  | 500 |
| Motor van |  | 1,000 |
|  |  | 1,500 |
| Current assets |  |  |
| Stocks | 200 |  |
| Debtors | 700 |  |
| Bank | 4,750 |  |
|  | 5,650 |  |
| less Current liabilities |  |  |
| Creditors | 500 |  |
| Working capital |  | 5,150 |
| Net assets |  | £6,650 |
| Financed by |  |  |
| Capital balance 1 Jan. 1985 |  | 5,000 |
| add net profit |  | 1,650 |
| Capital balance 31 Dec. 1985 |  | £6,650 |

## Example 4.2

From the trial balance given in Example 3.2 of Chapter 3, prepare a balance sheet for G. Green as at 31 December 1985.

## Solution 4.2

Balance sheet of G. Green as at 31 December 1985

| Fixed assets |  | £ |
| :---: | :---: | :---: |
| Motor vehicle |  | 5,700 |
| Current assets |  |  |
| Stock | 1,000 |  |
| Debtors | 500 |  |
| Bank | 45 |  |
|  | 1,545 |  |
| less Current liabilities |  |  |
| Creditors | 300 |  |
| Working capital |  | 1,245 |
|  |  | £6,945 |
| Capital balance 1 Jan. 1985 |  | 7,000 |
| add net profit |  | 245 |
|  |  | 7,245 |
| less drawings |  | 300 |
| Capital balance 31 Dec. 1985 |  | £6,945 |

### 4.6 Further exercises

## Question 4.1

From the trial balance given in Question 3.1 of Chapter 3 prepare a balance sheet of Darren Guymer at 30 November 1985.

Answer 4.1

Fixed assets $\mathfrak{£} 8,000$
Current assets $£ 95,204$
Current liabilities $£ 14,150$
Capital £89,054

## Question 4.2

(a) Explain the meaning of each of the following terms:
(i) 'capital expenditure';
(ii) 'revenue expenditure'.
[3 marks]
(b) Give two examples of each type of expenditure given in (a) above.
(c) Devise a suitable example to explain the effect on the final accounts of incorrectly classifying an item of capital expenditure as revenue.
(d) Explain the significance to the preparation of final accounts of being able to distinguish between capital and revenue expenditure.

## Answer 4.2

(a) Refer to Section 4.4.
(b) (i) Premises, motor van; (ii) wages, electricity.
(c) Refer to Section 4.4. For example, if the cost of a new motor van were treated as an expense, this would reduce profit by that amount. When it is treated correctly as capital expenditure, it is shown as an asset in the balance sheet and has no effect upon the net profit.
(d) Refer to Section 4.4 and (c) above.

## 5 Cash Book and Cash Discounts

### 5.1 Cash book

The cash book in manual systems and some computerised systems is a book combining the cash account and the bank account. (Other uses will be discussed in Chapter 7.) Refer back to Section 1.4, where a bank account was illustrated, and compare the cash and bank accounts with the illustration below, where we have a separate column for cash and bank.

Cash book

|  |  | Cash £ | Bank <br> £ |  |  | Cash | Bank £ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 1 | Balance b/d | 100 | 5,000 | Jan. 8 | Wages | 150 |  |
| Jan. 6 | Sales | 800 |  | Jan. 9 | Rent |  | 600 |
| Jan. 7 | D. Taylor |  | 510 | Jan. 11 | J. Small |  | 750 |
|  |  |  |  | Jan. 15 | Balances c/d | 750 | 4,160 |
|  |  | 900 | 5,510 |  |  | 900 | 5,510 |
| Jan. 16 | Balance b/d | 750 | 4,160 |  |  |  |  |

Make sure that you understand this illustration before proceeding. The entries to the credit columns for cash and bank represent payments by cash and cheque, respectively. The entries to the debit columns represent receipts of cash and payments direct into the bank account by cheque or other means. The balances represent the cash held by the business and the balance at the bank.

We can now go on to consider the entries where cash is paid into the bank or withdrawn from the bank.

Withdrawal of cash from the bank will increase our cash balance and decrease our bank balance, and the entry is

Dr. Cash account
Cr. Bank account

Cash paid into the bank will increase our bank balance and decrease our cash balance and the entry is

Dr. Bank account
Cr. Cash account

We can illustrate this by continuing our previous example and making an entry to record the paying in of $£ 500$ to our bank account from our cash in hand.

Cash book

| Jan. 16 | Balance b/d | Cash $£$ | Bank $£$ |  |  | $\begin{aligned} & \text { Cash } \\ & £ \end{aligned}$ | $\begin{aligned} & \text { Bank } \\ & £ \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 750 | 4,160 | Jan. 17 | Bank | 500 |  |
| Jan. 17 | Cash |  | 500 | Jan. 18 | Balance b/d | 250 | 4,660 |
|  |  | 750 | 4,660 |  |  | 750 | 4,660 |
| Jan. 18 | Balance b/d | 250 | 4,660 |  |  |  |  |

### 5.2 Cash discounts

Cash discounts fall into two categories - discounts allowed and discounts received. Discounts allowed occur where we accept a payment from a customer of a lesser amount than the amount due, because the customer has paid us promptly. Discounts received occur where a supplier allows us to pay a lesser amount to him than the amount due, because we have paid him promptly.

There are two reasons why businesses allow discounts. First, they improve their own cash flow - i.e. prevent it going into an overdraft situation - or release funds for investment elsewhere. Second, they reduce the possibility of bad debts: the more quickly payments are received the less chance there is of debtors becoming unable to pay.

When a business allows a discount, it nonetheless needs to reduce the debtor's account by the full amount of the debt being settled. In addition to the debit to cash or bank and the credit to the debtor's account, the following entry is necessary to completely eliminate the balance from the debtor's account:

Dr. Discounts allowed account
Cr. Debtor's account
At the end of the accounting period the balance on the discounts allowed account is transferred to the profit and loss account and treated as an expense of the business, thus reducing the profit. Conversely, when a business receives a discount, the creditor's account needs to be reduced by the full amount of the debt due and the following entry then becomes necessary:

## Dr. Creditor's account

Cr. Discounts received account
At the end of the accounting period the balance on the discounts received account is transferred to the profit and loss account as other income and increases the profit.

### 5.3 Cash discounts in the cash book

Because of the frequency with which discounts allowed and received occur, we do not usually make separate entries in our books every time they occur. The usual method is to add an additional column to the cash book illustrated in Section 5.1. On the debit side we create a column 'discounts allowed' and enter amounts into this column as they occur. When the credit entry is made to the debtor's account, we post the full amount of the debt - i.e. the cash received plus the discount allowed to the credit of the debtor's account. On the credit side we create a column 'discounts received' and enter amounts into this column
as they occur. When the debit entry is made to the creditor's account, we post the full amount of the debt - i.e. the cash paid plus the discount received to the debit of the creditor's account.

The discount columns are not part of the double-entry system. In so far as discounts allowed are concerned, we have so far debited our cash or bank account with the amount actually received and credited the debtor with the full amount due. It now remains to post the discount to the debit of the discounts allowed account, and this we do in one total amount at the end of a period. Similarly, we must total discounts received and post these to the credit of the discounts received account. This completes the double entry, which we can summarise for cash received from debtors as

Dr. Bank account (with amount received)
Dr. Discounts allowed account (with the discount allowed)
Cr. Debtor's account (with the amount received plus the discount)
Similarly, we can summarise the entries for payment to creditors as
Dr. Creditor's account (with the amount paid plus the discount allowed)
Cr. Discount received account (with the amount of the discount received)
Cr. Bank (with the amount actually paid)

### 5.4 Petty cash

In businesses other than the very small ones it becomes advantageous to maintain a petty-cash account in addition to the cash and bank accounts. The benefits are as follows: (a) the petty-cash duties can be delegated to a junior member of staff; (b) the main cash book does not become over-large because of a large quantity of small items; (c) an analysed petty-cash book can be maintained so that totals only for each category of expense will be posted to the various expense accounts - e.g. postage, stationery, etc.

Where such a book is maintained, the recommended system to operate is the imprest system. Under this system a float is established to meet requirements for the following period. At the end of that period the petty cashier is reimbursed with the amounts actually paid out, which restores the petty cash balance to the original float. From the control point of view, this system has the advantage that at any one time the total value of vouchers which have not been reimbursed plus the petty-cash balance will equal the agreed float.

### 5.5 Worked examples

## Example 5.1

The cashier of your firm has been absent owing to illness and no entries have been made in the cash book for the period 24-30 November. The cash book has three columns - for discounts, cash and bank.

On 23 November the balances in the cash book were: cash in hand $£ 86$ and bank overdraft $£ 380$. There were no cash discount items in the cash book at that date. The following additional information is available:

Nov. 24 Paid cash for stationery $£ 8$ and stamps $£ 11$
25 Sent L. Fairclough a cheque for $£ 280$ and took $£ 20$ cash discount
26 Received and paid into bank a cheque from A. Tatlock $£ 432$ accepted in full settlement of his debt of $£ 470$
28 Banked a cheque from E. Yates $£ 506$ on account and sold goods $£ 262$ on credit to K. Barlow
29 Cashed a cheque $£ 42$ for office use
30 Cash sales for the period 24-30 November, £544, paid direct to bank
At the start of business on 1 December there was $£ 59$ in the firm's cash box.

## REQUIRED

(a) Preparation of the cash book for the period 24-30 November, bringing down the balances to 1 December.
[10 marks]
(b) An explanation of why you may be dissatisfied with the correctness of the cash balances.
[1 mark]
(c) An explanation of where discount allowed and discount received will be posted from the cash book and how each of them will affect the net profit calculation (2 marks)
[2 marks]

## Solution 5.1

(a)

Cash book

|  |  | Discount £ | Cash £ | Bank £ |  |  | Discount <br> £ | Cash $£$ | Bank £ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov. 23 | Balance b/d |  | 86 |  | Nov. 23 | Balance b/d |  |  | 380 |
| Nov. 26 | A. Tatlock | 38 |  | 432 | Nov. 24 | Stationery |  | 8 |  |
| Nov. 28 | E. Yates |  |  | 506 |  | Postage |  | 11 |  |
| Nov. 29 | Bank |  | 42 |  | Nov. 25 | L. Fairclough | h 20 |  | 280 |
| Nov. 30 | Sales |  |  | 544 | Nov. 29 | Cash |  |  | 42 |
|  |  |  |  |  | Nov. 30 | Balance c/d |  | 109 | 780 |
|  |  | 38 | 128 | 1,482 |  |  | 20 | 128 | 1,482 |
| Dec. 1 | Balance b/d |  | 109 | 780 |  |  |  |  |  |

(b) Since at 1 December there is only $£ 59$ in the cash box either $£ 50(£ 109-£ 59)$ has been spent and not recorded or it has been misappropriated.
(c) The $£ 38$ representing discount allowed will be posted to the debit of the discounts allowed account and will eventually be transferred to the profit and loss account as an expense, thus reducing the net profit. The $£ 20$ representing discounts received will be posted to the credit of the discounts received account and will eventually be transferred to the profit and loss account as an income item, thus increasing the net profit.

## Example 5.2

The cashier of the firm in which you are employed has been absent through illness and no entries have been made in the three-column cash book for the period 25-31 January. On 1 February you are instructed to bring the entries up to date. You obtain the following information.
(a) At the close of business on 24 January the cash book balances were: office cash $£ 156.70$, bank $£ 1,569.40$ (debit). For the period 1-24 January the entries made in the discount allowed and discount received columns totalled $£ 117.60$ and $£ 83.30$, respectively.
(b) Some credit customers have settled their accounts by cheque and the cheques have been paid into the bank:

|  |  | Amount owed | Cash discount deducted |
| :--- | :--- | :---: | :---: |
|  |  | $£$ |  |
| 25 January | G. Long | 264.00 | $21 / 2$ per cent |
| 28 January | D. Fender | 276.00 | $21 / 2$ per cent |
| 30 January | B. Keeper | 148.00 | 5 per cent |

(c) Payments made out of office cash:

25 January Travelling expenses $\quad 28.50$
28 January Postage stamps 12.60
29 January Stationery 18.20
(d) Payments by cheque to settle trade creditors' accounts:

|  |  | Amount owed <br> $£$ | Cash discount deducted |
| :--- | :--- | :---: | :--- |
|  |  | 2 January | N. Morris |
| $1,065.40$ | Nil |  |  |
| 26 January | F. Talbot | 616.00 | 2 $1 / 2$ per cent |
| 30 January | J. Ford | 419.50 | Nil |

(e) Other payments made by cheque:

|  |  | $\mathfrak{£}$ |
| :--- | :--- | ---: |
| 26 January | Telephone bill | 175.30 |
| 26 January | Repairs to typewriter | 43.40 |
| 29 January | Wages and salaries | $1,360.60$ |

(f) Cash sales are always paid intact into bank at the end of the day. The total for 25-31 January, which you can enter in one amount, was $£ 3,600.45$.
(g) At the start of business on 1 February there is $£ 87.40$ in the firm's cash box.
(h) A statement received from the bank shows a favourable balance of $£ 2,591.65$ at 31 January. There are no items in the statement of which you are not already aware, but you notice that the cheque sent to J. Ford on 30 January has not yet been cleared.

You are asked:
(1) to write up the firm's cash book for the period 25-31 January and carry down the balances;
(2) to say whether or not you are satisfied with the correctness of the cash and bank balances, giving your reasons.

Note: You are not required to make any postings to the ledger.

## Solution 5.2

(1)
(see the top of page 31)
(2) We can be satisfied with the bank balance of $£ 2,591.65$, since when J. Ford's cheque is cleared, the balance will be reduced to $£ 2,172.15$, exactly as shown in the cash book. We cannot be satisfied with the cash balance, since at $£ 97.40$ it is $£ 10$ more than the cash in the cash box and $£ 10$ has therefore been spent and not recorded, or misappropriated.

Cash book

|  |  | Discounts | Cash | Bank |  |  | Discounts | Cash | Bank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | £ | £ | £ |  |  | £ | £ | £ |
| Jan. 24 | Balances b/d | 117.60 | 156.70 | 1,569.40 | Jan. 24 | Balance b/d | d 83.30 |  |  |
| Jan. 25 | G. Long | 6.60 |  | 257.40 | Jan. 25 | Travelling expenses |  | 28.50 |  |
| Jan. 28 | D. Fender | 6.90 |  | 269.10 | Jan. 26 | N. Morris |  |  | 1,065.40 |
| Jan. 30 | B. Keeper | 7.40 |  | 140.60 | Jan. 26 | F. Talbot | 15.40 |  | 600.60 |
| Jan. 31 | Sales |  |  | 3,600.45 | Jan. 26 | Telephone |  |  | 175.30 |
|  |  |  |  |  | Jan. 26 | Equipment and repairs |  |  | 43.40 |
|  |  |  |  |  | Jan. 28 | Postage |  | 12.60 |  |
|  |  |  |  |  | Jan. 29 | Stationery |  | 18.20 |  |
|  |  |  |  |  | Jan. 29 | Wages and salaries |  |  | 1,360.60 |
|  |  |  |  |  | Jan. 30 | J. Ford |  |  | 419.50 |
|  |  |  |  |  | Jan. 31 | Balance c/d |  | 97.40 | 2,172.15 |
|  |  | 138.50 | 156.70 | 5,836.95 |  |  | 98.70 | 156.70 | 5,836.95 |
| Feb. 1 | lance b/d |  | 97.40 | 2,172.15 |  |  |  |  |  |

## Example 5.3

P. Black is in business as a retailer. On 1 May 1983 his balance sheet disclosed the following information:

| Liabilities |  | Assets | $£$ |
| :--- | ---: | :--- | ---: |
| Creditor W. Jones | 410 | Cash in hand | 50 |
| Capital | 31,100 | Cash at bank | 2,050 |
|  |  | Stock | 1,410 |
|  |  | Premises | $\underline{28,000}$ |
|  | $\underline{31,510}$ |  | $\underline{31,510}$ |

The following transactions took place during the month of May 1983:

[^0](b) Extract a trial balance on 14 May 1983.
(L)

Solution 5.3
(a)

Cash book

|  |  | Cash | Bank |  |  | Cash | Bank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | £ | £ |  |  | £ | £ |
| May 1 | Balance b/d | 50 | 2,050 | May 6 | W. Jones |  | 410 |
| May 6 | Sales | 700 |  | May 11 | Drawings | 250 |  |
| May 13 | Cash |  | 400 | May 13 | Bank | 400 |  |
| May 13 | Sales |  | 540 | May 13 | Stationery | 40 |  |
| May 13 | Sales | 50 |  | May 13 | R. Wilkinson |  | 450 |
|  |  |  |  | May 13 | Stolen money | 50 |  |
|  |  |  |  | May 14 | Balance c/d | 60 | 2,130 |
|  |  | 800 | 2,990 |  |  | 800 | 2,990 |
| May 14 | Balance b/d | 60 | 2,130 |  |  |  |  |

Purchases

|  |  |  | $£$ |  | May 14 |
| :--- | :--- | :--- | :---: | :--- | :--- |
| May | 2 | W. Jones | 175 | Trading account | 625 |
| May | 3 | R. Wilkinson | $\underline{450}$ |  |  |
| $\underline{625}$ |  |  | $\underline{625}$ |  |  |

W. Jones

|  |  | $£$ |  |  | $£$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| May 6 | Purchases returns | 34 | May | 1 | Balance b/d |

May 14 Balance b/d
Shop fittings

|  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
| May 2 | Shopfitters Ltd |  | May 14 | Balance c/d |
| May 14 | Balance b/d |  |  | $\frac{1,000}{1,000}$ |

Shopfitters Ltd

| May 14 | Balance c/d | £ | May | 2 | Shop fittings | £ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1,000 |  |  |  | 1,000 |
|  |  | 1,000 |  |  |  | 1,000 |
|  |  |  | May |  | Balance b/d | 1,000 |

R. Wilkinson

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| May 13 | Bank |  | May 3 | Purchases | $\underline{£}$ |
|  | $\underline{450}$ |  |  | $\underline{450}$ |  |

Purchases returns

| May 14 | Trading a/c | £ | May 6 | W. Jones | £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 34 |  |  | 34 |
|  |  | Sales |  |  |  |
| May 14 | Trading a/c | £ | May 6 <br> May 13 <br> May 13 | Cash <br> Bank <br> Cash | £ |
|  |  | 1,290 |  |  | 700 |
|  |  |  |  |  | 540 |
|  |  |  |  |  | 50 |
|  |  | 1,290 |  |  | 1,290 |
|  |  | Drawing |  |  |  |
| May 11 | Cash | £ | May 14 | Capital | £ |
|  |  | 250 |  |  | 250 |
|  |  | 250 |  |  | 250 |

Stationery

| May 13 | Cash | £ | May 14 | Profit and loss a/c | £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 40 |  |  | 40 |
|  |  | 40 |  |  | 40 |

Capital

|  |  | $£$ |  |  | $£$ |
| :--- | :--- | :---: | :---: | :---: | :---: |
| May 14 | Drawings | 250 | May | 1 | Balance b/d |

Stock

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| May | 1 | Balance b/d | $\underline{1,410}$ | May 14 | Trading a/c |

Stolen money

| May 13 | Cash | $£$ | May 14 | Profit and loss account |
| :--- | :--- | :--- | :--- | :--- |
|  | $\underline{50}$ |  |  |  |


|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| May | 1 | Balance b/d |  | May 14 |  |
|  |  |  |  | $\underline{28,000}$ |  |
| May 28 | Balance b/d | 28,000 |  |  |  |

(b) Trial balance of P. Black as at 14 May 1983

|  | Dr. £ | $\mathrm{Cr} .$ $£$ |
| :---: | :---: | :---: |
| Cash | 60 |  |
| Bank | 2,130 |  |
| Purchases | 625 |  |
| W. Jones |  | 141 |
| Shop fittings | 1,000 |  |
| Shopfitters Ltd |  | 1,000 |
| Purchases returns |  | 34 |
| Sales |  | 1,290 |
| Stolen money | 50 |  |
| Stationery | 40 |  |
| Capital |  | 30,850 |
| Opening stock | 1,410 |  |
| Premises | 28,000 |  |
|  | £33,315 | £33,315 |

### 5.6 Further exercises

## Question 5.1

The Oran Company keeps very little cash in its office. All cheques and cash received are banked immediately. All payments are made by cheque, except that certain small payments of $£ 20$ or less may be made from petty cash. A main cash book is kept with two columns on each side. One column on each side is used to record cash discounts, while the other is used to keep a record of the bank account. Small payments are recorded in a petty-cash book with four analysis columns: postage, travelling, sundry expenses, and small purchases.
(a) From the following information write up the firm's bank cash book and petty-cash book for the week ended 15 December 1982.

| December |  | £ |
| :---: | :---: | :---: |
| 10 | Balance at bank | 410.27 |
|  | Petty cash in hand | 7.36 |
|  | Vouchers held by petty cashier | 92.64 |
|  | Petty cashier presented vouchers to main cashier a |  |
|  | Postage stamps | 10.00 |
|  | Banked cheques received from |  |
|  | P. Winters (cash discount $£ 2.24$ ) | 216.18 |
|  | R. Makeson (cash discount £3.16) | 317.17 |
|  | T. Soames (cash discount fnil) | 171.00 |
| 11 | A member of the company drew foreign currency | 100.00 |
|  | The bank charged for the service | 2.84 |
| 12 | Director's fare to London | 18.60 |

13 The following accounts were paid by cheque:
Leon Manufacturing Ltd. (cash discount £4.60) 225.40
Palton Traders Ltd. (cash discount £2.04) 174.16
14 Window cleaner paid 5.00
Postage stamps purchased 10.00
15 Small item of stock purchased for cash 15.81
Drew cheque for wages 200.00
P. Winters' cheque returned R/D
Errand boy's fare
1.70
(b) A bank statement was received on 17 December 1982 showing a balance at bank of £277.56. From the information given, what may account for the difference between the books and the bank statement?
(c) Why is it necessary to keep a separate column for purchases of stock made from petty cash?
(L)

Answer 5.1
(a)

Cash book

|  |  | Discount | Bank £ |  |  |  | Discount <br> £ | Bank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dec. 10 | Balance b/d |  | 410.27 D | Dec. 10 P | Petty cash |  |  | 92.64 |
| Dec. 10 | P. Winters | 2.24 | 216.18 D | Dec. 11 T | Travel advance |  |  | 100.00 |
| Dec. 10 | R. Makeson | 3.16 | 317.17 D | Dec. 11 B | Bank charges |  |  | 2.84 |
| Dec. 10 | T. Soames |  | 171.00 D | Dec. 13 L | Leon Manufacturing |  | 4.60 | 225.40 |
|  |  |  |  | Dec. 13 <br> Dec. 15 | Palton Traders |  | 2.04 | 174.16 |
|  |  |  |  |  | Wages |  |  | 200.00 |
|  |  |  |  | Dec. 15 <br> Dec. 15 | P. Winters |  |  | 216.18 |
|  |  |  |  | Dec. 15 B | Balance c/d |  |  | 103.40 |
|  |  | 5.40 | 1,114.62 |  |  |  | 6.64 | 1,114.62 |
|  |  |  |  | Petty-cash book |  |  |  |  |
|  | Receipts <br> £ | s Date | Details | Total £ | Postage £ | Travelling £ | $\underset{£}{\mathrm{~g}} \mathrm{Sundry}$ | Purchases <br> £ |
|  | 7.36 | Dec. 10 | Balance b/d |  |  |  |  |  |
|  | 92.64 | Dec. 10 | Bank |  |  |  |  |  |
|  |  | Dec. 10 | Postage | 10.00 | 10.00 |  |  |  |
|  |  | Dec. 12 | Travelling | 18.60 |  | 18.60 |  |  |
|  |  | Dec. 14 | Window cleaning | g $\quad 5.00$ |  |  | 5.00 |  |
|  |  | Dec. 14 | Postage | 10.00 | 10.00 |  |  |  |
|  |  | Dec. 15 | Purchases | 15.81 |  |  |  | 15.81 |
|  |  | Dec. 15 | Travelling | 1.70 |  | 1.70 |  |  |
|  |  |  |  | 61.11 | 20.00 | 20.30 | 5.00 | 15.81 |
|  |  | Dec. 15 | Balance c/d | 38.89 |  |  |  |  |
|  | 100.00 |  |  | 100.00 |  |  |  |  |
|  | 38.89 | Dec. 15 | Balance b/d |  |  |  |  |  |

(b) Refer to Chapter 6. Difference of $£ 174.16$ could represent Palton Traders Ltd cheque unpresented.
(c) Such items representing purchases of goods for resale will be posted to the purchases account and not any other expense account.

## Question 5.2

Fred Ogden opened a hardware shop on 1 April 1984. He had $£ 1,000$ cash, of which he placed $£ 900$ into a bank account. The transactions for the shop during the month of April were:
£ p
April 3 Purchased goods from T. Duke on credit ..... 150.00
4 Paid half year's rent by cheque ..... 600.00
7 Cash sales for week ..... 685.40
Cash drawings by J. Jones ..... 100.00
Paid cash into bank ..... 500.00
8 Purchased goods from B. Prince on credit ..... 75.50
Purchased goods from R. Knight on credit ..... 115.00
11 Paid T. Dukes a/c by cheque in full settlement ..... 135.00
14 Cash sales for week ..... 732.80
Paid cash into bank ..... 600.00
Cash drawings by J. Jones ..... 100.00
Purchases from B. Prince on credit ..... 125.00
18 Paid B. Prince by cheque ..... 75.50
Paid R. Knight by cheque, on account ..... 50.00
19 Sales to J. Lord on credit ..... 30.00
21 Cash sales for week ..... 483.70
Paid cash into bank ..... 500.00
23 Purchases from R. Knight on credit ..... 176.30
24 Bought cash register from ABC Ltd for credit ..... 172.00
25 J . Lord settled his account by cheque (less 10 per cent discount)
572.50
28 Cash sales for week
700.00
Paid into bank200.00

Note: Candidates should calculate the amount of the cheque paid by J. Lord on April 25.

From this information you are required to
(a) record the appropriate transactions in a three-column cash book, and bring down the balances as at 30 April 1984;
(b) write up the ledger account of T. Duke, B. Prince and J. Lord and bring down the balances as at 30 April 1984.

## Answer 5.2

(a)

Cash book

|  |  | Discount | $\begin{gathered} \text { Cash } \\ £ \end{gathered}$ | Bank $£$ |  |  | $\begin{aligned} & \text { Discount } \\ & \quad £ \end{aligned}$ | $\begin{gathered} \text { Cash } \\ £ \end{gathered}$ | $\begin{gathered} \text { Bank } \\ £ \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| April 1 | Capital |  | 100.00 | 900.00 | April 4 | Rent |  |  | 600.00 |
| April 7 | Sales |  | 685.40 |  | April 7 | Drawings |  | 100.00 |  |
| April 7 | Cash |  |  | 500.00 | April 7 | Bank |  | 500.00 |  |
| April 14 | Sales |  | 732.80 |  | April 11 | T. Dukes | 15.00 |  | 135.00 |
| April 14 | Cash |  |  | 600.00 | April 14 | Bank |  | 600.00 |  |
| April 21 | Sales |  | 483.70 |  | April 14 | Drawings |  | 100.00 |  |
| April 21 | Cash |  |  | 500.00 | April 18 | B. Prince |  |  | 75.50 |
| April 25 | J. Lord | 3.00 |  | 27.00 | April 18 | R. Knight |  |  | 50.00 |
| April 28 | Sales |  | 572.50 |  | April 21 | Bank |  | 500.00 |  |
| April 28 | Cash |  |  | 700.00 | April 28 | Bank |  | 700.00 |  |
|  |  |  |  |  | April 28 | Drawings |  |  | 200.00 |
|  |  |  |  |  | April 30 | Bal c/d |  | 74.40 | 2,166.50 |
|  |  | 3.00 | 2,574.40 | 3,227.00 |  |  | 15.00 | 2,574.40 | 3,227.00 |
| May 1 | Balance | b/d | 74.40 | 2,166.50 |  |  |  |  |  |

(b)
T. Duke

| April 11 <br> April 11 | Bank <br> Discount received | $\begin{gathered} £ \\ 135.00 \end{gathered}$ | April 3 | Purchases | $\begin{gathered} £ \\ 150.00 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 15.00 |  |  |  |
|  |  | 150.00 |  |  | 150.00 |
|  |  | B. Prince |  |  |  |
| April 18 April 21 | Bank <br> Balance c/d | £ |  |  | £ |
|  |  | 75.50 | April 8 | Purchases | 75.50 |
|  |  | 125.00 | April 14 | Purchases | 125.00 |
|  |  | 200.50 |  |  | 200.50 |
|  |  |  | April 30 | Balance b/d | 125.00 |
|  |  |  | Lord |  |  |
| April 19 | Sales | $£$ |  |  | $\stackrel{\text { £ }}{ }$ |
|  |  | 30.00 | April 25 | Bank | 27.00 |
|  |  |  | April 25 | Discount allowed | 3.00 |
|  |  | 30.00 |  |  | 30.00 |

## Question 5.3

(a) For what purposes does a business keep a petty-cash book?
(b) Explain the imprest system of keeping petty cash.
(c) Explain how the petty-cash book would be balanced at the end of the accounting period. Where would the petty-cash book closing balance be shown at the end of the financial year?
(d) Explain what happens to the total of the postage and stationery column.
(e) Explain what happens to the items in the column headed Ledger Accounts.

## Answer 5.3

(a) Refer to Section 5.4. To record small payments.
(b) Refer to Section 5.4. Reimbursing amounts paid to restore cash held to agreed float.
(c) Refer to Answer 5.1. Current asset on balance sheet.
(d) Debited to the expense account for postage and stationery.
(e) Debited to the respective ledger accounts.

## 6 Bank Reconciliation

### 6.1 Introduction

The cash book of a business shows the balance which the business considers it has as cash at the bank. In the same way as an individual receives a bank statement and compares it with his own records, in whatever form they may be, so a business must make that same comparison. The object of this chapter will be to discover differences between the balance shown on the bank statement and the balance according to the business's own records.

### 6.2 Types of differences

## (a) Error

Errors may be either calculation errors or errors due to failure to record items or recording them twice. Under this heading we also include standing order payments which we have instructed the bank to make but which we have not recorded in our books.

## (b) Bank Charges and Interest

Bank charges and interest will be entered by the bank on our account with them, and if we do not make an entry in our books for these amounts, then this will result in a difference.

## (c) Timing

When we send a cheque to a supplier, we enter the amount immediately in our cash book. However, allowing time for the supplier to receive the cheque and pay it into his bank account and then for it to find its way to our bank will mean that our account at the bank will not be debited for at least a few days and often much longer. Similarly, there will be a delay, although usually less, from the time we enter cheques received in our cash book to the time they are credited to our account by the bank.

## (d) Dishonoured Cheques

When we pay a cheque into our bank account, the bank will credit our account the next day and then proceed to collect the value of that cheque from the bank of our customer who sent us the cheque. If because our customer has insufficient
funds in his account or for some other reason the bank will not honour the cheque, then our bank will debit our account with the value of the dishonoured cheque, since it has previously credited our account and is now unable to collect the money.

### 6.3 Identifying the differences

In comparing the cash book with the bank statement we must remember that cash at bank is an asset to the business and as such we will debit the account to increase the asset and credit it to reduce it. Our bank statement represents our personal account in the books of the bank and therefore the entries will be the opposite to those in our cash book. For example, cheques received from our customers are debited to the bank account in our books but the bank credits our account in their books. To identify differences, we must therefore tick the items appearing as debits in our cash book and credits on our bank statements. Similarly, we can tick items appearing as credits in our cash book and debits on our bank statement.

### 6.4 Preparing the reconciliation

There are three methods of preparing or writing out the reconciliation:
(i) Reconcile the bank balance per the bank statement to the cash book balance.
(ii) Reconcile the cash book balance to the bank balance per the bank statement.
(iii) Adjust both balances as appropriate to a corrected balance, which will be the same in both cases - i.e. corrected cash book balance and corrected bank statement balance.

Unless the examination question instructs you to do otherwise you should follow method (iii). Using this method, we must add to our balance in the cash book any receipts not recorded in the cash book or recorded at less than the correct amount. We must deduct from this balance any charges or payments not recorded in our books or recorded at less than the correct amount. This calculation will give us a corrected cash book balance. We must then take the balance per the bank statement and add to it any receipts not recorded on the bank statement. We must then deduct from this any payments which we have made and entered in our cash book but which have not yet been debited to our account at the bank. The amount which we arrive at should then agree with the corrected cash book balance above.

### 6.5 Worked examples

## Example 6.1

Jim Duddy received a statement from his bank at 30 April 1983, showing a balance of $£ 1,420$ in his favour. The differences between his cash book and bank statement balances at 30 April are given below.
(1) An amount of $£ 421$, paid into bank on 29 April, has not been entered by the bank.
(2) Two cheques drawn by Duddy were not presented for payment until after 30 April: C. Walker £206, P. Higgins $£ 39$.
(3) The bank made standing order payments, amounting to $£ 168$, on behalf of Duddy. This had not been recorded in the cash book.
(4) On 23 April 1983 Duddy received from V. Bennett a cheque for $£ 306$, which he paid to bank on the same day. The bank statement showed that this cheque was dishonoured on 28 April 1983.
(5) On 24 April Duddy paid into bank a cheque for $£ 360$, which he received from a cus tomer in full settlement of a debt of $£ 375$. This item was shown correctly in the bank statement but Duddy had entered the full $£ 375$ in the bank column of his cash book.
(6) J. Ellis, a debtor, had made a payment of $£ 292$ direct to the bank but this entry had not been entered in Duddy's cash book.

## REQUIRED

(a) A statement showing the corrected bank statement balance.
(b) The cash book (bank columns only) showing the opening balance at 30 April, the additional entries now made necessary and closing with the corrected balance. [7 marks]
(c) An explanation of why a credit balance on a bank statement represents an asset to the firm concerned.

## Solution 6.1

|  | $£$ |
| :--- | :---: |
| (a) Balance as per bank statement | 1,420 |
| add cheques not yet credited (1) | $\underline{421}$ |
|  | 1,841 |
| less cheques not yet presented (2) | $\underline{245}$ |
| Corrected bank statement balance | 1,596 |

(b)

| Cash book |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | £ |  |  | £ |
| April 30 | Balance b/d | 1,793 | April 30 | Standing orders (3) | 168 |
| April 30 | J. Ellis | 292 | April 23 | V. Bennett (4) | 306 |
|  |  |  | April 24 | Discount allowed (5) | 15 |
|  |  |  | April 30 | Balance c/d | 1,596 |
|  |  | 2,085 |  |  | 2,085 |

The cash book adjustments can be explained as follows.
(3) Standing orders not entered.
(4) Since we had previously debited the bank account with $£ 306$ and credited V. Bennett's account with $£ 306$, we must now reverse that entry.
(5) The original entry would have been a debit to bank account of $£ 375$ - i.e. $£ 15$ more than the correct figure of $£ 360$.
(c) Refer to Section 6.3. Bank statement is personal account of business in bank's books.

### 6.6 Further exercises

## Question 6.1

(a) Do you consider the cash book to be a division of the ledger, a book of original entry, or both? Give reasons for your answer.
(b) A 'Bank Reconciliation Statement' is part of the double-entry system compiled to check the accuracy of the bank statement and the correctness of the firm's own bank records. Comment on this statement.
(c) On 31 December 1982 the balance of cash at bank shown in a firm's cash book was £976.44. A bank statement up to and including 31 December 1982 showed the following:

|  | £ |
| :---: | :---: |
| Bank charges debited to the account | 7.94 |
| Credit transfer payments made by customers for which no other notification |  |
| had been received | 247.00 |
| Insurance payment made by standing order not entered in the cash book | 25.00 |
| There was no mention in the statement of cheques entered in the cash book and paid to suppliers | 219.18 |

Make the necessary adjustments to the balance shown in the cash book to ascertain the correct amount of cash available - i.e. the amount which should be shown as 'Cash in bank' on a balance sheet dated 31 December 1982.

## Answer 6.1

(a) Refer to Section 7.2.
(b) Incorrect: refer to Section 6.1.
(c) $£ 976.44$ add $£ 247.00$ less $£ 7.94$ less $£ 25.00$ - i.e. $£ 1,190.50$.

## Question 6.2

The cash book kept by Martin Barron showed that he had a balance of cash at the bank at 30 December 1983 of $£ 15,429$. On the same date his bank statement showed a balance in hand of $£ 17,520$.

On investigation you discover:
(a) a cheque drawn in payment of an account of $£ 571$ had been entered in the cash book as $£ 751$ and, at 30 December 1983, had not been presented to the bank for payment;
(b) further cheques drawn, amounting to $£ 1,732$, had not been presented to the bank for payment at 30 December 1983;
(c) the bank had made a direct debit of $£ 125$ on 29 December 1983; there was no entry in the cash book for this item;
(d) bank charges of $£ 86$ were charged in the bank statement on 20 December 1983, but no entry had been made in the cash book;
(e) cheques received on 30 December 1983, amounting to $£ 181$, had been entered in the cash book and banked immediately, but no entry appeared in the bank statement.

You are asked:
(i) to prepare a statement showing the correct balance in the cash book at 30 December, 1983;
(ii) to prepare a reconciliation statement, reconciling the bank statement balance with the corrected cash book balance at 30 December, 1983.
(SUJB)

## Answer 6.2

|  |  |  | £ |
| :---: | :---: | :---: | :---: |
| (i) | Balance as per cash book |  | 15,429 |
|  | add (a) överstatement of payment (£751-£571) |  | 180 |
|  |  |  | 15,609 |
|  | less (c) direct debit not entered in cash book | 125 |  |
|  | (d) bank charges not entered in cash book | 86 | 211 |
|  | Corrected cash book balance |  | £15,398 |
| (ii) | Balance per bank statement |  | 17,520 |
|  | less cheques not yet presented ( $£ 1,732+£ 571$ ) |  | 2,303 |
|  |  |  | 15,217 |
|  | add cheques not yet credited |  | 181 |
|  |  |  | £15,398 |

## Question 6.3

Paul Summerbee reconciled his cash book with the bank statement every month. His bank reconciliation statement for the month of November was as follows:

Balance as per statement 30.11.81.
Add unpresented cheques:
£4,500.00 overdrawn

| J. Soap | 54.00 |  |
| :--- | ---: | ---: |
| A. Smith | 110.00 |  |
| M. Pym | 26.00 |  |
|  |  |  |
| Balance as per cash book (CR) |  | $£ 4,690.00$ |

The following is the extract of the bank column in the cash book for the month of December 1981, and a copy of the bank statement for the same month.


| 5 | Regal Insurance Co. - Standing order | 65.00 |  |
| ---: | :--- | ---: | ---: |
|  | Ralfs Computers |  | $3,420.00$ |
| $8,621.00 \mathrm{CR}$ |  |  |  |
| 8 | Perkins Ltd. | 46.00 |  |
| 19 | Pyper Finance | 110.00 |  |
|  | Bank charges | 66.00 |  |
| 22 | Mullen Printers |  | $3,465.00 \mathrm{CR}$ |
| 23 | Carus Ltd. - Credit transfer |  | 221.00 |
| 2959.00 CR |  |  |  |
| 29 | Higson Ltd. |  | 540.00 |
|  | $3,985.00 \mathrm{CR}$ |  |  |
|  | Bank commission | 45.525 .00 CR |  |
|  | L. Cleary \& Sons - refer to drawer | $4,180.00$ |  |
|  |  | $4,480.00 \mathrm{CR}$ |  |
|  |  |  | 300.00 CR |

From the above information you are required to prepare:
(a) the corrected cash book balance as at 31 December 1981;
(b) a bank reconciliation statement as at 31 December 1981, using the amended cash book balance.

## Answer 6.3

| (a) Balance per cash book |  | $\begin{gathered} £ \\ 4,248.00 \end{gathered}$ |
| :---: | :---: | :---: |
| add received from Carus Ltd (23 Dec.) |  | 365.00 |
|  |  | 4,613.00 |
| less |  |  |
| standing order Regal Insurance (5 Dec.) | 65.00 |  |
| bank charges (19 Dec.) | 66.00 |  |
| returned cheque | 4,180.00 |  |
| bank commission (29 Dec.) | 45.00 | 4,356.00 |
| Corrected cash book balance |  | £257.00 |
| (b) Bank balance per statement |  | $\begin{gathered} \mathfrak{£} \\ 300.00 \end{gathered}$ |
| add cheque not yet credited Moore and Co. (29 Dec.) |  | 399.00 |
|  |  | £699.00 |
| less cheques not yet presented |  |  |
| Haynes \& Co | 92.00 |  |
| Hodgson Building | 249.00 |  |
| Pennington Printers | 75.00 |  |
| M. Pym | 26.00 | 442.00 |
| Balance per corrected cash book |  | £257.00 |

## 7 Day Books and VAT

### 7.1 Introduction

So far we have emphasised the importance of the double-entry system of bookkeeping. For each transaction which we have looked at we have explained the double entry involved - that is, the debit to one account and the credit to another. This is an important principle, which has to be understood. However, the number of transactions quickly becomes very large in even the smallest of businesses and to record every transaction as a double entry would be unwieldy. In the life of a business there are many transactions of a similar nature - i.e. there will be many credit sale transactions. The purpose of day books is to summarise all of these transactions of a like nature and to make one entry in the ledger for the sum total of all those transactions. These books are also called books of prime entry or books of original entry. They are not part of the double-entry system. We shall now examine these various books.

### 7.2 Cash book

We mentioned in Chapter 5 that the cash book was a combination of the bank account and the cash account. It is, however, also a day book in that it records daily transactions and is the book of original entry. Unlike other day books, the cash book may be part of the double-entry system, or there may be a separate cash account recording totals in the ledger, in which case the cash book is not part of the double-entry system.

In examination questions, unless they state anything to the contrary, you should assume that cash book means a book of original entry which also acts as part of the double-entry system. Chapter 5 illustrates this type of system.

### 7.3 Petty-cash book

The uses and advantages of the petty-cash book were discussed in Chapter 5. As with the main cash book, it may or may not be part of the double-entry system.

### 7.4 Purchases day book

The purchases book records details of all credit purchases of goods for resale. The details are obtained from suppliers' invoices. An example of the purchases day book, or purchases journal, as it may also be called, is shown below.

| Date | Supplier | Invoice No. | Goods value | VAT | Invoice value |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | $£$ | $£$ | $£$ |  |
| Oct. 6 Jones \& Co. | 1,234 | 100 | 15 | 115 |  |
| Oct. 7 Express Co. | 1,235 | 1,500 | 225 | 1,725 |  |

Before we look at the next step we should clarify two items.
(i) Goods value is the amount charged by the supplier before adding VAT (see below) but after deducting any trade discounts. Do not confuse these with cash discounts, referred to in Chapter 5. Trade discounts are allowed to trade customers irrespective of how long they take to pay. Cash discounts are offered for prompt payment.
(ii) Value added tax is charged by suppliers for most types of goods; we shall examine this subject in more detail in Section 7.9.

At the end of each month or such other length of time as the business decides, the latter three columns will be totalled and an entry posted to the ledger as follows:

Dr. Purchases account (with total goods value)
Dr. VAT account (with total VAT charged)
Cr. Creditors account (with total invoice values)

### 7.5 Purchases returns day book

We record in the purchases returns day book details from credit notes given to us by suppliers in respect of goods which we have returned to them. The details recorded will be similar to those in the purchases day book. At the end of the period the book will be totalled and an entry made in the ledger as follows:

```
Dr. Creditors account (with total value of credit notes)
    Cr. VAT account (with VAT on credit notes)
    Cr. Purchases returns account (with goods value as shown on credit notes)
```


### 7.6 Sales day book

The sales day book records details of all credit sales by the business. The details are obtained from copy sales invoices. An example of the sales day book, or sales journal, as it is also called, is shown below.

| Date | Customer | Invoice No. | Goods value | VAT | Invoice value |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  |  | $£$ | $£$ | $£$ |
| Oct. 6 | Greentrees Ltd | 1,274 | 600 | 90 | 690 |
| Oct. 7 | Bluestars Ltd | 1,275 | 160 | 24 | 184 |

Again we clarify two points before continuing.
(i) Goods value is the amount which we charge our customers before adding VAT (see below) but after deducting trade discounts.
(ii) When we invoice our customers, we will have to charge VAT for most types of goods.

At the end of the period the latter three columns are totalled and an entry made in the ledger as follows:

Dr. Debtors account (with total invoice value)
Cr. VAT account (with VAT charged to customers)
Cr. Sales account (with goods value)

### 7.7 Sales returns day book

We record in the sales returns day book details of all credit notes which we have sent to customers for goods which they have returned to us. The details will be similar to those recorded in the sales day book. At the end of the period the book will be totalled and an entry made in the ledger as follows:

Dr. Sales returns account (with goods value)
Dr. VAT account (with VAT on credit notes)
Cr. Debtors account (with total credit note value)

### 7.8 The journal

We should record in the journal all transactions which are not entered into one of the other day books - e.g. purchase on credit of fixed assets; transfers between accounts; correction of errors. We keep the journal in order to have some control over entries in the ledger and also to make it easier to locate any differences which we may discover as a result of taking out a trial balance.

The form of the journal to record the purchase of a motor van on credit from Greenford Autos might be as follows:

| Dr. | Cr. |
| :--- | :--- |
| £ | $£$ |

March 30 Motor vehicles
6,600
Greenford Autos
6,600
Being purchase of van on credit from Greenford Autos
The narration is important for audit and control purposes, and should indicate the reason for the entry and, where appropriate, the authority for it.

### 7.9 Value added tax

We have already seen that when a business purchases goods and incurs VAT, the VAT amount is debited to a VAT account. When a business charges VAT, this is credited to the VAT account. At the end of each quarter the business sends to H.M. Customs and Excise a remittance for the difference btween VAT charged to customers and the VAT the business has itself suffered on purchases. The amount of this remittance is debited to the VAT account and the bank account is credited. In this way the VAT account acts as a personal account for H.M. Customs and Excise, and any balance on the account at the balance sheet date is shown as a debtor or creditor on the balance sheet, as appropriate.

### 7.10 Worked examples

## Example 7.1

You are required to copy the following table on your answer paper and then to complete the columns. The first item has been completed as an example.

|  | Details <br> obtained <br> from | Account <br> debited | Account <br> credited |
| :--- | :--- | :--- | ---: |
| Book of original entry | Invoices <br> (a) Purchases day book | Purchases | Supplier's |
| (b) Sales day book |  | $[2$ marks $]$ |  |
| (c) Purchases returns day book |  | $[21 / 2$ marks $]$ |  |
| (d) Cash book ('discount received' column) | $[21 / 2$ marks $]$ |  |  |
| (e) Cash book (sale of the firm's motor van |  | $[21 / 2$ marks $]$ |  |
| (f) General journal (purchase of fixtures) |  | $[21 / 2$ marks $]$ |  |

Solution 7.1

| Book of original entry | Details obtained from | Account <br> debited | Account <br> credited |
| :--- | :--- | :--- | :--- |
| (a) | Invoices received | Purchases | Supplier's |
| (b) | Copy sales invoices | Customer's | Sales |
| (c) | Credit notes received | Supplier's | Purchases returns |
| (d) | Supplier's statement | Supplier's | Discount received |
| (e) | Credit note received | Bank | Motor van |
| (f) | Invoice received | Fixtures | Supplier's |

## Example 7.2

R. Elkins made the following credit purchases on 15 May 1983:

Whitfield Manufacturing Company Ltd
Stock priced at $£ 200$ net but subject to 15 per cent VAT
Marketing Company Ltd
Stock at list price $£ 400$ subject to a trade discount of 25 per cent and VAT at 15 per cent
Messrs Rook and Crow Ltd
Stock at $£ 300$ list price subject to a trade discount of 20 per cent and VAT at 15 per cent Messrs Rook and Crow Ltd allow a further cash discount of 5 per cent for settlement within 30 days
(a) Set out a purchase day book showing:
(i) the amount to be credited to the personal account of each supplier;
(ii) the amount to be debited to the purchases account;
(iii) the amount to be debited to the VAT account.
(b) The VAT account has been debited with a certain sum of money.
(i) Does this indicate the government is a debtor to R. Elkins?
(ii) How, under normal trading practice, will R. Elkins recover the amounts paid for VAT to suppliers?
(L)

## Solution 7.2

(a)

Purchase day book

| Date |  | Goods value (ii) | VAT (iii) | Invoice value (i) |
| :--- | :--- | :---: | :---: | :---: |
|  |  | $£$ | $£$ | $£$ |
| May 15 | Whitfield Manufacturing Co. Ltd | 200.00 | 30.00 | 230.00 |
| May 15 | Marketing Co. Ltd | 300.00 | 45.00 | 345.00 |
| May 15 | Rook and Crow Ltd | 240.00 | 36.00 | 276.00 |

(i) Credit to supplier's personal account.
(ii) Debit to purchases account.
(iii) Debit to VAT account.
(b)
(i) H.M. Customs and Excise will be a debtor for the amount in (a) (iii).
(ii) R. Elkins will normally recover the amount in (a) (iii) by deducting it from VAT he has charged his customers and collected on behalf of H.M. Customs and Excise.

### 7.11 Further exercise

## Question 7.1

W. Watson is the owner of a small retail outlet. He keeps a full set of accounts, including books of original entry. A selection of his transactions during 1983 is given below.
(1) Purchased goods for resale on credit from D. Crompton $£ 863$.
(2) Cash sales $£ 462$ (cost price of these goods was $£ 300$ ).
(3) Received $£ 500$ from B. Richards (a debtor) on account; paid the full amount into bank.
(4) Bought a motor van, for use in the business, $\mathfrak{£ 2 , 3 5 0 \text { on credit from A. Ramsay Motors }}$ Ltd. The full debt is repayable before the end of the current accounting period.
(5) Paid the window cleaner, out of petty cash, $£ 5$ for cleaning the office windows.

## REQUIRED

(a) Completion of the following table for each transaction [(2)-(5) above], naming the book of original entry and the immediate or eventual debit and credit entries. The first one has been done for you as an example.
[6 marks]
(a) (1)
Book of Original Entry
Debit

## Credit

D. Crompton $£ 863$

Note: State the amount of money involved in each debit and credit entry.

## REQUIRED

(b) Completion of the following table for each transaction [(2)-(5) above], indicating how each transaction would affect gross profit, net profit and working capital. Again, the first one has been done for you, as an example.
[10 marks]

Gross Profit
(b) (1) Purchases $+£ 863$ but
 no effect on gross profit.

Net Profit Gross profit no effect: net profit no effect.
Working Capital
Creditors $+£ 863$;
therefore current
liabilities $+£ 863$.
Stock $+£ 863 ;$
therefore current
assets $+£ 863$. No
effect on working
capital
(AEB)

## Answer 7.1

(a)
(2) Cash book
(3) Cash book
(4) Journal
(5) Petty-cash book
Cash
Bank
Motor van
Window cleaning
Sales
B. Richards
A. Ramsay Motors Ltd
Petty cash
(b)

| (2) | Sales $+£ 462$ but <br> stock - $£ 300$ : <br> therefore $£ 162$ <br> increase in <br> gross profit | £162 increase, as for gross profit | Cash $+£ 462$ but stock £300; therefore £162 increase in current assets and therefore £162 increase in working capital |
| :---: | :---: | :---: | :---: |
| (3) | No effect | No effect | Bank $+£ 500$ but debtors - £500; therefore no effect on current assets or working capital |
| (4) | No effect | No effect | Creditors $+£ 2,350$; therefore current liabilities + £2,350 and working capital $-£ 2,350$ |
| (5) | No effect | Expenses + $£ 5$; therefore net profit - £5 | Petty cash - $£ 5$; therefore current assets - $£ 5$ and working capital - £5 |

## 8 Errors and Suspense Accounts

### 8.1 Errors not affecting the trial balance

In Chapter 2 we saw that the purpose of preparing the trial balance was to check the arithmetical accuracy of the books. We also noted that some errors would not be revealed by extracting a trial balance, and we shall now look at those types of error in greater detail.

Errors of omission are errors resulting from the complete failure to enter a transaction in the books.

Errors of commission are errors resulting from the posting of a transaction to the correct type of account but the wrong account: for example, debiting the account of J. Fenner with $£ 100$ paid to D. Fenner.

Errors of principle are errors that occur where we debit the wrong type of account: for example, debiting $£ 100$ for repairs to buildings to the buildings account (asset) instead of the repairs account (expense).

Compensating errors occur where we make errors which compensate: for example, debiting $£ 150$ to the salaries account when the correct figure is $£ 200$ and crediting $£ 350$ to the sales account when the correct figure is $£ 400$.

Reversal of entries occurs where we debit the account which should be credited and credit the account which should be debited.

Errors of original entry occur where the same wrong amount is posted to the debit of one account and the credit of another. Although the accounts to which we enter are correct, the amount is incorrect.

### 8.2 Correction of errors

## (a) Errors of Omission

Errors of omission are corrected by posting the original entry as it should have been posted. For example, we omit to post a payment of $£ 200$ through the bank for wages: the correction would be

| Dr. | Cr. |
| :--- | :--- |
| $£$ | $£$ |
| 200 |  |
|  | 200 |

## (b) Errors of Commission

In order to correct errors of commission, we must cancel out the misposting by an opposite entry to the original and post the item to the correct account. For example, we pay $£ 100$ to D. Fenner and debit the account of J. Fenner.

|  | Dr. | Cr. |
| :--- | :--- | :--- |
|  | $£$ | $£$ |
| D. Fenner | 100 |  |
| J. Fenner |  | 100 |

(c) Errors of Principle

As with errors of commission, we must cancel out the original entry and post the amount to the correct account. For example, we debit buildings account with $£ 100$ paid in respect of repairs to buildings.

|  | Dr. | Cr. |
| :--- | :--- | :--- |
|  | $£$ | $£$ |
| Repairs to buildings account <br> Buildings account | 100 |  |
|  |  | 100 |

## (d) Compensating Errors

We must analyse whether we have debited or credited the account with too much or too little. We then debit the account if either we have previously debited too little or credited too much. We credit the account if either we have originally credited too little or debited too much. For example, to correct an error where we have debited $£ 150$ to the salaries account instead of $£ 200$ and credited $£ 350$ to the sales account instead of $£ 400$, the correcting entry would be

Wages account

| Dr. | Cr. |
| :--- | :--- |
| $£$ | $£$ |
| 50 |  |
|  | 50 |

(e) Reversal of Entries

In this case we must reverse our original entry to cancel out that entry and post the transaction as it should have been posted in the first instance. For example, we pay postage of $£ 100$ and we debit bank account and credit postage account when, of course, the entry should be the reverse:

|  | Dr. | Cr. |
| :--- | :--- | :--- |
| £ | $£$ |  |
| Postage account | 100 |  |
| Bank account <br> and |  | 100 |
| Postage account <br> Bank account | 100 |  |

The first entry cancels out and reverses the incorrect entry and the second entry records the transaction as it should have been entered in the books originally.

## (f) Errors of Original Entry

If we have posted an amount which is less than the correct amount, we make an additional entry for the amount of the difference, posting to the same accounts as the original entry. If we have posted an amount which is greater than the correct amount, we make an entry for the amount of the difference, posting to the same accounts as the original entry but in reverse - that is, debit where we credited and credit where we debited. This will have the effect of reducing the value of the original entry to its correct amount. For example, we receive $£ 160$ from P. Dawson but we debit the bank account with $£ 180$ and credit P. Dawson with $£ 180$. The correcting entry will be

|  | Dr. | Cr. |
| :--- | :--- | :--- |
|  | $£$ | $£$ |
| P. Dawson | 20 |  |
| Bank account |  | 20 |

### 8.3 Suspense accounts

Suspense accounts are used where a difference arises when we extract our trial balance and we are unable to locate the difference. Of course, every effort should be made to locate the difference and correct the errors, the suspense account being used only as a last resort. Where we need to use a suspense account, we open the account with a balance representing the difference between the two sides of the trial balance. If debit balances are greater than credit balances, then the account is opened with a credit balance, and if credit balances are greater than debit balances, then the suspense account will be opened with a debit balance.

The balance will remain on the suspense account until the error or errors are located, possibly after the final accounts have been prepared. When the errors are discovered, we must correct them, using the suspense account. If we have debited too little to an account or credited too much, then we must debit that account and credit the suspense account. If we have credited too little to an account or debited too much, then we must credit that account and debit the suspense account.

### 8.4 Worked examples

## Example 8.1

P. Wedge is the owner of a small retail outlet dealing in the purchase and sale of golf equipment. On 1 December 1984, the following balances appear in his books:

|  |  |
| :--- | ---: |
|  | 620 |
| fittings | 3,200 |
| stock in trade | 2,500 |
| motor van | 9,200 |
| sales | 69 |
| returns inward | 2,600 |
| cash at bank | 180 |
| cash in hand | 3,500 |
| purchases | 30 |
| drawings | 2,190 |
| trade creditors | 1,479 |

A trial balance prepared at 1 December 1984, from the above figures, was incorrect owing to:
(1) goods, to the value of $£ 85$ (cost price), withdrawn for the personal use of the owner incorrectly credited to the drawings account (the other part of the double entry was correct);
(2) the last physical stock count omitted goods valued at $£ 800$;
(3) the complete omission of bank charges $£ 9$, levied towards the end of November.

## REQUIRED

(a) A corrected trial balance as at 1 December 1984 incorporating the adjustments made necessary by items (1-3) above. Show any such adjustment in brackets next to the relevant item in the trial balance.
[9 marks]
During the month of December, some of Wedge's transactions were:
(i) purchased goods from a supplier by cheque $£ 1,500$;
(ii) purchased goods for resale on credit, $£ 2,300$ from P. Green;
(iii) sent a cheque $£ 1,900$ to a creditor, S. Iron, for an amount on which $5 \%$ cash discount was received;
(iv) sold the motor van (book value $£ 2,000$ ) for $£ 1,800$ cash;
(v) returned damaged goods, previously bought on credit, to S. Bunker $£ 93$.

## REQUIRED

(b) A statement showing which account would be debited and which account would be credited for each of the transactions numbered (i-v) above. The amount involved in each debit and credit entry must be stated and you are advised that some of the transactions may require more than one double entry.
[4 marks]
(c) Computation of the amount Wedge owed his trade creditors at 31 December 1984. Your answer may be in account form or otherwise but you are advised to show all workings.
[3 marks]
(d) An explanation of the main purpose of a trial balance.
[1 mark]
(e) The main reason why Wedge's creditors may offer cash discount terms.

Solution 8.1
(a)
P. Wedge Trial Balance as 1 December 1984

|  | As given |  | Adjustments |  | Corrected |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dr. | $\mathrm{Cr} .$ $\mathrm{Cr} .$ | Dr. $\mathfrak{£}$ | $\mathrm{Cr} .$ | Dr. <br> f | $\mathrm{Cr} .$ |
| Fittings | 620 |  |  |  | 620 |  |
| Stock | 3,200 |  |  |  | 3,200 |  |
| Motor van | 2,500 |  |  |  | 2,500 |  |
| Sales |  | 9,200 |  |  |  | 9,200 |
| Returns inward | 69 |  |  |  | 69 |  |
| Cash at bank | 2,600 |  |  | 9(3) | 2,591 |  |
| Cash in hand | 180 |  |  |  | 180 |  |
| Purchases | 3,500 |  |  |  | 3,500 |  |
| Drawings | 30 |  | 85(1) |  | 200 |  |
|  |  |  | 85(1) |  |  |  |
| Trade creditors |  | 2,190 |  |  |  | 2,190 |
| Capital |  | 1,479 |  |  |  | 1,479 |
| General expenses |  |  | 9(3) |  | 9 |  |
|  | 12,699 | 12,869 |  |  | 12,869 | 12,869 |

## NOTES

(1) The correct entry for taking of goods for personal use is

Dr. Drawings Cr. Purchases

The second part of the entry was done correctly, but an adjustment is needed to reverse the original credit to drawings and then to record the transaction correctly.
(2) No adjustment required since it is the closing stock which will be affected. The stock figure appearing in the trial balance will be the opening stock figure.
(3) Dr. General expenses Cr. Bank
(b)

|  | £ | £ |
| :---: | :---: | :---: |
| (i) Dr. Purchases | 1,500 |  |
| Cr. Cash at bank |  | 1,500 |
| (ii) Dr. Purchases | 2,300 |  |
| Cr. P. Green |  | 2,300 |
| (iii) Dr. S. Iron | 1,900 |  |
| Cr. Cash at bank |  | 1,900 |
| Dr. S. Iron | 100 |  |
| Cr. Discounts received |  | 100 |
| (iv) Dr. Cash in hand | 1,800 |  |
| Cr. Motor van |  | 1,800 |
| Dr. Loss on disposal | 200 |  |
| Cr. Motor va |  | 20 |

(Note: This topic is explained in Chapter 11.)
(v) Dr. S. Bunker 93

Cr. Returns Outward
93
(c)

Creditors
Dec. 31 Cash at bank (Iron) 1,900 Dec. 1 Balance b/d 2,190
Dec. 31 Discounts received (Iron) 100 Dec. 31 Purchases (Green) 2,300
Dec. 31 Returns outward (Bunker) 93
Dec. 31 Balance c/d 2,397
4,490
4,490
(d) Refer to Section 2.2.
(e) Refer to Section 5.2.

## Example 8.2

I. Buchanan prepared a trial balance on 31 May 1984, which showed that the total of the credit balances was $£ 350$ more than the total of the debit balances. A suspense account was opened with this figure to make the books balance. Later investigations revealed the following errors in his books:
(i) a purchase of $£ 350$ was entered wrongly as $£ 200$ in the account of the supplier, P. Madoc;
(ii) the purchase by cheque of a piece of office equipment for use in the office, at a cost of $£ 600$, had been posted to the purchases account;
(iii) the total of the sales returns book, amounting to $£ 410$, had not been posted to the ledger;
(iv) a debit balance on J. Gower’s account of $£ 540$ was brought down as $£ 450$ and this latter figure was included in the debtors' total entered in the trial balance.

You are required to:
(a) prepare the journal entries, including narrations, necessary to correct the above errors;
[10 marks]
(b) write up the suspense account.
[5 marks]

## Solution 8.2

(a)

| (i) | Dr. | Cr. |
| :--- | :--- | :--- |
|  | $£$ | $£$ |
| Suspense account | 150 |  |
| P. Madoc |  | 150 |

To credit P. Madoc with $£ 150$, being difference between $£ 200$ originally entered and correct figure of $£ 350$
(ii) Office equipment account 600
Purchases account
600
To transfer cost of office furniture originally entered in purchases account
(iii) Sales returns account Suspense account

Being value of sales returns as per sales returns book not entered in ledger

90
Suspense account

90

To debit J. Gower with difference on balance brought down (£540 less £450)
(b)

Suspense account

|  | $£$ |  | $£$ |
| :--- | :--- | :--- | ---: |
| Balance | $\mathbf{£}$ | Sales returns (iii) | 410 |
| P. Madoc (i) | $\underline{150}$ | J. Gower (iv) | $\underline{90}$ |
|  | $\underline{500}$ |  | $\underline{500}$ |

## Example 8.3

R. Blackett's trial balance, extracted at 30 April 1982, failed to agree. In early May the following errors were discovered.

1. The total of the returns outward book, $£ 124$, had not been posted to the ledger.
2. An invoice received from W. Dawson, £100, had been mislaid. Entries for this transaction had, therefore, not been made.
3. A payment for repairs to the motor van, $£ 36$, had been entered in the vehicle repairs account as $£ 30$.
4. When balancing the account of R. Race in the ledger, the debit balance had been brought down in error as $£ 26$, instead of $£ 62$.

## REQUIRED

(a) (i) Journal entries, complete with suitable narrations, to correct each of the above errors.
[6 marks]
(ii) A suspense account indicating the nature and extent of the original difference in the books.
[4 marks]
(iii) The incorrect total of the trial balance credit column, given that the incorrect total of the debit column was $£ 10,000$.
[2 marks]

## REQUIRED

(b) Four types of errors which do not affect the agreement of the trial balance, giving an example of each.
[8 marks]
(AEB)

## Solution 8.3

(a)
(i) 1 .
Dr. Cr.
£ £
Suspense account
124
Returns outward account

Being value of returns outwards as per returns outwards book not entered in ledger
2.

Purchases account 100
W. Dawson 100

Being value of purchases from W. Dawson not posted to ledger Note: This assumes invoice is for purchases of goods for resale.
3.

| Vehicle repairs | 6 | 6 |
| :--- | :--- | :--- |
| Suspense account |  | 6 |

Being difference between cost of motor repairs $£ 36$ and amount actually posted $£ 30$
4.

| R. Race | 36 |  |
| :--- | :--- | :--- |
| Suspense account |  | 36 |

Being error in balance brought down on R. Race’s account $£ 62$ instead of $£ 26$
(ii)

Suspense account

|  | $£$ |  |  |
| :--- | :--- | :--- | ---: |
| Returns outwards | 124 | Balance (see note) |  |
|  |  | Vehicle repairs | 6 |
|  |  | R. Race | 36 |
|  | $\boxed{124}$ |  | $\overline{124}$ |

Note: This is a balancing figure and therefore assumes that all of the differences have been located.
(iii) Incorrect total of debit column 10,000

Therefore credit column $£ 82$ less - i.e. $£ 9,918$.
(b)

Refer to Section 8.1; any four from six types described.

### 8.5 Further exercises

## Question 8.1

Marks
(a) State whether each of the following is TRUE or FALSE. In EACH CASE give a reason for your answer.
(i) When you receive your monthly Bank Statement its closing balance should always be the same as the closing balance shown in the Bank Column of your Cash Book.
(ii) The purchase of a Fixed Asset should always be recorded on the DEBIT side of the Profit and Loss account.
(iii) The Bank Account Column in a Cash Book can never have a CREDIT balance.
(iv) Discount Received is transferred at the end of the accounting period to the CREDIT side of the Profit and Loss account
(b) What is the purpose of preparing a Trial Balance?
(c) Explain THREE DISTINCT types of error NOT disclosed by a Trial Balance. Give an example with each explanation.

## Answer 8.1

(a) (i) False (ii) False (iii) False (iv) True
(b) Refer to Section 8.1.
(c) Refer to Section 8.1.

## Question 8.2

The trial balance extracted by T. James and Sons, wholesalers, on 30 April 1983 failed to agree and the difference was entered in a Suspense Account. When the books of account were checked later, it was found that the difference had been caused by these errors:
(a) A payment of $£ 470.00$ for rates had been entered correctly in the Cash Book but was posted to Rates Account (debit side) as $£ 400.70$.
(b) In the F. Mason Account, there were debit entries totalling $£ 1,087.28$ and credit entries totalling $£ 1,208.08$. The balance was carried down on 30 April 1983 as $£ 110.80$ and the amount entered in the trial balance for this account was $£ 110.80$ (credit column), as shown in the account.
(c) The total of the Discount Allowed column in the Cash Book had been over-cast by $£ 9$.
(d) An entry of $£ 87.50$ in the Sales Day Book for goods sold to N. Dailey had not been posted to the N. Dailey Account in the ledger.
(e) The total of Sales Returns Book, $£ 225.90$, had not been posted to the ledger.

You are asked:
(1) to prepare journal entries for the correction of these errors;
(2) to make all the necessary entries in the Suspense Account, including the initial entry for the difference in the books.

## Answer 8.2

(1) (a) Dr. Rates

$$
\text { Cr. Suspense } \quad £ 69.30
$$

(b) Dr. Suspense

Cr. F. Mason
£10.00
(c) Dr. Suspense

Cr. Discounts allowed £9.00
(d) Dr. N. Dailey

Cr. Suspense £87.50
(e) Dr. Sales returns

Cr. Suspense
£225.90
(2) Suspense account opening balance $£ 363.70$ debit

## 9 Bad Debts and Bad Debts Provision

Examination questions involving bad debts can be centred around the accounting entries to record the writing off of bad debts and the creation, increase and decrease of bad debts provisions. Alternatively, their treatment can be examined as part of a larger question such as a final accounts question. If you can master the principles necessary to answer the first type of question, you should have no difficulty with the second type of question.

### 9.1 Writing off bad debts

When a debtor is unable to pay his debts and the amount due from him is considered to be irrecoverable, we would not want to leave the balance on his account. To do so would be to carry forward a balance which in reality has no value. The accounting entry is therefore

Dr. Bad debts (an expense account which will be transferred to the profit and loss account)
Cr. A debtor (to reduce/eliminate the amount owing)
If any monies are subsequently received from the debtor, the entry will be
Dr. Cash or Bank
Cr. Bad debts (to reduce the charge to the profit and loss account)

### 9.2 Making a provision for future bad debts

If we consider that there is a possibility of future bad debts, we do not want to reduce the debtors account, since there is still a chance of recovery of the debt. We do however wish to make a charge against profits in a current accounting period against future bad debts and reduce the value of debtors in our balance sheet. The accounting entries are therefore

Dr. Profit and loss account (which will decrease profits)
Cr. Bad debts provision account (the balance on this account being carried forward in the books of account and shown as a deduction from debtors on the balance sheet - thus reducing the value of the debtors)

It is always preferable to maintain a separate bad debts provision account as above. However, it may be that the examination question will require only a bad debts account, in which case the method is identical, as shown in the second worked example.

Once a provision is set up, future bad debts may be either written off direct to a bad debts account or debited to the provision account.

### 9.3 Adjusting the provision

## (a) Accounting Entries

In future periods we may consider our provision to be too large or too small. To increase the provision, we make an accounting entry as in Section 9.2 for the amount of the increase. Conversely, to reduce the provision, we must reverse that entry.

## (b) Final Accounts

Faced with a trial balance to which adjustments have to be made from the above, we can make the following rules:
(i) Bad debts - if this appears in the trial balance, write the amount off as a charge in the profit and loss account.
(ii) Bad debts provision - this amount must be deducted from debtors in the balance sheet. If the question requires an adjustment to the provision we must treat any increase as a charge in the profit and loss account, or treat any decrease as a credit in the profit and loss account and deduct the new provision from debtors in the balance sheet.

### 9.4 Worked examples

## Example 9.1

R. Browling keeps his books on the financial year January to December. The figures below show his debtors at the end of the years indicated.

|  |  | $£$ |
| :---: | :---: | :---: |
| January to December | 1984 | 8,000 |
| 1985 | 6,000 |  |
| 1986 | 9,000 |  |
|  | 1987 | 9,000 |

He decided to create a provision for doubtful debts of 5 per cent of debtors in December 1984 and to maintain it at that percentage. Write up the provision for doubtful debts account for the years ended 31 December 1984 to December 1987.

Solution 9.1
Provision for doubtful debts

| 31 Dec. 1984 balance c/d | £ | 31 Dec. 1984 Profit and loss (1) | £ |
| :---: | :---: | :---: | :---: |
|  | 400 |  | 400 |
|  | 400 |  | 400 |
| 31 Dec. 1985 Profit and loss (2) | 100 | 1 Jan. 1985 balance b/d | 400 |
| 31 Dec. 1985 balance c/d | 300 |  |  |
|  | 400 |  | 400 |
| 31 Dec. 1986 balance c/d | 450 | 1 Jan. 1986 balance b/d | 300 |
|  |  | 31 Jan. 1986 Profit and loss (3) | 150 |
|  | 450 |  | 450 |
| 31 Dec. 1987 balance c/d | 450 | 1 Jan. 1987 balance b/d | 450 |
|  | 450 |  | 450 |

NOTES

| (1) 5 per cent of $£ 8,000$ | $=\underline{£ 400}$ |
| :---: | :---: |
| (2) 5 per cent of $£ 6,000$ | = $£ 300$ |
| less provision $\mathrm{b} / \mathrm{f}$ | = $£ 400$ |
| Increase/(decrease) in provision | f(100) |
| (3) 5 per cent of $£ 9,000$ | = £450 |
| less provision $\mathrm{b} / \mathrm{f}$ | £300 |
| Increase/(decrease) in provision | £150 |

Note: No adjustment is required to the provision in 1987, since the level of debtors is unchanged from that in 1986.

## Example 9.2

The account shown below was in the ledger of J. Thompson at the end of his accounting year, 31 December 1982, before the final accounts for that year were prepared.

Dr.
Bad Debts Account Cr.

|  |  | $£$ |  |  |  |
| :--- | :--- | ---: | :--- | :--- | ---: |
|  |  |  |  |  |  |
| June 5 | J. Hanson | 218.40 | January 1 | Provision b/d | 170.00 |
| July 22 | F. Simpson | 112.50 | December 15 | Cheque (J. Hanson) | 21.84 |
| November 6 | T. Morrison | 96.20 |  |  |  |

You are asked:
(a) to prepare the account as it should appear after the preparation of final accounts for the year ended 31 December 1982. Sundry trade debtors at 31 December 1982 totalled $£ 4,100$ and the closing provision required is $5 \%$ of this amount;
(OLE)

Solution 9.2
Bad debts account

|  |  |  |  |  |  |
| :--- | :--- | ---: | :--- | :--- | ---: |
| June 5 | J. Hanson |  | Jan. 1 | Provision b/d | 170.00 |
| July 22 | F. Simpson |  | Dec. 15 | Cheque (J. Hanson) | 21.84 |
| Nov. 6 | T. Morrison |  | Dec. 31 | Profit and loss (2) | 440.26 |
| Dec. 31 | Provision c/d (1) | 205.00 |  |  |  |
|  |  | $\underline{£ 632.10}$ |  |  | $\underline{£ 632.10}$ |

NOTES
(1) The year end provision is required to be 5 per cent of $£ 4,100-$ i.e. $£ 205$.
(2) The figure of $£ 440.26$ is the balancing figure required to bring the bad debts provision to the amount calculated in (1) above.

### 9.5 Further exercise

## Question 9.1

D. Davy had an exporting business which adjusted its provision for doubtful debts at the end of the year at a given percentage of the total sundry debtors. The percentage varied each year, depending on the national and international economic situation. Irrecoverable debts were written off during the year to a bad debts account, as and when they were known.

|  | Bad debts written <br> off during year to <br> bad debts account | Total debtors <br> at year end | Rate of percentage <br> for provision of <br> doubtful debts |
| :--- | :---: | :--- | :---: |
| £ | £ |  |  |
| 31 December 1979 | 750 | 14,000 | 5 per cent |
| 31 December 1980 | 4,085 | 10,000 | 10 per cent |
| 31 December 1981 | 2,900 | 15,000 | 5 per cent |

From the above information you are required to show:
(a) the bad debts account as affected by the closing entries at the end of the financial years 31 December 1979, 1980 and 1981;
(b) the provision for doubtful debts account for the same years showing the provision brought forward for each year; the balance on this account on 1 January 1979 was £500;
(c) the journal entries for transactions to both the above-named accounts;
(d) an extract from the balance sheets showing how the provision would affect the sundry debtors, as at 31 December 1979, 1980 and 1981.

## Answer 9.1

(a)

Bad debts

| 1979 |  | £ | 1979 |  | £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dec. 31 | Debtors | 750 | Dec. 31 | Profit and loss | 750 |
| 1980 |  |  | 1980 |  |  |
| Dec. 31 | Debtors | 4,085 | Dec. 31 | Profit and loss | 4,085 |
| 1981 |  |  | 1981 |  |  |
| Dec. 31 | Debtors | 2,900 | Dec. 31 | Profit and loss | 2,900 |

(b)

Provision for doubtful debts


## 10 Control Accounts

### 10.1 Introduction

We have referred in previous chapters to entries to accounts of debtors and creditors, and this is the area where control accounts are used. We also saw in Chapter 7 how day books reduce the necessity of posting several separate tránsactions in our ledger. It is the problems associated with a large number of transactions in the ledger that control accounts seek to resolve.

If we consider the problem with a business which has a large number of debtors, we need to have a record of the amounts due from individual debtors in order that we can chase up unpaid debtors for payment. With regard to our final accounts - that is, the balance sheet - we only need a total figure for debtors and this is what control accounts will tell us, since they are nothing more than accounts containing totals. In fact, an alternative name for them is 'total accounts'. The control account contains totals of postings to the individual accounts which it is controlling. For example, a debtors control account or total debtors account contains entries for the total of all items posted to the individual debtor accounts. Similarly, a creditors control account or total creditors account will contain entries for the total of all items posted to the individual creditors accounts.

### 10.2 Control accounts and double-entry

To give a simple example of control accounts, let us take the following transactions of a new business for the month of January.

| Total sales | $£ 10,500$ |
| :--- | :--- |
| Cash receipts from debtors | $£ 9,100$ |

The debtors control account would appear as follows

Debtors control account

| Jan. 31 | Sales | $\begin{gathered} £ \\ 10,500 \end{gathered}$ |  |  | £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Jan. 31 | Cash | 9,100 |
|  |  |  | Jan. 31 | Balance c/d | 1,400 |
|  |  | 10,500 |  |  | 10,500 |
| Feb. 1 | Balan | 1,400 |  |  |  |

Meanwhile the individual debtors accounts will be debited with the separate sales transactions which make up the $£ 10,500$, and individual accounts credited with cash receipts making up $£ 9,100$. If this process is followed accurately, at any one time the balances on the individual accounts will total the balance on the control account - in this case $£ 1,400$.

At first sight it may appear that we are contravening the rules of double-entry book-keeping, since the transactions are being posted to the individual accounts and the control accounts. That is to say, in the above example we credit sales with $£ 10,500$ and debit both the control account and the individual debtors accounts with $£ 10,500$. The answer to this apparent inconsistency is that only one of either the control accounts or the individual accounts is part of the doubleentry system. Unfortunately for the student, it may be either of these which is part of the double-entry system, but never both. You must read the examination question carefully to ascertain which system is in use. It may be that the control account is part of the double-entry system, in which case the individual accounts will be a subsidiary record. Alternatively, the individual accounts may be part of the double-entry system and the control account will be only a memorandum account.

### 10.3 Maintaining control accounts

In Section 10.2 we looked at a very simple example of a control account where there were only two types of transactions involved - that is, sales and cash. However, the principle remains the same with all transactions involving the debtors or creditors accounts.

The rule is that the totals of similar transactions posted to the debit of the individual accounts must be posted in total to the control account as a debit. Similarly, the totals of similar transactions posted to the credit of the individual accounts must be posted in total to the credit of the control or total account.

Following this rule we would expect the debit side of the debtors control account to include entries for sales and miscellaneous debits and the credit side to include cash, discounts allowed, sales returns and bad debts. The creditors control account will, on the debit side, include entries for cash, discounts received and purchases returns, while the credit side will include entries for purchases and miscellaneous credits.

### 10.4 Transferring accounts

Examination questions on control accounts often involve transfers between sales and purchase ledgers. If an account in the sales ledger has a debit balance and is to be transferred to the purchase ledger, we credit the sales ledger control and debit the purchase ledger control. Conversely, a credit balance being transferred from purchase ledger to sales ledger requires an entry debiting sales ledger and crediting purchase ledger.

### 10.5 Sectionalisation of ledgers

In the larger businesses the sales and/or purchase ledger may be kept in sections for example, A-J, K-R and S-Z. Exactly the same principles apply with the control account containing entries for the totals of all transactions in the individual accounts which they are controlling.

### 10.6 Sales and purchases ledgers

These names refer to the ledgers containing the individual accounts for debtors and creditors.

### 10.7 Worked examples

## Example 10.1

R. Pettit's purchase ledger contains the accounts of two creditors with the following balances:

1982
August 1 S. Nicholls 260 credit
G. Price

310 credit

During August the following transactions took place.
1982
August 4 Bought goods from S. Nicholls on credit $£ 624$.
August 5 Purchases from G. Price on credit $£ 414$.
August 10 Returned damaged goods to S. Nicholls £24.
August 14 Sent S . Nichols a cheque in settlement of his account at 1 August, less 10 per cent cash discount.
August 19 Received a credit note from G. Price for $£ 8$ in respect of an overcharge on 5 August.
August 28 S. Nicholls complained that the discount on 14 August should have been $5 \%$. Correct this error.
August 31 G. Price also bought some goods from Pettit. The debit balance of $£ 16$ on Price's account in the sales ledger was transferred to his account in the bought ledger.
Pettit had many customers to whom he sold goods on credit. Such debtors totalled $£ 700$ on 1 August 1982 and during that month transactions with them were:

|  | $£$ |
| :--- | ---: |
| Sales | 5,300 |
| Returns inward | 29 |
| Cheques received | 5,356 |
| Discounts allowed | 281 |
| Bad debts | 35 |

In addition, the transfer of the balance on the account of G. Price (see 31 August above) was carried out.

## REQUIRED

(a) The accounts of Nicholls and Price as they would appear in Pettit's purchase ledger for the month of August 1982.
[8 marks]
(b) The sales ledger control account for the month of August 1982.
[5 marks]
(c) A comment on the purpose of control accounts.
[4 marks]
(AEB)

Solution 10.1
(a)
S. Nicholls

| S. Nicholls |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | £ |  |  | £ |
| Aug. 10 | Purchases returns | 24 | Aug. 1 | Balance b/d | 260 |
| Aug. 14 | Bank | 234 | Aug. 4 | Purchases | 624 |
| Aug. 14 | Discounts received | 26 | Aug. 28 | Discounts received | 13 |
| Aug. 28 | Bank (1) | 13 |  |  |  |
| Aug. 31 | Balance c/d | 600 |  |  |  |
|  |  | £897 |  |  | $£ 897$ |
|  |  |  | Sept. 1 | Balance c/d | 600 |

G. Price

|  |  |  |  |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Aug. 19 | Purchases (2) |  | Aug. 1 | Balance b/d |  |
| Aug. 31 | G. Price (sales ledger) (3) | 16 | Aug. 4 | Purchases |  |
| Aug. 31 | Balance c/d | $\underline{700}$ |  |  | $\overline{724}$ |
|  |  | $\underline{724}$ |  |  | $\overline{700}$ |

NOTES
(1) Represents payment to S. Nicholls of discount deducted in error.
(2) A price reduction should correctly go to purchases account and not purchases returns.
(3) Entry to transfer would be debit G. Price (purchases ledger) and credit G. Price (sales ledger)
(b)

Sales ledger control

| £ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Aug. 1 Balance b/d | 700 | Aug. 31 | Sales returns | 29 |
| Aug. 31 Sales | 5,300 | Aug. 31 | Bank | 5,356 |
|  |  | Aug. 31 | Discounts allowed | 281 |
|  |  | Aug. 31 | Bad debts | 35 |
|  |  | Aug. 31 | G. Price (purchase ledger) | 16 |
|  |  | Aug. 31 | Balance c/d | 283 |
|  | $\overline{6,000}$ |  |  | 6,000 |
| Sept. 1 Balance b/d | 283 |  |  |  |

(c)
(i) An aid to balancing the ledger.
(ii) Control account under charge of responsible official makes fraud more difficult.
(iii) Total balances readily available.

## Example 10.2

The following information relates to the sales and purchases transactions of E. MacDon for the month of January, 1983. YOU ARE REQUIRED to select the appropriate items and draw up:
(i) the Sales Ledger Control Account ..... 7
and(ii) the Purchases Ledger Control Account
as they would appear in the General ledger of E. MacDon for January, 1983
£
1983
Jan. 1 Amounts owed by debtors ..... 12,400
Jan. 1 Amounts owed to creditors ..... 3,600Transactions during January, 1983
Sales on credit ..... 84,600
Cash sales ..... 19,500
Purchases on credit ..... 43,900
Cash purchases ..... 7,200
Cash received from debtors ..... 81,200
Cash paid to creditors ..... 42,100
Cash discount allowed by suppliers ..... 750
Cash discount allowed to customers ..... 1,250
Credit notes issued for goods returned by customers ..... 250
Credit notes received for goods returned to suppliers ..... 400
Interest charged to debtors on accounts overdue ..... 35
Credit balances on Purchases Ledger accounts transferred to Sales Ledger ..... 1006

Solution 10.2
Sales ledger control


Purchases ledger control

|  |  | $£$ |  |  | $£$ |
| :--- | :--- | ---: | :--- | :--- | ---: |
| Jan. 31 | Bank | 42,100 | Jan. 1 | Balance b/d | 3,600 |
| Jan. 31 | Discounts received | 750 | Jan. 31 | Purchases | 43,900 |
| Jan. 31 | Purchases returns | 400 |  |  |  |
| Jan.31 | Sales ledger | 100 |  |  |  |
| Jan. 31 | Balance c/d | 4,150 |  |  | $\overline{47,500}$ |
|  |  | $\underline{47,500}$ |  |  | 4,150 |

## Example 10.3

From the following details prepare the Sales Ledger Control Account and the Purchases Ledger Control Account for the month of March 1983:

|  | $£$ |
| :--- | ---: |
| Sales Ledger Control Account balance 1 March 1983 | 7,000 |
| Purchases Ledger Control Account balance 1 March 1983 | 6,550 |
| Sales | 11,000 |
| Purchases | 5,450 |
| Receipts from credit customers | 10,400 |
| Payments to suppliers for goods on credit | 6,300 |
| Returns Inwards | 20 |
| Returns Outwards | 190 |
| Bad Debts written off | 350 |
| Refund of an overpayment made to a credit supplier | 60 |
| Discount allowed | 130 |
| Transfer of Credit balance from Purchases Ledger to Sales Ledger | 100 |

Solution 10.3

| Dr. |  | Sales ledger control |  |  | Cr. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | £ |  |  | £ |
| Mar. 1 | Balance b/d | 7,000 | Mar. 31 | Bank | 10,400 |
| Mar. 31 | Sales | 11,000 | Mar. 31 | Returns inwards | 20 |
|  |  |  | Mar. 31 | Bad debts | 350 |
|  |  |  | Mar. 31 | Discounts allowed | 130 |
|  |  |  | Mar. 31 | Purchases ledger | 100 |
|  |  |  | Mar. 31 | Balance c/d | 7,000 |
|  |  | 18,000 |  |  | 18,000 |
| April 1 | Balance b/d | 7,000 |  |  |  |
| Dr. |  | Purchases | r control |  | Cr . |
|  |  | £ |  |  | £ |
| Mar. 31 | Bank | 6,300 | Mar. 1 | Balance b/d | 6,550 |
| Mar. 31 | Returns outwards | 190 | Mar. 31 | Purchases | 5,450 |
| Mar. 31 | Sales ledger | 100 | Mar. 31 | Bank | 60 |
| Mar. 31 | Balance c/d | 5,470 |  |  |  |
|  |  | 12,060 |  |  | 12,060 |
|  |  |  | April 1 | Balance b/d | 5,470 |

### 10.8 Further exercises

## Question 10.1

The following information refers to the debtors and creditors of A. M. Suppliers Ltd.
Balances on 1 December 1984

|  | £ |  | £ |
| :---: | :---: | :---: | :---: |
| T. Wilkins | 380.80 | J. M. Barton | 490.78 |
| R. Brough | 480.35 | T. W. Smart | 350.85 |
| W. Rilands | 107.50 |  |  |
| Total debtors | 968.65 | Total creditors | 841.63 |
| Sales during December 1984 |  | Purchases during December 1984 |  |
| Dec. | £ | Dec. | £ |
| 8 T. Wilkins | 170.70 | 8 J. M. Barton | 170.95 |
| 10 R. Brough | 850.30 | 12 T. W. Smart | 460.05 |
| 11 T. W. Smart | 110.00 |  |  |
|  | 1,131.00 |  | 631.00 |

Receipts and payments during December 1984

|  | Discount | Bank |  | Bank |
| :---: | :---: | :---: | :---: | :---: |
| Dec. | $£$ | $£$ | Dec. | $£$ |
| 4 | T. Wilkins | 7.60 | 373.20 | 3 |
| 9 | J. M. Barton | 490.78 |  |  |
|  | $\underline{7.60}$ | $\underline{480.35}$ | 5 | T. W. Smart |

(a) Open accounts for each customer and supplier together with control accounts for each ledger and post the information given above.

On 31 December it was decided, since T. W. Smart is mainly a supplier, to offset the isolated sale against his account in the purchases ledger.
It was also decided since the W. Rilands account is now long overdue and there appears to be no possibility of receiving payment, to write it off as a bad debt.
(b) Make the entries to record these two decisions.
(c) Balance the accounts and reconcile the two ledgers.

Answer 10.1
Sales Ledger

| T. Wilkins |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dec. 1 | Balance b/d | 380.80 | Dec. 4 | Bank | 373.20 |
| Dec. 8 | Sales | 170.70 | Dec. 4 | Discount | 7.60 |
|  |  |  | Dec. 31 | Balance c/d | 170.70 |
|  |  | 551.50 |  |  | 551.50 |
| Jan. 1 | Balance b/d | 170.70 |  |  |  |
| R. Brough |  |  |  |  |  |
| Dec. 1 | Balance b/d | 480.35 | Dec. 9 | Bank | 480.35 |
| Dec. 10 | Sales | 850.30 | Dec. 31 | Balance c/d | 850.30 |
|  |  | 1,330.65 |  |  | 1,330.65 |
| Jan. 1 | Balance b/d | 850.30 |  |  |  |
| W. Rilands |  |  |  |  |  |
| Dec. 1 | Balance b/d | 107.50 | Dec. 31 | Bad debts | 107.50 |
|  |  | 107.50 |  |  | 107.50 |
| T. W. Smart |  |  |  |  |  |
| Dec. 11 | Sales | 110.00 | Dec. 31 | Contra Purchases Ledger | 110.00 |
|  |  | 110.00 |  |  | 110.00 |
| Debtors Control |  |  |  |  |  |
| Dec. 1 | Balances b/d | 968.65 | Dec. 31 | Bank | 853.55 |
| Dec. 31 | Sales | 1,131.00 | Dec. 31 | Discounts | 7.60 |
|  |  |  | Dec. 31 | Bad debts | 107.50 |
|  |  |  | Dec. 31 | Contra Purchases Ledger | 110.00 |
|  |  |  | Dec. 31 | Balances c/d | $\underline{1,021.00}$ |
|  |  | 2,099.65 |  |  | 2,099.65 |
| Jan. 1 | Balances b/d | 1,021.00 |  |  |  |
| Reconciliation: T. Wilkins |  | 170.70 |  |  |  |
|  | R. Brough | 850.30 |  |  |  |
| As above |  | £1,021.00 |  |  |  |

Purchases Ledger

| J. M. Barton |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dec. 3 B | Bank | 490.78 | Dec. 1 | Balance b/d | 490.78 |
| Dec. 31 | Balance c/d | 170.95 | Dec. 8 | Purchases | 170.95 |
|  |  | 661.73 |  |  | 661.73 |
|  |  |  | Jan. 1 | Balance b/d | 170.95 |
| T. W. Smart |  |  |  |  |  |
| Dec. $31 \quad$ C | Contra Sales Ledger | 110.00 | Dec. 1 | Balance b/d | 350.85 |
| Dec. 12 B | Bank | 350.85 | Dec. 12 | Purchases | 460.05 |
| Dec. 31 | Balance c/d | 350.05 |  |  |  |
|  |  | 810.90 |  |  | 810.90 |
|  |  |  | Jan. 1 | Balance b/d | 350.05 |
| Creditors Control |  |  |  |  |  |
| Dec. 31 B | Bank | 841.63 | Dec. 1 | Balances b/d | 841.63 |
| Dec. 31 C | Contra Sales Ledger | 110.00 | Dec. 31 | Purchases | 631.00 |
| Dec. 31 | Balances c/d | 521.00 |  |  |  |
|  |  | 1,472.63 |  |  | 1,472.63 |
|  |  |  | Jan. 1 | Balance b/d | 521.00 |
| Reconciliation | n: J. M. Barton | 170.95 |  |  |  |
|  | T. W. Smart | 350.05 |  |  |  |
| As above |  | £521.00 |  |  |  |

## Question 10.2

(a) Explain the term 'suspense account' in connection with the trial balance. Draw up a suspense account showing one entry and explain how it may be cleared. [8 marks]
(b) What is a control account? Give an example of a sales (debtors') ledger control account of a firm which has a large number of customers. Your control account should contain at least four different entries and should be balanced at the period end.
[7 marks]

## Answer 10.2

(a) Used for difference in trial balance which cannot be located; refer to Section 8.3 and worked examples.
(b) An account which records totals of transactions entered in individual accounts; refer to Section 10.1 and worked examples.

# 11 Depreciation and <br> Disposal of Assets 

### 11.1 Introduction

In Chapter 4 we defined fixed assets as those held for continuing use in the business. Fixed assets therefore earn profits for a business over several years, which was our reason for showing them on our balance sheet rather than treating them as an expense in our profit and loss account. We must realise, however, that fixed assets do not last forever, except land, although some, such as buildings, may have very long lives. In view of the above, we should make a charge to the profit and loss account each year equal to the part of the cost which we have used. We call this charge depreciation.

### 11.2 Meaning of depreciation

From the above we could say that depreciation is the spreading of the cost of a fixed asset over its useful life. For example, if a machine costs a business $£ 20,000$ and has an expected life of 5 years, it would be reasonable to charge against each year's profits $£ 4,000$ ( $£ 20,000 \div 5$ ).

Although the above is not a strict definition of depreciation, it is satisfactory for us at the moment, and we shall now examine some points for further consideration.

### 11.3 Total depreciation charge

In Section 11.2 we took the cost of the fixed asset and spread that cost over its expected life. We have therefore ignored the possibility of the asset having a value, albeit a scrap value, at the end of its expected life. If a fixed asset has a value at the end of its life, which we will call its disposal value, then the cost which has to be spread over the life of the asset should be reduced by that disposal value. For example, let us suppose that the fixed asset referred to previously, which cost the business $£ 20,000$, has a disposal value after 5 years, its expected useful life, of $£ 2,000$. The cost which we now have to spread over 5 years is $£ 18,000(£ 20,000$ less $£ 2,000$ ) or $£ 3,600$ each year.

### 11.4 The balance sheet value of fixed assets

So far we have indicated that depreciation spreads the cost - that is to say, the amount of the depreciation charge will be an expense to the profit and loss
account. Because of this it reduces the amount of our net profit by the amount of that charge, as compared with what the profit would have been if we had not charged depreciation. While this is perfectly true, we must also consider the value at which the fixed asset will be shown in the balance sheet. The balance sheet value of a fixed asset will be its original cost less the sum of all depreciation charges to date. We call this value its net book value.

We shall now show how, on the basis of the figures in Section 11.2 above, the profit and loss account depreciation charge and balance sheet value would be affected. The machine originally cost the business $£ 20,000$, and if there were no depreciation charge, that is the value at which it would appear in the balance sheet. However, in year 1 we charge to the profit and loss account a depreciation charge of $£ 3,600$ and the balance sheet value will be $£ 16,400$ ( $£ 20,000$ less $£ 3,600$ ). In each of years 2 to 5 we charge $£ 3,600$ to our profit and loss account, and our balance sheet values of the fixed asset would be as follows:

| at end of year 2 | $£ 12,800$ | $(£ 16,400$ less $£ 3,600)$ |
| :--- | :--- | :--- |
| at end of year 3 | $£ 9,200$ | $(£ 12,800$ less $£ 3,600)$ |
| at end of year 4 | $£ 5,600$ | $(£ 9,200$ less $£ 3,600)$ |
| at end of year 5 | $£ 2,000$ | $(£ 5,600$ less $£ 3,600)$ |

At the end of year 5 we can see that the balance sheet value is equivalent to its estimated disposal value or scrap value.

### 11.5 Methods of depreciation

There are several methods of calculating the depreciation charge or methods of spreading the cost.

## (a) Straight Line Method

The straight line method is the method which we have used in the example above, where the total depreciation charge (that is, cost less residual value) is spread evenly over its expected useful life. With this method the charge for depreciation is the same in each year and is therefore appropriate where each year enjoys equal benefits from the use of the asset.

## (b) Reducing Balance Method

The reducing balance method calculates the depreciation charge as a percentage of the net book value at the previous accounting period end. For example, an asset costs a business $£ 20,000$ and it is decided to depreciate it at a rate of 40 per cent per annum on the basis of the reducing balance method.

|  | Depreciation charge for year | nd |
| :---: | :---: | :---: |
| Year 1 | £8,000 | £12,000 (£20,000 less £8,000 |
| Year 2 | £4,800 (40 per cent $\times$ £ 12,000) | £ 7,200 (£12,000 less $£ 4,800$ ) |
| Year 3 | £2,880 (40 per cent $\times$ £ 7,200) | £ 4,320 (£7,200 less £2,880) |
| Year 4 | £1,728 (40 per cent $\times £ 4,320$ ) | £ 2,592 (£4,320 less £ 1,728 ) |

We can see that the depreciation charge is substantially higher in the earlier years and can therefore be considered to be appropriate where the business enjoys greater benefit from the asset in its early years because of, for example, greater efficiency. Another argument for the use of this method is in cases where repair
and maintenance costs are higher in the later years and these higher costs are then offset by a lower depreciation charge.

From the practical viewpoint, the reducing balance method has the disadvantage that the asset is never fully depreciated. Further, a much higher charge is needed in the early years when compared with the straight line method if the same residual value is to be achieved at the end of its useful life. This method is also referred to as the diminishing balance method.

## (c) Machine-hour Method

The machine-hour method, not commonly used, involves taking the total depreciation charge and dividing it by the estimated useful life in hours. The depreciation charge for a period is then calculated by reference to the number of hours that the machine is used in that period. For example, cost of machine is $£ 20,000$, residual value $£ 2,000$ and estimated life 36,000 hours. If the usage in year 1 were 9,000 hours, depreciation would be calculated as follows:
$\frac{£ 18,000 \text { (total depreciation charge) }}{36,000 \text { hours (estimated life) }}=£ 0.50$ per hour
Depreciation charge for year $1: 9,000$ hours at $£ 0.50=£ 4,500$.

## (d) Revaluation Method

The revaluation method is only appropriate for such assets as small tools where there are several small items of low value but nonetheless of lasting value. The depreciation charge is arrived at by comparing the period end valuation of the asset with last period end's valuation as increased by new purchases during the period. For example, at 31 December 1984 a business has loose tools with a value of $£ 400$ and purchases new tools during 1985 costing $£ 350$. At 31 December 1985 the value of loose tools is $£ 550$. Depreciation charge for 1985 would be $£ 200$, as follows:

|  | $£$ |
| :--- | ---: |
| Valuation at 1 January 1985 | 400 |
| Purchases during 1985 | 350 |
|  | 750 |
| less Valuation at 31 December 1985 | $\underline{550}$ |
| Depreciation charge 1985 | $\mathbf{£ 2 0 0}$ |

### 11.6 Other factors

We have already stated that the object of depreciation is to write off the cost of the asset (less disposal value) over its expected useful life. We must realise that its balance sheet value will be equal to its cost less amounts of depreciation charged to date. The balance sheet value or net book value does not purport to be the amount for which it could be sold or could be replaced. This is a very important point to realise when looking at the balance sheet of a business.

Another point to be clearly understood is that depreciation has nothing to do with putting aside money to replace an asset. Similarly, we must realise that cash will not necessarily be available to replace that fixed asset. Depreciation writes off the expense of a fixed asset which has already been incurred.

### 11.7 Accounting entries

We have already seen that the amount of depreciation both creates a charge against profits and reduces the value of the fixed asset in the balance sheet. There are two methods of recording the depreciation, with the same end result.

## (a) Method 1

In the first method accounting entries here are
Dr. Depreciation expense account
Cr. Fixed asset account
The balance on the depreciation expense account is transferred at the accounting period end to the profit and loss account.

## (b) Method 2

The second method uses a depreciation provision account and the entries are
Dr. Depreciation expense account
Cr. Depreciation provision account
The balance on the depreciation expense account is transferred to the profit and loss account as with method 1 , while the balance on the depreciation provision account is deducted from the cost of the fixed asset in the balance sheet. The balance on the depreciation provision account is carried forward to the next account period and is added to each year by repeating the entry above. The net book value of the asset will then be its original cost (as recorded in the fixed asset account) less the balance on the depreciation provision account.

### 11.8 Fixed asset disposals

When a business sells a fixed asset, there will usually be a profit or loss on disposal. This will be the difference between the sale proceeds and the net book value of the asset. This amount must be debited (if a loss) or credited (if a gain) to the profit and loss account as a gain or loss on disposal of fixed assets. This gain or loss could also be described as a depreciation adjustment, since it reflects an over- or under-charge for depreciation in previous periods.

The accounting entries to deal with the disposal are as follows:
(a) Dr. Fixed asset disposal account

Cr. Fixed asset account (with the original cost of the fixed asset)
(b) Dr. Fixed asset depreciation provision account

Cr. Fixed asset disposal account (with the depreciation provided to date on that fixed asset)

The balance on the fixed asset disposal account now represents the net book value of the asset disposed of. If no separate depreciation provision account is maintained, the net book value of the asset should be transferred direct from the fixed asset account to the fixed asset disposal account.
(c) Dr. Bank account

Cr. Fixed asset disposal account (with the sale proceeds of the fixed asset)
If the asset is disposed of, other than for cash, the personal account of the person acquiring the fixed asset should be debited rather than bank account.

The balance on the fixed asset disposal account now represents the profit or loss or disposal and should be transferred to the profit and loss account.

### 11.9 Assets purchased/sold during year

When an asset is purchased or sold during the year, we must consider how much depreciation is to be charged for the year during which it is purchased or sold. You must read the examination question carefully to tackle this point, but any of the following may happen:
(a) no depreciation during year of purchase or sale;
(b) one half-year's depreciation in year of purchase or sale;
(c) depreciation calculated pro rata to number of months owned by business (you should assume this method if the question does not tell you otherwise).

### 11.10 Worked examples

## Example 11.1

(a)

|  |  | Motor Vans Account |
| :--- | :--- | :--- |
| 1981 |  | $£$ |
| 1 Jan | T. Weldon | 30,000 |
|  |  | Provision for depreciation |


| 31 Dec. | $£$ |
| :--- | :---: |
| 1981 Profit and loss | 3,000 |
| 1982 Profit and loss | 2,700 |
| 1983 Profit and loss | 2,430 |
| 1984 Profit and loss | 2,187 |

The above accounts refer to motor vans purchased. Study the accounts and answer the following questions.
(i) Were the vans paid for immediately or were they bought on credit?
(ii) What method of calculation is being used for the depreciation?
(iii) Give the figure of percentage being used for depreciation.
(iv) What is the value of the motor vans shown in the Balance Sheet dated 31 December 1983?

Rewrite the account for the years 1981 and 1982 in the alternative form in which the depreciation appears in the same account as the motor vans. Balance the account at the end of each year.
(b) Hotels often use the revaluation method for calculating depreciation on glass, china, etc. An hotel valued its glass and china at $£ 870$ on 1 January 1983, purchased $£ 700$ worth during the year and then valued its stock at $£ 1,100$ at the end of the year. How much should appear in the hotel's accounts as depreciation for the year ended 31 December 1983?
(c) Name two other items of capital equipment for which the revaluation method of depreciation is most suitable.

Solution 11.1
(a) (i) Credit, since the account of T. Weldon has been credited.
(ii) Reducing balance method.
(iii) 10 per cent $\left(\frac{£ 3,000}{30,000} \times 100\right)$
(iv) $£ 19,683(30,000-(3,000+2,700+2,430+2,187))$

Motor vans account

| 1981 |  | £ | 1981 |  | £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\text { Jan. } 1$ | T. Weldon | 30,000 | Dec. 31 | Profit and loss | 3,000 |
|  |  |  | Dec. 31 | Balance c/d | 27,000 |
|  |  | 30,000 |  |  | 30,000 |
| $\begin{aligned} & 1982 \\ & \text { Jan. } 1 \end{aligned}$ |  |  | 1982 |  |  |
|  | Balance b/d | 27,000 | Dec. 31 | Profit and loss | 2,700 |
|  |  |  | Dec. 31 | Balance c/d | 24,300 |
|  |  | 27,000 |  |  | 27,000 |
| 1983 |  | £ |  |  |  |
| Jan. 1 | Balance b/d | 24,300 |  |  |  |

(b)
£470 (as below)
Glass and china

|  |  |  |  |  |  |
| :--- | :--- | :---: | :--- | :--- | ---: |
| Jan. 1 | Balance b/d | 870 | Dec. 31 | Profit and loss |  |
| Dec. 31 | Bank | $\frac{700}{1,570}$ | Dec. 31 | Balance b/d | $\frac{1,100}{\square}$ |
|  |  |  |  | $\underline{1,570}$ |  |
| Jan. 1 | Balance | 1,100 |  |  |  |

(c) Small tools, jigs, dies.

## Example 11.2

Answer each of the following questions:
(a) On 1 January 1978 P. Williams bought a new machine for $£ 3,000$. On 31 December 1978 and at the end of every year thereafter $10 \%$ of cost was credited to a Provision for Depreciation Account. The machine was sold on 5 January 1982 for $£ 2,000$.
Write up a Machine Disposal Account on 5 January 1982 showing clearly the amount to be debited or credited to a Profit and Loss Account to cover the over or under depreciation.
(b) On 1 January 1979 W. Elder bought a new motor van. The van, which cost $£ 4,000$, was depreciated every year by $10 \%$ of the diminishing balance. The financial year ends on 31 December.
On 2 January 1982 W. Elder sold the van for $£ 2,000$.
W. Elder did not keep a separate Provision for Depreciation Account but entered the amount at the end of every year in the van account.
Write up W. Elder's van account for the period 1 January 1979 to 2 January 1982, showing clearly the amount of under or over depreciation to be debited or credited to the profit and loss account.
(c) Outline the revaluation method of calculating depreciation.

On 1 January 1981, W. Beach owned small tools to the value of $£ 4,180$.

During the year he purchased new tools at a cost of $£ 427$.
On 31 December 1981 he valued his tools at $£ 4,250$.
Write up a small tools account showing the amount to be written off to profit and loss.
(L)

## Solution 11.2

(a)

Machinery disposal

| 1982 |  | $£$ | 1982 |  | $£$ |
| :--- | :--- | :---: | :--- | :--- | :---: |
| Jan.5 | Machinery | 3,000 | Jan. 5 | Depreciation provision (1) | 1,500 |
| Jan.5 | Profit and loss (2) | $\underline{500}$ | Jan. 5 | Bank | $\underline{2,000}$ |
|  |  | $\underline{3,500}$ |  |  | $\underline{3,500}$ |
|  |  |  |  |  |  |

## NOTES

(1) 5 years at 10 per cent per annum.
(2) Balancing figure.
(b)

| Van |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1979 \\ & \text { Jan. } 1 \end{aligned}$ |  | £ | 1979 |  | £ |
|  | Bank | 4,000 | Dec. 31 | Profit and loss | 400 |
|  |  |  | Dec. 31 | Balance c/d | 3,600 |
|  |  | 4,000 |  |  | 4,000 |
| 1980 |  |  | 1980 |  |  |
| Jan. 1 | Balance b/d | 3,600 | Dec. 31 | Profit and loss | 360 |
|  |  |  | Dec. 31 | Balance c/d | 3,240 |
|  |  | 3,600 |  |  | 3,600 |
| 1981 |  |  | 1981 |  |  |
| Jan. 1 | Balance b/d | 3,240 | Dec. 31 | Profit and loss | 324 |
|  |  |  | Dec. 31 | Balance c/d | 2,916 |
|  |  | 3,240 |  |  | 3,240 |
| 1982 |  |  | 1982 |  |  |
| Jan. 1 | Balance b/d | 2,916 | Jan. 2 | Bank | 2,000 |
|  |  |  | Jan. 2 | Profit and loss (1) | 916 |
|  |  | 2,916 |  |  | 2,916 |

NOTE
(1) Balancing figures.
(c) Refer to Section 11.5(d).

Small tools

|  |  | $£$ |  |  | $£$ |
| :--- | :--- | :---: | :--- | :--- | ---: |
| Jan. 1 | Balance b/d | 4,180 | Dec. 31 | Profit and loss | 357 |
| Dec. 31 | Bank | $\frac{427}{4,607}$ | Dec. 31 | Balance c/d | $\frac{4,250}{4,607}$ |
|  |  |  |  |  |  |
| Jan. 1 | Balance b/d | 4,250 |  |  |  |

### 11.11 Further exercises

## Question 11.1

(a) Name, and describe briefly, two ways of calculating depreciation and give a numerical example of each.
(b) Explain two ways in which depreciation can be entered into the books of account and the effect of these entries on the balance sheet.

Answer 11.1
(a) (i) Straight line (Section 11.5).
(ii) Reducing balance (Section 11.5).
(b) (i) Use of depreciation provision account (Section 11.7).
(ii) Direct to asset account (Section 11.7).

## Question 11.2

| 1983 | PREMISES ACCOUNT |  | Dr. | Cr. | Balance |
| :--- | :--- | :---: | ---: | :--- | :--- |
| Jan. 1 | Balance | b/d | 20,000 |  | $£ 20,000$ |
| April 1 | Bank | CB | 8,000 |  | $£ 28,000$ |
| June 30 | Repairs | J | 690 |  | $£ 28,690$ |
| Nov. 30 | Rates | J | 2,400 |  | $£ 31,090$ |

EXAMINE the above ledger accounts, then ANSWER THE FOLLOWING QUESTIONS.
(a) STATE why the entries for June 30 and Nov. 30 are incorrect.
(b) Give the JOURNAL ENTRIES to correct these errors.
(c) If the rate of depreciation is set at 25 per cent per annum (using the Fixed Instalment/Straight Line method of calculation), CALCULATE the amount of depreciation for the year ending 31 December 1983.
(d) Give the JOURNAL ENTRY to show the depreciation entry in the necessary account. You should assume that a Provision for Depreciation on Premises account is kept.

Answer 11.2
(a) (i) June 30 Repairs should be debited to an expense account, not debited to the fixed asset account.
(ii) Nov. 30 Rates should be debited to an expense account, not debited to the fixed asset account.
Neither of the above increases the value of the fixed asset.
(b) (i)

|  | Dr. $£$ | $\mathrm{Cr} .$ £ |
| :---: | :---: | :---: |
| Building repairs | 690 |  |
| Premises |  | 690 |
| Rates | 2,400 |  |
| Premises |  | 400 |

Note: Add suitable narrations.
(c) 25 per cent $\times £ 20,000=£ 5,000$

25 per cent $\times £ 8,000 \times \frac{9}{12}=£ 1,500$
Total depreciation expense of $£ 6,500$
(d)

|  | Dr. | Cr. |
| :--- | :---: | :---: |
| Depreciation expense | $£$ | $£$ |
| Depreciation provision | 6,500 |  |
| Being depreciation expense for year |  | 6,500 |

## Question 11.3

Stuart Bennet owned a confectioner's retail shop and catering business. The following list of balances was extracted from his books on 31 May 1984:

|  | $£$ |
| :--- | ---: |
| Purchases | 20,000 |
| Sales and catering contracts | 50,000 |
| Stock of provisions 1 June 1983 | 3,300 |
| Debtors (catering contracts) | 2,700 |
| Rates | 900 |
| Trade creditors | 3,600 |
| Provision for doubtful debts | 600 |
| Wages | 10,200 |
| Motor van expenses for catering contracts | 1,000 |
| Light and heating | 4,000 |
| Kitchen equipment (cost $£ 6,500$ ) | 5,200 |
| Crockery and cutlery | 2,100 |
| Motor van (cost $£ 3,000)$ | 2,000 |
| Drawings | 5,000 |
| Cash in hand | 100 |
| Cash in bank (Dr.) | 1,900 |
| Fixtures and fittings (cost $£ 5,000)$ | 3,800 |
| Premises | 60,000 |
| Goodwill | 20,000 |
| Capital | 88,000 |

From the above balances you are required to prepare a trial balance and a trading and profit and loss account for the year ended 31 May 1984, and a balance sheet as at that date. The following information should be taken into account:
(a) Stock of provisions at 31 May 1984 was $£ 2,800$.
(b) Depreciation on fixtures and fittings, the motor van and kitchen equipment is to be calculated at 20 per cent on written-down value, and crockery and cutlery has been revalued at $£ 1,600$.
(c) A debtor has been declared bankrupt and $£ 500$ is to be written off as a bad debt.
(d) Provision for doubtful debts is to be adjusted to 10 per cent of $£ 2,200$.

Answer 11.3

| Trial balance |  |  |
| :--- | ---: | :---: |
|  | Dr. | Cr. |
|  | £ | $£$ |
| Purchases | 20,000 |  |
| Sales |  | 50,000 |
| Stock 1 June 1983 | 3,300 |  |
| Debtors | 2,700 |  |
| Rates | 900 |  |
| Trade creditors |  | 3,600 |
| Provision for doubtful debts | 10,200 | 600 |
| Wages | 1,000 |  |
| Motor van | 4,000 |  |


| Kitchen equipment | 5,200 |
| :--- | ---: |
| Crockery and cutlery | 2,100 |
| Motor van | 2,000 |
| Drawings | 5,000 |
| Cash in hand | 100 |
| Cash at bank | 1,900 |
| Fixtures and fittings | 3,800 |
| Premises | 60,000 |
| Goodwill | 20,000 |
| Capital |  |
|  | $\mathbf{£ 1 4 2 , 2 0 0}$ |

Trading profit and loss account of Stuart Bennett for year ended 31 May 1984

|  |  | £ |
| :---: | :---: | :---: |
| Sales |  | 50,000 |
| less Cost of sales (Working 1) |  | 33,640 |
|  |  | 16,360 |
| less |  |  |
| Rates | 900 |  |
| Bad debts 500 |  |  |
| less Reduction in provision 380 | 120 |  |
| Light and heating | 4,000 |  |
| Depreciation fixtures and fittings ( 20 per cent $\times £ 3$, 800) | 760 | 5,780 |
| Net profit |  | £10,580 |

Balance sheet of Stuart Bennett at 31 May 1984

| Fixed Assets |  | £ |
| :---: | :---: | :---: |
| Premises |  | 60,000 |
| Fixtures and fittings ( $£ 3,800-£ 760$ ) |  | 3,040 |
| Kitchen equipment ( $£ 5,200-£ 1,040)$ |  | 4,160 |
| Motor vehicles ( $£ 2,000-£ 400$ ) |  | 1,600 |
| Crockery and cutlery |  | 1,600 |
| Goodwill |  | 20,000 |
|  |  | 90,400 |
| Current Assets |  |  |
| Stock | 2,800 |  |
| Debtors (Working 2) | 1,980 |  |
| Cash at bank and in hand | 2,000 |  |
|  | 6,780 |  |
| less Current Liabilities |  |  |
| Creditors | 3,600 |  |
| Working Capital |  | 3,180 |
| Net Assets |  | £93,580 |
| Capital Employed |  |  |
| Balance at 1 June 1983 | 88,000 |  |
| add Net profit | 10,580 |  |
|  | 98,580 |  |
| less Drawings | 5,000 |  |
| Balance 31 May 1984 |  | £93,580 |


| WORKING 1 |  |
| :---: | :---: |
|  | £ |
| Stock 1 June 1983 | 3,300 |
| Purchases | 20,000 |
| less Stock 31 May 1984 | 23,300 |
|  | 2,800 |
|  | 20,500 |
| Wages (assumed catering staff) | 10,200 |
| Motor van expenses | 1,000 |
| Depreciation motor van ( 20 per cent $\times £ 2,000$ ) | 400 |
| Depreciation kitchen equipment ( 20 per cent $\times £ 5$,200) | 1,040 |
| Depreciation crockery and cutlery ( $£ 2,100-£ 1,600$ ) | 500 |
|  | £33,640 |
| WORKING 2 |  |
| Debtors per trial balance | 2,700 |
| less bad debt written off | 500 |
|  | 2,200 |
| less provision for doubtful debts | 220 |
|  | £1,980 |

## Question 11.4

Explain the meaning of the phrase 'depreciation of fixed assets', and indicate THREE methods by which the amount of depreciation for a year can be calculated.
(SUJB)
Answer 11.4

Refer to Sections 11.2, 11.5. Depreciation = spreading the cost, measure of wearing out. Methods: straight line, reducing balance, machine-hour, revaluation.

## 12 Year End Adjustments

### 12.1 Introduction

In the examples which we have looked at so far we have considered that the expenses and income which we have entered in our accounts relate exactly to the period for which we are preparing the profit and loss account. For example, if there was a debit of $£ 550$ on the rent account, we assumed that that was the rent expense for that accounting period. We shall now consider the accounting treatment where that is not the case and either there is rent owing at the balance sheet date or there is rent paid in advance at the balance sheet date. In both of these cases the amount appearing in our rent account does not represent the true rent expense for that accounting period.

### 12.2 Accrued expenses

Let us consider the case where a business prepares its profit and loss account to 31 December in each year. The business pays rent two weeks after the end of each quarter in respect of the previous three months. If the business first occupied the premises on 1 January 1985 at a rental of $£ 2,000$ per annum, its rent account for 1985 will appear as follows:

|  |  | Rent |
| :--- | :--- | :--- |
|  |  | $£$ |
| April 14 | Bank | 500 |
| July 14 | Bank | 500 |
| Oct. 14 | Bank | 500 |

If we prepared our profit and loss account from the account as it stands, we would show a rent expense of $£ 1,500$. This would clearly be incorrect, since the annual rental is $£ 2,000$ and we have occupied the premises for the whole year. In order that the correct amount of $£ 2,000$ be transferred to the profit and loss account, we need to carry down a credit balance for the amount owing - that is, £500. The rent account would then appear as follows:

| Rent |  |  |  |  |  |
| :--- | :--- | :---: | :--- | :--- | :---: |
| 1985 |  | $£$ | 1985 |  | $£$ |
| April 14 | Bank | 500 | Dec. 31 | Profit and loss account | 2,000 |
| July 14 | Bank | 500 |  |  |  |
| Oct. 14 | Bank | 500 |  |  | $\overline{2,000}$ |
| Dec. 14 | Balance c/d | 500 |  |  |  |
|  |  | $\frac{2,000}{}$ |  |  | 500 |

In January 1986, when we pay the rent for the three months ended 31 December 1985, this will appear as a debit on the rent account reducing the balance to nil. This process then continues until the next accounting period end, in this case 31 December 1986, when we examine the situation again to decide whether there is an amount owing.

We have already seen that the balance of $£ 500$ on the rent account at 31 December represents the amount owing at that date, and as such it will appear in the balance sheet as an amount owing under current liabilities. The same treatment is applied to any expenses where there is an amount unpaid at the balance sheet date representing expenses actually incurred before that date.

### 12.3 Prepayments

The opposite situation is where we pay an expense during one accounting period which relates to the next accounting period. Let us consider a situation where the same business as that mentioned in Section 12.2 pays an annual insurance premium on 1 April 1985 of $£ 1,000$. If at 31 December we transferred the balance of $£ 1,000$ to the profit and loss account, it would not reflect the true expense for the accounting period, since $£ 250\left(\frac{3}{12} \times £ 1,000\right)$ relates to the next accounting period. In order that the profit and loss account show the true expense of $£ 750$, we need to carry down a debit balance on the account for the $£ 250$ prepaid. The insurance account would then appear as follows:

| Insurance |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1985 |  | £ | 1985 |  | £ |
| April 1 | Bank | 1,000 | Dec. 31 | Profit and loss account | 750 |
|  |  |  | Dec. 31 | Balance c/d | 250 |
|  |  | 1,000 |  |  | 1,000 |
| 1986 |  |  |  |  |  |
| Jan. 1 | Balance b/d | 250 |  |  |  |

The balance of $£ 250$ brought down into 1986 will then be transferred to the profit and loss account at end of 1986 together with any further expense paid, and after adjusting for any accrual or prepayment at 31 December 1986. In the balance sheet at 31 December 1985 the debit balance of $£ 250$ will appear under current assets as a prepayment. The reason for this is that it represents value due to the business at that date.

### 12.4 Sundry stocks

A year end adjustment should also be made in the case of expenses such as stationery where a stock remains at the year end. The accounting treatment is similar to that for prepayments in that a debit balance is carried down on the expense account, thus decreasing the amount transferred to the profit and loss account. The difference in treatment when compared with prepayments is in the balance sheet treatment of the balance carried down. In the case of sundry stocks it should be shown as such on the balance sheet and not as prepayments.

### 12.5 Summary

We can summarise the effect on the final accounts of a business of accruals and prepayments as follows. An accrual or amount owing will be added to the amount of the expense which is transferred to the profit and loss account and will also appear under current liabilities as an expense creditor. A prepayment will reduce the amount of an expense transferred to the profit and loss account and will also appear under current assets as a prepayment.

From the above and from Chapter 11, on depreciation, you should notice that all accounting adjustments will affect two items in our final accounts. When we made a depreciation adjustment, we created an expense and reduced the value of the fixed asset. When making any year end adjustments, you should always ensure that two items or accounts are affected. It is often a good idea in examinations to write the names of the two accounts against the adjustment on your examination paper and place a mark against them when you adjust that account. If you do this and you have difficulty in making the balance sheet agree, you can look back to these items to ensure that they are properly ticked.

### 12.6 Worked examples

## Example 12.1

The following balances were extracted from the books of S. Charles, a retail trader, on 30th June, 1982:

|  | $\begin{aligned} & \text { Dr. } \\ & £ \end{aligned}$ | $\begin{aligned} & \text { Cr. } \\ & £ \end{aligned}$ |
| :---: | :---: | :---: |
| Purchases and Sales | 71,400 | 123,600 |
| Returns Inwards and Outwards | 1,600 | 2,400 |
| Carriage on Purchases | 860 |  |
| Carriage on Sales | 990 |  |
| Buildings (at cost price) | 100,000 |  |
| Furniture and Fittings (at cost price) | 10,000 |  |
| Provisions for Depreciation |  |  |
| Buildings |  | 50,000 |
| Furniture and Fittings |  | 2,000 |
| Debtors and Creditors | 44,000 | 9,610 |
| Stock 1st July, 1981 | 9,400 |  |
| Lighting and Heating | 5,390 |  |
| Office salaries and expenses | 10,000 |  |
| Discounts allowed and received | 620 | 990 |
| Provision for Doubtful debts |  | 1,200 |
| Insurance | 1,100 |  |
| Rent and Rates | 3,000 |  |
| Cash Balance | 510 |  |
| Bank Balance |  | 2,490 |
| Capital |  | 66,580 |
|  | £258,870 | £258,870 |

From the above information and the notes below YOU ARE REQUIRED to prepare a Trading and Profit and Loss account for the year ended 30th June, 1982.

A BALANCE SHEET IS NOT REQUIRED.

FULL WORKING FOR ALL ADJUSTMENTS MUST BE SHOWN AND CLEARLY LABELLED.

NOTES
(1) There were no amounts owing or prepaid at the START of the year on 1 July 1981.
(2) Stock 30 June $1982 \ldots £ 10,300$.
(3) Rent and Rates had been paid up to 30 September 1982. There has been no change in the annual amounts charged for Rent and Rates since 1 July 1981.
(4) The following amounts were unpaid at 30 June 1982:
(i) Office expenses . . £900 (ii) Lighting and Heating . . . £400.
(5) Depreciation is to be calculated as follows:
(i) Buildings at 5 per cent per annum by the STRAIGHT LINE (FIXED INSTALMENT) METHOD.
(ii) Furniture and Fittings at 10 per cent per annum by the REDUCING BALANCE METHOD.
(6) Commission payable to salesmen at 1 per cent on Net Sales has not yet been paid.
(7) Provision for Doubtful Debts is to be adjusted to $2^{1 / 2}$ per cent of Debtors.
(8) Office Expenses included the following items:
(i) Private drawings of $£ 400$ by S. Charles.
(ii) Private telephone calls totalling $£ 14$ by S. Charles.
(SEB)
Solution 12.1

Trading and profit and loss account of S. Charles for year ended 30 June 1982

|  |  | £ |
| :---: | :---: | :---: |
| Sales |  | 123,600 |
| less returns inwards |  | 1,600 |
|  |  | 122,000 |
| less Cost of sales |  |  |
| Stock 1 July 1981 | 9,400 |  |
| Purchases 71,400 |  |  |
| less returns outwards 2,400 |  |  |
| 69,000 |  |  |
| add carriage on purchases 860 | 69,860 |  |
|  | 79,260 |  |
| less Stock 30 June 1982 | 10,300 |  |
| Cost of sales |  | 68,960 |
| Gross profit |  | 53,040 |
| add Discounts received |  | 990 |
| add Reduction in provision for doubtful debts |  | 100 |
|  |  | 54,130 |
| less |  |  |
| Carriage on sales | 990 |  |
| Lighting and heating ( $£ 5,390+£ 400$ ) | 5,790 |  |
| Office salaries and expenses ( $£ 10,000+£ 900-£ 414)$ | 10,486 |  |
| Discounts allowed | 620 |  |
| Insurance | 1,100 |  |
| Rent and rates (£3,000-£750) | 2,250 |  |
| Depreciation buildings ( 5 per cent $\times \mathfrak{£ 1 0 0 , 0 0 0 \text { ) }}$ | 5,000 |  |
| Depreciation furniture and fittings ( 10 per cent $\times £ 8,000$ ) | 800 |  |
| Commission | 1,220 | 28,256 |
| Net profit |  | 25,874 |

Note: Although not required by the question, a balance sheet is shown below to complete the illustration.

Balance sheet of S. Charles at 30 June 1982

| Fixed Assets | Cost | Depreciation | Net book |
| :---: | :---: | :---: | :---: |
|  |  |  | value |
|  | £ | £ | £ |
| Buildings | 100,000 | 55,000 | 45,000 |
| Furniture and fittings | 10,000 | 2,800 | 7,200 |
|  | 110,000 | 57,800 | 52,200 |
| Current Assets |  |  |  |
| Stock |  | 10,300 |  |
| Debtors | 44,000 |  |  |
| less provision for doubtful debts | 1,100 | 42,900 |  |
| Prepayment |  | 750 |  |
| Cash |  | 510 |  |
|  |  | 54,460 |  |
| less Current Liabilities |  |  |  |
| Creditors | 9,610 |  |  |
| Expense creditors (£900 + £400 + £1,220) | 2,520 |  |  |
| Bank overdraft | 2,490 | 14,620 |  |
| Working capital |  |  | 39,840 |
|  |  |  | £92,040 |
| Capital Employed |  |  |  |
| Capital balance 1 July 1981 add net profit |  | 66,580 |  |
|  |  | 25,874 |  |
|  |  | 92,454 |  |
| less drawings ( $£ 400+£ 14$ ) |  | 414 | £92,040 |

## Example 12.2

Mr J. Shaw's first year in business as a retailer and general dealer ended on 31 January 1983. He has submitted to you, for checking, his final accounts for the year to 31 January 1983, showing a net profit of $£ 8,170$, and his balance sheet as at 31 January 1983 .
The balance sheet he had prepared is shown below:
Balance Sheet for first year, ending 31 January 1983

|  |  |  | $£$ |
| :--- | ---: | :--- | ---: |
| Stock | 9,150 | Trade creditors | 10,360 |
| Cash in hand | 180 | Loan | 4,000 |
| Vehicles (cost) | 8,300 | Capital, 1 February 1982 | 20,000 |
| Trade debtors | 12,210 |  |  |
| Drawings £9,500 |  |  |  |
| Net profit $£ 8,170$ |  |  |  |
| Fixtures and fittings (cost) | 1,330 |  |  |
| Cash at bank | 2,650 |  |  |
|  | $\boxed{34,360}$ |  | $\underline{34,360}$ |

You agree with his profit calculation and with the amounts shown for the items in the balance sheet, apart from the following:
(a) No depreciation had been included in the profit calculation. Depreciation should have been calculated by the 'straight line' ('equal instalment') method, assuming for the fixtures and fittings a life of 10 years, with no residual value, and for the vehicles a life of 4 years and residual value $£ 700$.
(b) The loan was obtained from Superior Finance Co. on 1 October 1982 and interest is payable from that date at the rate of 15 per cent per annum. The loan is to be repaid in full on 30 September 1984. No interest has been paid so far and no entries in respect of the loan interest have been made in the accounts.
(c) Mr Shaw pays the rent of his business premises monthly in advance. The rent for February 1983, £160, was paid in January 1983 and charged by Mr Shaw against the profits of his first year's trading.
(d) Mr Shaw had included his unsold stock in the final accounts and balance sheet at selling price ( $£ 9,150$ ). To determine the selling price of his goods, Mr Shaw adds 50 per cent to the cost price.

You are asked:
(1) to calculate the working capital from the balance sheet as it was prepared by Mr Shaw;
(2) to re-calculate the net profit for the first year, showing all your working;
(3) to re-draft the balance sheet, improving the presentation and incorporating any changes needed in view of items (a) to (d) above.
(OLE)

Solution 12.2
(1) Working capital as given. Stock $£ 9,150$, add cash $£ 180$, add debtors $£ 12,210$, add bank $£ 540$, less creditors $£ 10,360=£ 11,720$
(a) no effect
(b) less interest payable (expense creditor) ( 15 per cent $\times \frac{4}{12} \times £ 4,000$ )
(c) add prepayment $\quad 11,520$
\(\begin{array}{lr}(d) less reduction in stock valuation\left(£ 9,150 \times \frac{50}{150}\right)(1) \& 11,680 <br>

Working capital (revised) \&\)|  (1)050  |
| :--- |
| 8,630 |\end{array}

NOTE


NOTE
(1) Reduction in closing stock increases cost of sales, thus decreasing gross profit and, hence, net profit.

## (3) Balance sheet of J. Shaw at 31 January 1983

| Fixed Assets | Cost | Depreciation | Net book value |
| :---: | :---: | :---: | :---: |
|  | £ | £ | £ |
| Fixtures and fittings | 2,650 | 265 | 2,385 |
| Vehicles | 8,300 | 1,900 | 6,400 |
|  | 10,950 | 2,165 | 8,785 |
| Current Assets |  |  |  |
| Stock (£9,150-£3,050) |  | 6,100 |  |
| Debtors |  | 12,210 |  |
| Prepayments |  | 160 |  |
| Cash at bank |  | 540 |  |
| Cash in hand |  | 180 |  |
|  |  | 19,190 |  |
| less Current Liabilities |  |  |  |
| Creditors | 10,360 |  |  |
| Interest payable | 200 | 10,560 |  |
| Working capital |  |  | 8,630 |
| Net Assets |  |  | £17,415 |
| Financed by: |  |  |  |
| Capital (balance 1 February 1982) |  |  | 20,000 |
| add Net Profit |  |  | 2,915 |
|  |  |  | 22,915 |
| less drawings |  |  | 9,500 |
| Capital (balance 31 January 1983) |  |  | 13,415 |
| Loan |  |  | 4,000 |
|  |  |  | £17,415 |

## Example 12.3

On the last day of his account year, 31 January 1982, three of the accounts in a merchant's ledger were: Stationery Account; Rent and Rates Account; Provision for Depreciation (Office Equipment) Account.
In the Stationery and Rent and Rates Accounts, there are debit entries only, totalling $£ 1,240$ (Stationery) and $£ 3,170$ (Rent and Rates). Provision for Depreciation (Office Equipment) Account shows a credit balance of $£ 1,830$, which had been brought down on 1 February 1981.
At 31 January 1982, $£ 196$ is owing for rent, rates have been paid in advance by $£ 140$ and the stock of stationery is valued at $£ 325$. Further provision for depreciation on office equipment is to be made in respect of the year to 31 January 1982 by the reducing balance method at 20 per cent per annum. The original cost of the firm's office equipment was $£ 3,750$.
You are asked:
(a) to open the three ledger accounts with the balances indicated and make all the further entries required in them at year-end;
(b) to show how the balances carried down on these accounts on 31 January 1982 would appear on the Balance Sheet of that date.

Solution 12.3
(a)

| Stationery |  |  |  |  |  |
| :--- | :--- | :---: | :--- | :--- | :---: |
| Jan. 31 | Balance b/d | $£$ | 1,240 | Jan. 31 | Balance c/d |
|  |  |  | Jan. 31 | Profit and loss account | $\underline{915}$ |
|  |  |  |  |  | $\underline{1,240}$ |
|  |  |  |  |  |  |

Rent and rates

| $\begin{aligned} & \text { Jan. } 31 \\ & \text { Jan. } 31 \end{aligned}$ | Balance b/d <br> Balance c/d | £ |  |  | £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 3,170 | Jan. 31 | Balance c/d | 140 |
|  |  | 196 | Jan. 31 | Profit and loss account | 3,226 |
| Feb. 1 | Balance b/d | 3,366 |  |  | 3,366 |
|  |  | 140 | Feb. 1 | Balance b/d | 196 |
|  |  | Provision for depreciation (office equipment) |  |  |  |
| 1982 | Balance c/d | £ | 1981 |  | £ |
| Jan. 31 |  | 2,214 | $\text { Feb. } 1$ $1982$ | Balance b/d | 1,830 |
|  |  |  | Jan. 31 | Profit and loss account (1) | 384 |
|  |  | 2,214 |  |  | 2,214 |
|  |  |  | Feb. 1 | Balance b/d | 2,214 |

NOTE
(1) 20 per cent $\times(£ 3,750-£ 1,830)=£ 384$.
(b)

Stationery account - Current assets (stock) £325
Rent and rates account - Current assets (prepayment) £140
Current liability (expense creditor) £196
Provision for depreciation - deduct from office equipment (fixed asset)

### 12.7 Further exercises

## Question 12.1

(a) Explain, using figures, what is meant by the terms
(i) accrued expense;
(ii) prepaid expense.
[4 marks]
(b) Using your figures from part (a), say how the relevant ledger accounts would be adjusted at period end for accrued and prepaid expenses.
(c) Explain the effect and the significance on the balance sheet of accounting for
(i) accrued expenses;
(ii) prepaid expenses.

## Answer 12.1

Refer to Sections 12.2 and 12.3.

## Question 12.2

The draft trading and profit and loss account of a business show a profit for the year of £10,320.
On examination, however, the following matters were discovered:
(a) an item of $£ 230$ had been omitted from the valuation of the stock-in-trade;
(b) no account had been taken of electricity bills outstanding of $£ 80$;
(c) no entry had been made for rates paid in advance amounting to $£ 150$;
(d) carriage inwards, amounting to $£ 75$, had been credited to the profit and loss account;
(e) depreciation of $£ 630$ on plant and machinery had been omitted.

Draw up a statement to show the corrected profits after making adjustments for the above items and indicate the adjustments which will become necessary in the Balance Sheet.
(SUJB)
Answer 12.2

| Net profit as calculated |  | 10,320 |
| :---: | :---: | :---: |
| add (a) increase in closing stock |  | 230 |
| (c) rates prepaid |  | 150 |
|  |  | 10,700 |
| less (b) accrued electricity | 80 |  |
| (d) carriage inwards ( $2 \times £ 75$ ) | 150 |  |
| (e) depreciation | 630 | 860 |
| Net profit revised |  | £9,840 |

## Question 12.3

The following trial balance was extracted from the books of the Sunnyside Holiday Caravan Site on 30 September 1983:

|  | $£ 000$ | $£ 000$ |  |
| :--- | ---: | ---: | ---: |
| Capital, 1 October 1982 |  | 175 |  |
| Rents received for use of sites and vans |  | 140 |  |
| Vans owned by proprietor of site | 25 |  |  |
| Shop sales |  | 70 |  |
| Shop purchases | 25 |  |  |
| Rates | 7 |  |  |
| Electricity | 10 |  |  |
| Commission received on sale of vans | 140 |  |  |
| Shop furniture and fittings | 70 |  |  |
| Land and buildings | 5 |  |  |
| Maintenance tools and equipment | 25 |  |  |
| Shop wages | 7 |  |  |
| Maintenance wages | 1 |  |  |
| Proprietor's cash drawings | 13 |  |  |
| Stock taken from shop for proprietor's own use | 4 |  |  |
| Insurance |  | 2 |  |
| Sundry site expenses | 13 |  |  |
| Creditors for shop supplies | 390 | $\underline{390}$ |  |
| Cash in hand and at bank |  |  |  |

Take into account the following:
(i) Of the electricity accounts paid, $£ 5,000$ is to be charged to permanent tenants for power used in their vans. The accounts have been sent out but no cash has yet been received. $£ 1,000$ is the cost of the general lighting of the site and the remaining $£ 1,000$ is the cost of power used in the proprietor's private house.
(ii) $£ 1,000$ of the rates paid covers the amount due on the proprietor's house.
(iii) Of the insurance paid, $£ 2,000$ is in advance at 30 September 1983.
(iv) All shop stocks are cleared at the end of season.
(v) Depreciation to be charged at the following rates:

| Vans | 20 per cent of book value |
| :--- | :--- |
| Maintenance tools and equipment | 10 per cent of book value |
| Shop furniture and fittings | 10 per cent of book value |

Prepare
(a) A shop trading account for the year ended 30 September 1983.
(b) A profit and loss account for the site for the year ended 30 September 1983 and a Balance Sheet on that date.

Answer 12.3
(a) Shop trading account of Sunnyside Holiday Caravan Site for year ended 30 September 1983

|  | $£ 000$ |
| :--- | ---: |
| Sales | 70 |
| Purchases | 45 |
| Gross profit | 25 |

(b) Profit and loss account of Sunnyside Holiday Caravan Site for year ended 30 September 1983

|  |  | £000 |
| :--- | ---: | ---: |
| Shop net profit $(£ 25,000-£ 5,000-£ 1,000)(1)$ | 19 |  |
| Rents received |  | 140 |
| Commission on sale of vans |  | 3 |
|  |  | 162 |
| less | 24 |  |
| Rates $(£ 25,000-£ 1,000)$ | 1 |  |
| Electricity $(£ 7,000-£ 5,000-£ 1,000)$ | 25 |  |
| Maintenance wages | 11 |  |
| Insurance $(£ 13,000-£ 2,000)$ | 4 |  |
| Sundry site expenses | 5 |  |
| Depreciation - vans | 7 | 77 |
| $\quad$ maintenance tools |  |  |

## NOTE

(1) Shop net profit is gross profit less wages $£ 5,000$ and depreciation of shop furniture and fittings $£ 1,000$.

Balance sheet of Sunnyside Holiday Caravan Site as at 30 September 1983

| Fixed Assets |  | £ 000 |
| :---: | :---: | :---: |
| Land and buildings |  | 140 |
| Shop furniture and fittings |  | 9 |
| Maintenance tools and equipment |  | 63 |
| Vans |  | 20 |
|  |  | 232 |
| Current Assets |  |  |
| Prepayments | 2 |  |
| Tenants (electricity) | 5 |  |
| Cash in hand and at bank | 13 |  |
|  | 20 |  |
| less Current Liabilities |  |  |
| Creditors | 2 |  |
| Working Capital |  | 18 |
| Net Assets |  | £250 |
| Financed by: |  |  |
| Capital (balance 1 October 1982) |  | 175 |
| add net profit |  | 85 |
|  |  | 260 |
| less drawings ( $£ 7,000+£ 1,000+£ 1,000+£ 1,000)(1)$ |  | 10 |
|  |  | £250 |

NOTE

|  |  | $£ 000$ |
| :--- | :--- | :--- |
| (1) Drawings | Cash | 7 |
|  | Electricity | 1 |
|  | Rates | 1 |
|  | Stock | 1 |
|  |  | $\underline{£ 10}$ |

## Question 12.4

(a) For each of the situations given below, explain
(i) how each would be entered into the firm's ledger accounts;
(ii) the effect of each of these entries on the firm's balance sheet:
(1) bad debts to be written off;
(2) decreasing a provision for bad debts;
(3) creating a provision for depreciation;
(4) adjusting a rent receivable account for an amount in arrears at year end. [12 marks]
(b) What is the general significance to the firm's balance sheet of adjusting for such items as (1) to (4) above?
(a) (1) (i) dr. bad debts written off a/c, cr. debtors.
(ii) Reduce debtors and net profit; hence, capital.
(2) (i) dr. bad debts provision $\mathrm{a} / \mathrm{c}$, cr. profit and loss account.
(ii) Decrease provision for bad debts; hence, increase debtors, increase profit hence capital.
(3) (i) dr. depreciation $a / c$, cr. fixed asset $a / c$ or depreciation provision account.
(ii) Reduce profits hence capital, reduce value of fixed assets.
(4) (i) Carry down debit balance on rent receivable account.
(ii) Increase profit hence capital, increase debtors.
(b) Refer to Chapters 9, 11 and 12. To show assets at a fair valuation to business and recognise amounts due.

## Question 12.5

S. Harrison and Co. keep one account in their Ledger for the rates and insurance on their business premises. Their accounting year runs from 1 July to 30 June.
The local authority's accounting year runs from 1 April to 31 March; rates are demanded in two equal instalments each year. The following payments for rates were made by Harrison and Co.:

28 April 1984, £318.00 (for the period 1 April 1984 to 30 September 1984).
26 October 1984, £318.00 (for the period 1 October 1984 to 31 March 1985).
25 April 1985, $£ 332.00$ (for the period 1 April 1985 to 30 September 1985).
The premises were insured for $£ 76,000$ (for 1984) and $£ 80,000$ (for 1985). The annual insurance premium, calculated at the rate of 15 pence per $£ 100$, is payable in advance for the period 1 January to 31 December. The premiums were duly paid by Harrison and Co. on 28 December 1983 (for 1984) and 29 December 1984 (for 1985).

You are asked:
(a) to prepare the Rates and Insurance Account in Harrison and Co.'s Ledger for the year to 30 June 1985;
(b) to say what entries in respect of rates and insurance you would expect to find in Harrison and Co.'s Balance Sheet at 30 June 1985.

## Answer 12.5

(a)

| Rates and insurance account |  |  |  |  |  |
| :--- | :--- | ---: | :--- | :--- | ---: |
| 1984 |  | 1985 |  |  |  |
| July 1 | Balance b/d (1) | 5,859 | June 30 | Profit and loss |  |
| Oct. 26 | Bank (rates) | 318 |  | (balancing figure) | 12,343 |
| Dec. 29 | Bank (insurance) | 12,000 | June 30 | Balance c/d (2) | 6,166 |
| 1985 |  |  |  |  |  |
| Apr. 25 | Bank (rates) | $\frac{332}{18,509}$ |  | 18,509 |  |
|  |  | $\underline{6,166}$ |  |  |  |

## WORKINGS

(1) 1 July 1984 prepaid rates $6 / 12 \times £ 318=$
prepaid insurance $6 / 12 \times(15 \%$ of $£ 76,000) \quad \underline{5,700}$
(2) 30 June 1985 prepaid rates $6 / 12 \times £ 332166$
prepaid insurance $6 / 12 \times(15 \%$ of $£ 80,000)$ 6,000 £6,166
(b)

30 June 1985 Balance Sheet extract
Prepayments £6,166

# 13 Departmental Accounts 

### 13.1 Introduction

One of the reasons for keeping accounts is to provide information for the owners and management of the business. One of the important areas of information relates to the profitability of the business. It is obviously important to know the overall or total profit of the business, but in the case of a business running separate departments or selling distinct and separate products it is also useful to know the profit made by each department or earned by each product. This is the purpose of departmental accounts: to provide us with information regarding profitability of separate departments.

We can use this information in various ways. We can compare one department with another with a view to taking action to improve the profitability of the least profitable department. Also, we can ensure that losses within one particular department are not hidden by the overall profit of the business, and, following on from this, we can calculate the effects of closing down any one department.

### 13.2 Expenses

If we are to calculate the profit of each department, we have to consider how we intend to apportion expenses between departments. There are many and varied bases for doing this, and each business will use bases for apportioning its various expenditures that it considers to be the most logical in the circumstances.

The following list is not exhaustive but will give some ideas of possible bases.

Expense
Rent and rates
Canteen costs
Salaries and wages
Power, heating and lighting
Selling expenses

Basis of apportioning
Floor area
Number of employees
Time spent in each department
Actual metered units
Sales value

### 13.3 Preparation of departmental accounts

When tackling examination questions on departmental accounts, you should prepare the final accounts in the usual way, as already illustrated, but draw up alongside columns for each department or product. If you complete the total columns first for the whole business, you can then go back and apportion the costs as required to the other columns.

### 13.4 Worked examples

## Example 13.1

D. Bird owns a retail store with two departments, one dealing in electrical goods and the other in furniture. The following information has been extracted from his books for the year ended 31 December 1985:

|  | £ |
| :---: | :---: |
| Premises at cost | 26,000 |
| Capital | 50,400 |
| Drawings | 9,500 |
| Fixtures and fittings at cost | 12,000 |
| Motor vehicles at cost | 11,000 |
| Provisions for depreciation: |  |
| fixtures and fittings | 4,000 |
| motor vehicles | 5,000 |
| Purchases: |  |
| electrical goods | 27,950 |
| furniture | 50,850 |
| Sales: |  |
| electrical goods | 40,000 |
| furniture | 80,000 |
| Debtors | 4,130 |
| Creditors | 5,330 |
| Salaries and wages | 21,150 |
| Rates and insurance | 1,500 |
| Motor vehicle expenses | 3,000 |
| Heating and lighting | 2,500 |
| Cash at bank | 3,150 |
| Stock (1 January 1985): |  |
| electrical goods | 4,200 |
| furniture | 7,800 |

You are required to prepare trading and profit and loss accounts, in columnar form, to show the gross profit and net profit for each department for the year ended 31 December 1985, and a balance sheet for the whole business as at that date, taking into account the following additional information:
(a) Stocks at 31 December 1985 were: Electrical goods $£ 6,400$

Furniture $£ 8,700$
(b) Fixtures and fittings should be depreciated at 15 per cent on cost and the motor vehicles at 20 per cent on cost.
(c) The floor area occupied by the Electrical Goods Department is 120 square metres and that of the Furniture Department is 180 square metres.
(d) Expenses are to be allocated between the departments on the following basis:
(i) Rates and insurance and heating and lighting in proportion to the departments' floor areas.
(ii) Salaries and wages and motor vehicle expenses, other than depreciation, in proportion to the turnover of each department.
(iii) Depreciation of fixtures and fittings and motor vehicles to be shared equally by the two departments.

## Solution 13.1

Trading and profit and loss account of D. Bird for year ended 31 December 1985

|  |  | Electrical | Furniture |  |  | $\frac{\text { Total }}{£}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | £ |  | £ |  |  |
| Sales |  | 40,000 |  | 80,000 |  | 120,000 |
| Stock (1 January 1985) | 4,200 |  | 7,800 |  | 12,000 |  |
| Purchases | 27,950 |  | 50,850 |  | 78,800 |  |
|  | 32,150 |  | 58,650 |  | 90,800 |  |
| less Stock (31 December 1985) | 6,400 |  | 8,700 |  | 15,100 |  |
| Cost of sales |  | 25,750 |  | 49,950 |  | 75,700 |
| Gross profit |  | 14,250 |  | 30,050 |  | 44,300 |
| Salaries and wages | 7,050 |  | 14,100 |  | 21,150 |  |
| Rates and insurance | 600 |  | 900 |  | 1,500 |  |
| Motor vehicle expenses | 1,000 |  | 2,000 |  | 3,000 |  |
| Heating and lighting | 1,000 |  | 1,500 |  | 2,500 |  |
| Depreciation furniture and fittings | 900 |  | 900 |  | 1,800 |  |
| Depreciation motor vehicles | 1,100 | 11,650 | 1,100 | 20,500 | 2,200 | 32,150 |
| Net profit |  | 2,600 |  | 9,550 |  | 12,150 |

Balance sheet of D. Bird as at 31 December 1985

| Fixed Assets | $\frac{\text { Cost }}{£}$ | $\frac{\text { Depreciation }}{£}$ | $\frac{\text { Net book value }}{£}$ |
| :---: | :---: | :---: | :---: |
| Premises | 26,000 |  | 26,000 |
| Fixture and fittings | 12,000 | 5,800 | 6,200 |
| Motor vehicles | 11,000 | 7,200 | 3,800 |
|  | 49,000 | 13,000 | 36,000 |
| Current Assets |  |  |  |
| Stock |  | 15,100 |  |
| Debtors |  | 4,130 |  |
| Cash at bank |  | 3,150 |  |
|  |  | 22,380 |  |
| less Current Liabilities |  |  |  |
| Creditors |  | 5,330 |  |
| Working capital |  |  | 17,050 |
| Net Assets |  |  | £53,050 |
| Capital (balance 1 January 1982) |  |  | 50,400 |
| add Net Profit |  |  | 12,150 |
|  |  |  | 62,550 |
| less drawings |  |  | 9,500 |
|  |  |  | £53,050 |

## Example 13.2

Adam Parrish carried on a business as a wholesaler selling two distinct products, X and Y . The following information was available on his activities for the year ended 31 March 1981.

| Balances as at 1 April 1980 | f |
| :---: | :---: |
| Freehold premises at cost | 36,000 |
| Capital | 118,700 |
| Motor vehicles at cost | 20,000 |
| Fixtures and fittings at cost | 25,000 |
| Stocks X | 6,500 |
| Y | 26,000 |
| Provisions for depreciation: |  |
| Motor vehicles | 3,500 |
| Fixtures and fittings | 4,500 |
| Balances as at 31 March 1981 |  |
| Purchases X | 35,000 |
| Y | 158,000 |
| Sales X | 43,500 |
| Y | 201,950 |
| Sales returns X | 3,500 |
| Y | 11,950 |
| Purchase returns X | 4,300 |
| Y | 14,900 |
| Drawings | 9,000 |
| Trade creditors | 21,000 |
| Trade debtors | 22,950 |
| Balance at bank | 18,900 |
| Cash | 3,050 |
| Administration expenses | 15,000 |
| Selling expenses | 21,500 |

The following further information had not yet been taken into account:
(i) during the year he had taken $£ 450$ of good X for his own use; the goods taken were valued at cost price;
(ii) depreciation was to be provided as follows: motor vehicles 20 per cent on cost fixtures and fittings 10 per cent on cost;
(iii) stocks at 31 March 1981:

$$
\begin{array}{cc} 
& £ \\
\mathbf{X} & 7,750 \\
\mathrm{Y} & 31,200
\end{array}
$$

(iv) commissions owing to sales men as at 31 March 1981 was $£ 1,350$;
(v) administration expenses paid for $1981 / 82$ were $£ 1,500$.

## REQUIRED

(a) Separate trading accounts for each of the products X and Y (columnar presentation may be used) for the year ended 31 March 1981.
(b) A profit and loss account for the whole business for the year ended 31 March 1981.
(c) A detailed statement of the working capital as at 31 March 1981.
(AEB)

## Solution 13.2

Trading and profit and loss account of Adam Parrish for year ended 31 March 1981


A detailed balance sheet is not required but is shown here for illustrative purposes.

Balance sheet of Adam Parrish at 31 March 1981

| Fixed Assets | Cost | Depreciation | Net book value |
| :---: | :---: | :---: | :---: |
|  | £ | £ | £ |
| Premises | 36,000 | - | 36,000 |
| Fixtures and fittings | 25,000 | 7,000 | 18,000 |
| Motor vehicles | 20,000 | 7,500 | 12,500 |
|  | 81,000 | 14,500 | 66,500 |
| Current Assets |  |  |  |
| Stock |  | 38,950 |  |
| Debtors |  | 22,950 |  |
| Prepayments |  | 1,500 |  |
| Bank balance |  | 18,900 |  |
| Cash |  | 3,050 |  |
|  |  | 85,350 |  |
| less Current Liabilities |  |  |  |
| Creditors | 21,000 |  |  |
| Expenses creditors | 1,350 | 22,350 |  |
| Working Capital |  |  | 63,000 |
| Net Assets |  |  | £129,500 |
| Financed by |  |  |  |
| Capital (balance 1 April 1980) |  |  | 118,700 |
| add Net Profit |  |  | 20,250 |

less drawings $(£ 9,000+£ 450)$

| 138,950 |
| ---: |
| 9,450 |
| $£ 129,500$ |$~$

### 13.5 Further exercise

## Question 13.1

Fairholm Ltd own a department store with three departments, and the following figures are taken from their books for the year ended 31 December, 1982:

| Sales | $£$ |
| :--- | ---: |
| Department A | 125,000 |
| Department B | 86,000 |
| Department C | 75,000 |
| Purchases |  |
| Department A | 91,000 |
| Department B | 69,000 |
| Department C | 55,000 |
| Stock 1 January 1982 | 8,930 |
| Department A | 6,110 |
| Department B | 6,850 |
| Department C |  |
| Stock 31 December 1982 | 9,720 |
| Department A | 5,870 |
| Department B | 6,160 |

You find that purchases, amounting to $£ 880$, have been charged incorrectly to Department C instead of Department B and that sales of $£ 1,350$ have been credited to Department A, whereas $£ 750$ of this amount should have been credited to Department B and the balance to Department C.
You are asked to prepare:
(a) a trading account for each department after making adjustments for the errors which have been indicated (a columnar form of presentation would be appropriate);
(b) a statement showing the gross profit as a percentage of sales for each department.
(Calculations should be correct to one decimal place.)
(SUJB)

## Answer 13.1

(a)

Trading account of Fairholm Ltd for the year ended 31 December 1982

|  | Department |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A |  | B |  | C |
|  | £ |  | £ |  | £ |
| Sales | 123,650 |  | 86,750 |  | 75,600 |
| Stock (1 Jan. 1982) 8,930 |  | 6,110 |  | 6,850 |  |
| Purchases 91,000 |  | 69,880 |  | 54,120 |  |
| 99,930 |  | 75,990 |  | 60,970 |  |
| less Stock (31 Dec. 1982) 9,720 |  | 5,870 |  | 6,160 |  |
| Cost of sales | 90,210 |  | 70,120 |  | 54,810 |
| Gross profit | 33,440 |  | 16,630 |  | 20,790 |
| (b) <br> Gross profit margin $\left(\frac{\text { Gross profit }}{\text { Sales }} \times 100\right)$ | 27.0\% |  | 19.2\% |  | 27.5\% |

### 14.1 Introduction

We have, in previous chapters, looked at the double-entry system of book-keeping. The advantages of the system can be summarised as follows:
(i) There is a complete record of every transaction.
(ii) There is an arithmetical check on the accuracy of the figures.
(iii) Greater control can be exercised over the accounting records.
(iv) Certain subsidiary functions in larger businesses can be delegated to junior staff.
(v) Greater reliability can be placed on the accounts produced from those records.

It would, however, be unrealistic to expect every business to maintain a full set of accounting records using the double-entry system. Many smaller businesses have neither the time nor the experience necessary to do so and can not afford the expense of outside staff to keep such records.

However, every business needs to prepare accounts from time to time, if only to show to the tax authorities, and in this chapter we shall be concerned primarily with the preparation of accounts or at least the calculation of net profit where the double-entry system of book-keeping is not employed. Using the same techniques, we shall also examine how we can prepare accounts, even though rather limited, when accounting records have been lost or destroyed, and we are in the same position as if double-entry accounting records had not been kept. Finally, we might also have to employ the same approach where stock has been physically lost or destroyed and we need to make a calculation of that stock which has been lost or destroyed.

### 14.2 Statement of affairs

In Section 4.2 we stated that the only time owner's capital is increased or decreased is when profits (or losses) are made or capital is introduced or withdrawn from the business. Taking the worst situation, where there are no records of daily transactions of the business, if we can construct a balance sheet at two dates, then the difference between the two capital balances must be the profit earned by the business, after adjusting for introductions and withdrawals of capital. We cannot, however, construct a balance sheet if we do not have accounts from which to extract balances, but if similar information can be obtained from the owner of the business or elsewhere, we can construct a statement similar to a balance sheet, which we call a statement of affairs. An example may make this clearer.

Dawn Guymer runs a small wholesale business and estimates the assets and liabilities of the business at the following dates to be as stated.


We can calculate that the capital account has increased by $£ 1,150$ ( $£ 6,240-$ $£ 5,090$ ). If there were no introductions or withdrawals of capital during the year, then her net profit must have been $£ 1,150$, subject to the accuracy of the statement of affairs. If fresh capital had been introduced by Dawn Guymer of $£ 500$, then her profit would have been $£ 500$ less than $£ 1,150$ - that is, $£ 650$. If, on the other hand, she had withdrawn cash of $£ 1,100$ from the business, then her profit would have been $£ 1,100$ more than $£ 1,150$, making $£ 2,250$.

The above profit calculations can be restated by showing the movements in capital as below:

|  | £ |  | £ |
| :---: | :---: | :---: | :---: |
| Opening capital (1 Jan. 1985) | 5,090 |  | 5,090 |
| add Capital introduced during year | 500 | or | - |
| Net profit (balancing figure) | 650 |  | 2,250 |
|  | 6,240 |  | 7,340 |
| less Drawings | - |  | 1,100 |
| Closing capital (3i Dec. 1985) | £6,240 |  | £6,240 |

The above method of calculating profits is unsatisfactory, since it relies on estimates in the statement of affairs and the advantages of double-entry bookkeeping listed in Section 14.1 are lost. Additionally, in the case where there are no records of daily transactions such as the above, we have no idea as to how the profit has been earned - for example, the figures for sales, gross profit and expenses.

In cases where we have a detailed record of cash and bank transactions or these can be estimated, we can construct a trading and profit and loss account.

### 14.3 Trading and profit and loss account from incomplete records

Let us continue the example above, but now the owner is able to supply cash and bank figures from which we construct a cash book as follows:

|  |  | Cash | Bank |  |  | Cash | Bank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 5 | £ |  |  | £ | £ |
| Jan. 1 | Balance b/d |  | 50 | Dec. 31 | Creditors | - | 8,010 |
| Dec. 31 | Debtors |  | 12,710 | Dec. 31 | Fittings |  | 900 |
| Dec. 31 | Bank | 1,545 |  | Dec. 31 | Rent |  | 800 |
|  |  |  |  | Dec. 31 | Other expenses | 200 | 1,255 |
|  |  |  |  | Dec. 31 | Drawings | 1,100 |  |
|  |  |  |  | Dec. 31 | Loan repayment |  | 200 |
|  |  |  |  | Dec. 31 | Cash |  | 1,545 |
|  |  |  |  | Dec. 31 | Balance c/d | 250 | 50 |
|  |  | 1,550 | 12,760 |  |  | 1,550 | 12,760 | 1986

Jan. 1 Balance b/d 250

From the above we can calculate sales, purchases and rent by constructing accounts as follows from information in the statement of affairs and the cash book. We can enter the opening and closing balances from the statement of affairs, and the cash and bank figures from our cash book, and we then enter a balancing figure which is the appropriate trading and profit and loss account item. The accounts set out below may help to clarify this.

Debtors


Alternatively, we can calculate the required figures as follows:

| (a) | Calculation of sales figure | £ |
| :---: | :---: | :---: |
|  | Amounts received from debtors | 12,710 |
|  | add amounts due from debtors at 31 Dec. 1985 | 350 |
|  |  | 13,060 |
|  | less amounts due from debtors at 1 Jan 1985 | 490 |
|  | Sales for 1985 | £12,570 |
| (b) | Calculation of purchases figure | £ |
|  | Amounts paid to creditors | 8,010 |
|  | add amounts due to creditors at 31 Dec. 1985 | 750 |
|  |  | 8,760 |
|  | less amounts due to creditors at 1 Jan. 1985 | 770 |
|  | Purchases for 1985 | £7,990 |
| (c) | Calculation of rent expense | £ |
|  | Rent paid during year | 800 |
|  | add rent due at 31 Dec. 1985 | 60 |
|  |  | 860 |
|  | less rent due at 1 Jan. 1985 | 80 |
|  | Rent expense for 1985 | £780 |

Using figures from the above accounts, the statement of affairs and cash book, we can now construct a trading and profit and loss account.

Trading and profit and loss account of Dawn Guymer for year ended 31 December 1985

|  |  | £ |
| :---: | :---: | :---: |
| Sales (see debtors account) |  | 12,570 |
| Opening stock (1 Jan. 1985) | 1,095 |  |
| Purchases (see creditors account) | 7,990 |  |
|  | 9,085 |  |
| less Closing stock (31 Dec. 1985) | 1,000 |  |
| Cost of sales |  | 8,085 |
| Gross profit |  | 4,485 |
| less |  |  |
| Rent (see rent account) | 780 |  |
| Other expenses (see cash book) (£1,255 + £200) | 1,455 | 2,235 |
| Net profit |  | £2,250 |

The net profit of $£ 2,250$ agrees with the figure which we arrived at in Section 14.2.

### 14.4 Goods stolen or lost

If a business loses stock through a burglary or fire, we need to know the value of that stock for insurance purposes.We may be able to find out its value from stock records, but if these do not exist, we may estimate the stock lost if we know our normal gross profit margin. We have so far calculated our gross profit by deducting cost of sales from sales. It is therefore a simple matter if we know gross profit and other trading account items, except closing stock, to insert this latter amount as a balancing figure.

For example, Stuart Davis has a small retail business which suffers a fire on 15 March 1986. He knows that his stock on 1 January was $£ 10,000$. His sales since that date have been $£ 30,000$, his purchases have been $£ 18,000$, and he estimates his gross profit at 20 per cent of sales. We can construct a trading account as follows:

Trading account of Stuart Davis for 11 weeks ended 15 March 1986

|  |  | £ |
| :---: | :---: | :---: |
| Sales |  | 30,000 |
| Opening stock | 10,000 |  |
| Purchases | 18,000 |  |
|  | 28,000 |  |
| less Closing stock | 4,000(3) |  |
| Cost of Sales |  | 24,000(2) |
| Gross profit |  | 6,000(1) |

notes
(1) We know that his gross profit is 20 per cent of sales - that is, $£ 6,000$ ( 20 per cent $\times £ 30,000$ ).
(2) Therefore cost of sales is $£ 24,000$ ( $£ 30,000$ less $£ 6,000$ ).
(3) Closing stock must therefore be the difference between cost of goods available for sale of $£ 28,000$ and cost of sales $£ 24,000$ - that is, $£ 4,000$. If, additionally, the business has only incomplete records, it may first be necessary to construct debtors and creditors accounts as in Section 14.3 to find purchases and sales figures.

### 14.5 Worked examples

## Example 14.1

On 31 December 1982 G. Philpott's balances were: premises $£ 55,000$; delivery vans $£ 3,900$; stock $£ 5,300$; bank $£ 4,290$; trade debtors $£ 3,910$; trade creditors $£ 2,900$; capital $£ 69,500$. Mr Philpott does not keep full accounting records, but the following information, relating to the half-year ended 30 June 1983, is available.

|  | $£$ |
| :--- | ---: |
| Cash paid into bank, proceeds of cash sales | 24,320 |
| Cheques received from trade debtors | 12,900 |
| Cheques drawn for private expenditure | 4,500 |
| Cheques drawn for expense items | 3,125 |
| Discount allowed | 50 |
| Discount received | 41 |
| Cheques drawn for payment to suppliers | 12,320 |
| Paid for extension to premises by cheque | 25,000 |

A $£ 10,000$ bank loan was taken out on 1 April 1983, repayable in equal quarterly instalments over a five-year period with interest at 12 per cent per annum. The first quarterly repayment was made on 30 June with the interest accrued to that date. Depreciation on delivery vans is at the rate of 20 per cent per annum.
On 30 June 1983 the following figures are available: stock $£ 6,300$; trade creditors $£ 1,900$; trade debtors $£ 5,300$.

## REQUIRED

(a) For the six months ended 30 June 1983,
(i) the bank account;
[5 marks]
(ii) the trade debtors total account and trade creditors total account, showing the calculation of credit sales and credit purchases;
(iii) the trading and profit and loss accounts;

NOTE: A balance sheet is NOT required.
[7 marks]
(b) An explanation of the purpose of discount allowed and discount received. How does each item affect the proprietor's capital?

## Solution 14.1

(a)
(i)

Bank

|  |  | $£$ |  |  |  |
| :--- | :--- | :---: | :--- | :--- | ---: |
| Jan. 1 | Balance b/d | 4,290 | June 31 | Drawings | 4,500 |
| June 30 | Sales | 24,320 | June 31 | Expenses | 3,125 |
| June 30 | Debtors | 12,900 | June 31 | Creditors | 12,320 |
| April 1 | Loans | 10,000 | June 31 | Premises | 25,000 |
|  |  |  | June 31 | Loan | 2,500 |
|  |  |  | June 31 | Interest (1) | 300 |
|  |  |  | June 31 | Balance c/d | 3,765 |
|  |  | $\underline{51,510}$ |  |  | $\underline{51,510}$ |
| July 1 | Balance b/d | 3,765 |  |  |  |

## NOTE (1)

12 per cent $\times \frac{3}{12} \times £ 10,000=£ 300$
(ii)

Debtors

| Jan. 1 <br> June 30 | Balance b/d <br> Sales (balancing figure) | £ | June 30 <br> June 30 <br> June 30 | Bank <br> Discounts allowed Balance c/d | $\begin{array}{r} £ \\ 12,900 \\ 50 \\ 5,300 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 3,910 |  |  |  |
|  |  | 14,340 |  |  |  |
|  |  |  |  |  |  |
| July 1 | Balance b/d | 18,250 |  |  | 18,250 |
|  |  | 5,300 |  |  |  |
|  |  | Creditors |  |  |  |
|  |  | £ |  |  | £ |
| June 30 | Bank | 12,320 | Jan. 1 | Balance b/d | 2,900 |
| June 30 | Discounts received | 41 | June 30 | Purchases (balancing figure) | 11,361 |
| June 30 | Balance c/d | 1,900 |  |  |  |
|  |  | 14,261 |  |  | 14,261 |
|  |  |  | July 1 | Balance b/d | 1,900 |

(iii)

Trading and profit and loss account of G. Philpott for 6 months ended 30 June 1983

|  |  |  | £ |
| :---: | :---: | :---: | :---: |
| Sales ( $£ 24,320+£ 14,340)$ |  |  | 38,660 |
| Opening stock (1 Jan. 1983) | 5,300 |  |  |
| Purchases | 11,361 |  |  |
|  | 16,661 |  |  |
| less Closing stock (30 June 1983) | 6,300 |  |  |
| Cost of sales |  |  | 10,361 |
| Gross profit add Discounts received |  |  | 28,299 |
|  |  |  | 41 |
|  |  |  | 28,340 |
| less |  |  |  |
| Discounts allowed |  | 50 |  |
| Expenses |  | 3,125 |  |
| Interest |  | 300 |  |
| Depreciation (20 per cent $\times \frac{6}{12} \times £ 3,900$ ) |  | 390 | 3,865 |
| Net profit |  |  | £24,475 |

A balance sheet, while not required, is shown for illustration purposes.
Balance sheet of G. Philpott as at 30 June 1983

| Fixed Assets | $\mathfrak{£}$ |
| :--- | ---: |
| Premises | 80,000 |
| Delivery van $(£ 3,900-£ 390)$ | 3,510 |
|  | $\mathbf{8 3 , 5 1 0}$ |


| Current Assets |  |
| :--- | ---: |
| Stock | 6,300 |
| Debtors | 5,300 |
| Bank | 3,765 |
|  | 15,365 |


| less Current Liabilities |  |  |
| :--- | ---: | ---: |
| $\quad$ Creditors | 1,900 |  |
|  |  |  |
| Working Capital |  | $\underline{13,465}$ |
|  |  | $\underline{£ 96,975}$ |


| Financed by |  |
| :--- | ---: |
| Capital (1 January 1983) | 69,500 |
| add Net Profit | 24,475 |
|  | 93,975 |
| less Drawings | 4,500 |
| Capital (30 June 1983) | 89,475 |
| Loan | 7,500 |
|  | $£ 96,975$ |

(b) Discounts allowed to encourage prompt payment from debtors to help cash flow and reduce possibility of bad debts. Expense reduces net profit and therefore capital. Discounts received offered to us by suppliers for same
reasons as we offer them to our customers. Income increases profit and therefore owner's capital.

## Example 14.2

On 1 January 1981 Colin Jakeman started business buying old motor vehicles, which he broke up, selling good parts as spares and the remainder as scrap metal. All purchases are paid for immediately by cheque and all sales of spares are for cash which is banked immediately. He does not keep a proper set of books, but all transactions are carefully recorded in a note book. The entries for the year ended 31 December 1981 have been summarised as follows:

| 1 January 1981 | $£$ |
| :--- | ---: |
| Started business using freehold land and building valued at | 70,000 |
| Motor lorry | 10,000 |
| Cash in bank | 1,000 |
| During the year ended 31 December 1981: | $£$ |
| Purchases of old vehicles (paid for by cheque) | 4,500 |
| Sales of salvaged parts for cash | 15,000 |
| Sales of scrap on credit | 14,700 |
| Payments received for scrap | 13,600 |
| Wages paid to car dismantlers | 5,000 |
| Rates paid on property (1 Jan. 1981-31 March 1982) | 900 |
| Insurance paid (including £200 for 1982) | 1,200 |
| Heating and lighting paid during year | 750 |
| Heating and lighting unpaid but due for year ended 31 Dec. 1981 | 210 |
| Drawings during year | 6,000 |

ngs during year
On 1 July 1981 he purchased a car crushing machine for $£ 30,000$. The whole amount was lent to him by the bank. On 31 December the bank debited his current account with a halfyear's interest at the rate of 20 per cent per annum and his first repayment of $£ 5,000$.

Colin Jakeman agrees that the lorry should be depreciated by 20 per cent of the value at 1 January 1981, and that the crusher should be depreciated by 10 per cent at cost. On 31 December 1981 stocks of old vehicles, spares, etc., were valued at $£ 500$.
A bank statement provided up to and including 31 December 1981 showed a bank balance of $£ 3,550$, but cheque stubs revealed that cheques to the value of $£ 300$ had not been presented.

Prepare a trading and profit and loss account for the year ended 31 December 1981 and a balance sheet on the date.

## Solution 14.2

Trading and profit and loss account of Colin Jakeman for year ended 31 December 1981

|  | $£$ |  |
| :--- | ---: | :---: |
| Sales (£15,000 +£14,700) |  | 29,700 |
| Purchases | 4,500 |  |
| less Stock (31 December 1981) | $\underline{500}$ |  |
|  | 4,000 |  |
| Wages | $\underline{5,000}$ |  |
| Cost of sales |  | $\underline{9.000}$ |
| Gross profit |  | 20,700 |
| less |  |  |


| Rates $(£ 900-£ 180)$ | 720 |  |
| :--- | ---: | ---: |
| Insurance $(£ 1,200-£ 200)$ | 1,000 |  |
| Heating and lighting $(£ 750+£ 210)$ | 960 |  |
| Interest $\left(20 \% \times \frac{6}{12} \times £ 30,000\right)$ | 3,000 |  |
| Depreciation motor lorry | 2,000 |  |
| Depreciation machine | $\underline{3,000}$ | $\underline{10,680}$ |
| Net profit |  | $\underline{10,020}$ |

Balance sheet of Colin Jakeman as at 31 December 1981

| Fixed Assets |  | £ |
| :---: | :---: | :---: |
| Land and building |  | 70,000 |
| Machine |  | 27,000 |
| Motor lorry |  | 8,000 |
|  |  | 105,000 |
| Current Assets |  |  |
| Stock | 500 |  |
| Debtors (£14,700-£13,600) | 1,100 |  |
| Prepayments (£200 + £180) | 380 |  |
| Bank (£3,550-£300) | 3,250 |  |
|  | 5,230 |  |
| less Current Liabilities |  |  |
| Expense creditors | 210 |  |
| Working Capital |  | 5,020 |
| Assets Employed |  | 110,020 |
| Financed by |  |  |
| Capital (1 January 1981) |  | 81,000 |
| add net profit |  | 10,020 |
|  |  | 91,020 |
| less drawings |  | 6,000 |
| Capital (31 December 1981) |  | 85,020 |
| Loan (£30,000-£5,000) |  | 25,000 |
|  |  | £110,020 |

## Example 14.3

On 1 April 1982, the first day of his accounting year, Mr F. Morris valued the stock in his retail store at $£ 4,570$ (cost price).
To determine the selling price of all goods sold, he adds 50 per cent to the cost price.
A fire occurred on 5 November 1982 and the stocktaking immediately afterwards showed the stock remaining after the fire, valued at the lower of cost or market price, to be worth £2,220.
The information below relates to the period from 1 April 1982 to the time of the fire:

|  | $£$ |
| :--- | ---: |
| Sales | 63,840 |
| Purchases | 44,540 |
| Returns inwards (all in good condition) | 240 |
| Returns outwards | 540 |
| Stock drawings by Mr Morris for his own use (cost price) | 680 |

Mr Morris made a claim on his insurance company and eventually accepted $£ 2,750$ in full settlement.

You are asked to show your calculation (which can be partly or wholly in the form of an account, if you wish) of the net loss sustained by Mr Morris through the fire.

## Solution 14.3

Trading account of F. Morris for period 1 April 1982 to 5 November 1982 (assuming no fire)

|  |  | £ |
| :---: | :---: | :---: |
| Sales |  | 63,600 |
| Opening stock (1 April 1982) | 4,570 |  |
| Purchases ( $£ 44,540$ less £540) | 44,000 |  |
|  | 48,570 |  |
| less stock taken for own use | 680 |  |
|  | 47,890 |  |
| less Closing stock (balancing figure) (2) | 5,490 |  |
| Cost of sales (1) |  | 42,400 |
| Gross profit ( $\left.\frac{50}{150} \times £ 63,600\right)$ |  | £21,200 |
| NOTES |  |  |
| (1) Sales less gross profit. <br> (2) $£ 47,890-£ 42,400$ |  |  |
|  |  |  |
|  |  | £ |
| Stock immediately before fire (as above) |  | 5,490 |
| Stock undamaged in fire |  | 2,220 |
| Stock damaged in fire |  | 3,270 |
| Insurance settlement |  | 2,750 |
| Net loss sustained by F. Morris |  | £520 |

### 14.6 Further exercises

## Question 14.1

On 1 May 1982, A. Jackson opened a photographic studio and paid $£ 14,000$ into a business bank account as the commencing capital.
He kept no proper books of account for his first year in business, but the summary given below, covering the year to 30 April 1983, has been prepared from statements supplied by the bank.
(a) Payments into the business bank account: Capital, 1 May 1982
Payments received for photographic work done (after deducting A. Jackson's drawings and certain expenses - see below)
(b) Cheques drawn on the business bank account:
Purchase of equipment (furniture and fittings, cameras, dark-room equipment, etc.)
Advertising 265
$\begin{array}{ll}\text { Lighting and heating } & 656\end{array}$
Rent, rates and insurance ..... 3,490
Miscellaneous expenses ..... 214
Payments to suppliers of photographic materials ..... 2,730

Mr Jackson tells you that the total amount received by him for photographic work done was $£ 19,560$. He explains that the difference between this total and the amount paid into bank is accounted for by: drawings $£ 8,100$, wages of a part-time assistant $£ 1,840$, miscellaneous expenses $£ 66$.
You are asked to prepare a Profit and Loss Account for the year ended 30 April 1983 and a Balance Sheet as at 30 April 1983, taking the following matters into consideration:
(i) Unpaid bills from suppliers of photographic materials totalled $£ 525$ at 30 April 1983.
(ii) $£ 950$ is to be allowed for depreciation of equipment.
(iii) At 30 April 1983, the stock of photographic materials is valued at $£ 620$.
(iv) The item above for rent, rates and insurance $(£ 3,490)$ includes the premium paid ( $£ 144$ ) on an insurance policy covering a 12 months' period starting on 1 August 1982.
(v) Mr Jackson tells you that at 30 April $1983 £ 2,720$ is owing to him for work done. He estimates, however, that only three-quarters of this amount will be collected eventually.

Answer 14.1
Profit and loss account of P. Jackson for year ended 30 April 1983

|  |  | £ |
| :---: | :---: | :---: |
| Sales (£19,560 + £2,720) |  | 22,280 |
| Purchases of materials ( $£ 2,730+£ 525$ ) | 3,255 |  |
| less Stock of materials (30 April 1983) | 620 |  |
|  |  | 2,635 |
|  |  | 19,645 |
| less |  |  |
| Advertising | 265 |  |
| Lighting and heating | 656 |  |
| Rent, rates and insurance ( $£ 3,490-\left(\frac{3}{12} \times 144\right)$ ) | 3,454 |  |
| Miscellaneous expenses (£214+£66) | 280 |  |
| Wages | 1,840 |  |
| Depreciation of equipment | 950 |  |
| Provision for doubtful debts ( $25 \% \times £ 2,720$ ) | 680 | 8,125 |
| Net profit |  | £11,520 |

Balance sheet of A. Jackson as at 30 April 1983

| Fixed Assets |  |  |  |
| :---: | :---: | :---: | :---: |
| Equipment (£11,220-£950) |  |  | 10,270 |
| Current Assets |  |  |  |
| Stock |  | 620 |  |
| Debtors | 2,720 |  |  |
| less provision for doubtful debts | 680 | 2,040 |  |
| Prepayments |  | 36 |  |
| Bank |  | 4,979 |  |
|  |  | 7,675 |  |
| less Current Liabilities |  |  |  |
| Creditors |  | 525 |  |
| Working Capital |  |  | 7,150 |
| Net Assets |  |  | 17,420 |


| Financed by |  |
| :--- | ---: |
| Capital (1 May 1982) | 14,000 |
| add net profit | $\underline{11,520}$ |
|  | 25,520 |
| less drawings | $\underline{8,100}$ |
| Capital (30 April 1983) | $\underline{17,420}$ |

## Question 14.2

A. Dawson, a property repairer, does not keep his business accounts by double-entry but it has been ascertained that the assets and liabilities on 1 September 1984 were:

|  | $£$ |
| :--- | ---: |
| Equipment | 4,600 |
| Bank overdraft | 2,284 |
| Sundry debtors for work done | 3,900 |
| Vehicles | 5,200 |
| Trade creditors (for materials purchased) | 2,280 |
| Cash in hand | 200 |
| Stock of materials | 2,450 |

The entries made in the business Cash Book for the year ended 31 August 1985 have been summarised as follows:

|  |  |
| :--- | ---: |
| Payments made to suppliers of materials | 9,870 |
| Vehicle running expenses | 856 |
| Assistant's wages | 4,460 |
| Amount received for work carried out | 28,570 |
| A. Dawson's drawings | 6,240 |
| Miscellaneous expenses | 852 |
| Purchase of equipment | 1,600 |

At 31 August 1985:
(a) after allowing for depreciation, the 31 August 1985 Balance Sheet figures for equipment and vehicles were: equipment $£ 5,200$, vehicles $£ 3,800$;
(b) stock of materials was valued at $£ 2,860$;
(c) $£ 4,100$ was owing by customers for work done;
(d) cash in hand was $£ 200$;
(e) $£ 2,580$ was owing to creditors for materials purchased.

You are asked:
(1) to calculate the capital of A. Dawson's business at 1 September 1984;
(2) to show your calculation, in account form or otherwise, of the bank balance at 31 August 1985;
(3) to prepare suitable final accounts showing the net profit for the year ended 31 August 1985;
(4) to prepare the Balance Sheet at 31 August 1985.

Answer 14.2
(1)

Statement of affairs of A. Dawson at 1 September 1984
Assets £
Equipment $\quad 4,600$
Vehicles $\quad 5,200$
Debtors 3,900
Stock 2,450
Cash $\quad 200$
16,350

(Note: It is assumed that all of the transactions mentioned in the question have been done through the bank and that the cash in hand remains static at £200.) (3)
A. Dawson Profit and Loss account for the year ended 31 August 1985

|  |  |  |
| :--- | ---: | :---: |
|  |  |  |
| Revenue from repair work (1) | 28,770 |  |
| Opening stock of materials | 2,450 |  |
| Purchases of materials (2) | $\underline{10,170}$ |  |
|  | 12,620 |  |
| less Closing stock of materials | $\underline{2,860}$ |  |
| Cost of materials used | 9,760 |  |
| Vehicle expenses | 856 |  |
| Assistant's wages | 4,460 |  |
| Miscellaneous expenses | 852 |  |
| Depreciation equipment (3) | 1,000 |  |
| Depreciation vehicles (4) | $\underline{1,400}$ |  |
| Total costs |  | $\underline{18,328}$ |
| Net profit |  | 10,442 |

## wORKINGS

(1) Cash received from customers 28,570
add amounts owing at 31 August $1985 \quad 4,100$
32,670
less amounts owing at 1 September $1984 \quad 3,900$
28,770
(2) Cash paid to suppliers 9,870
add amounts owing to suppliers at 31 August $1985 \quad 2,580$
12,450
less amounts owing to suppliers at 1 September $1984 \quad 2,280$
10,170
(3) Equipment value at 1 September 1984 4,600

Purchases during year $\quad 1,600$
6,200
less Equipment value at 31 August 1985 ..... 5,200
Depreciation for year ..... 1,000
(4) Vehicles value at 1 September 1984 ..... 5,200less Vehicles value at 31 August 19853,800
(4) A. Dawson Balance Sheet at 31 August 1985

| Fixed Assets |  |  |
| :---: | :---: | :---: |
| Equipment |  | 5,200 |
| Vehicles |  | 3,800 |
|  |  | 9,000 |
| Current Assets |  |  |
| Stock | 2,860 |  |
| Debtors | 4,100 |  |
| Cash at bank | 2,408 |  |
| Cash in hand | 200 |  |
|  | 9,568 |  |
| less Current Liabilities |  |  |
| Creditors | 2,580 |  |
| Working capital |  | 6,988 |
|  |  | £15,988 |
| Capital |  |  |
| Balance at 1 September 1984 | 11,786 |  |
| add Net profit | 10,442 |  |
|  | 22,228 |  |
| less Drawings | 6,240 |  |
| Balance at 31 August 1985 |  | £15,988 |

## Question 14.3

On 1 January 1980, the total assets of J. McMahon's business were $£ 76,360$ and the total liabilities amounted to $£ 29,150$. The corresponding figures for 31 December 1980 were: assets $£ 85,740$, liabilities $£ 34,290$. McMahon’s drawings in 1980 amounted to $£ 19,200$.
On 31 December 1981, total liabilities were $£ 45,670$. Net profit for 1981 was $£ 14,920$ and McMahon's drawings in 1981 amounted to $£ 17,500$.
On 31 December 1982, total assets were $£ 90,460$ and total liabilities were $£ 55,280$. The business made a net loss of $£ 1,860$ in 1982.
In the period 1 January 1980 to 31 December 1982, no new capital was introduced into the business by J. McMahon.
You are asked to prepare:
(1) statements showing (a) the net profit (or net loss) for 1980, (b) the total assets at 31 December 1981, (c) McMahon's drawings in 1982;
(2) Capital Account for the period 1 January 1980 to 31 December 1982.

Answer 14.3

|  | $\frac{1979}{£}$ | $\frac{1980}{£}$ | $\frac{1981}{£}$ | $\underline{1982}$ |
| :--- | :---: | :--- | :--- | :--- |
|  | 76,360 | 85,740 | $94,540(\mathrm{~b})$ | 90,460 |
| Assets | $\underline{29,150}$ | $\underline{34,290}$ | $\underline{45,670}$ | $\underline{55,280}$ |
| Liabilities | $\underline{47,210}$ | $\underline{51,450}$ | $\underline{48,870}$ | $\underline{35,180}$ |
| Capital |  | 47,210 | 51,450 | 48,870 |
| Capital (opening) |  | $\underline{23,440(a)}$ | $\frac{14,920}{70,650}$ | $\underline{66,370}$ |
| add Net profit (loss) |  | $\underline{19,200}$ | $\underline{17,500}$ | $\frac{11,860)}{47,010}$ |
| less drawings | $\underline{51,450}$ | $\underline{48,870}$ | $\underline{35,180}$ |  |
| Capital (closing) |  |  |  |  |

NOTES
(a) (b) and (c) calculated by balancing figures after figures given in question entered in above statement.

## 15 Income and Expenditure Accounts

### 15.1 Introduction

An income and expenditure account is prepared for non-trading organisations such as clubs and societies in place of the profit and loss account which we prepare for trading organisations. Items of income and expenditure are shown on this account on the basis of expenses incurred and revenue earned, which means that we must adjust for accruals and prepayments in exactly the same way as we do for trading organisations in the profit and loss account.

Since the object of non-trading organisations is usually not to make a profit but to cover expenses, we use the word 'surplus' rather than profit to refer to the excess of income over expenditure. The opposite of surplus is a deficit.

### 15.2 Accumulated fund

Non-trading organisations do not usually have a share capital as such, the finance being provided by excesses of income over expenditures. These surpluses are referred to as accumulated fund and described as such in the balance sheet.

### 15.3 Members' subscriptions

The income and expenditure account needs to reflect subscriptions in respect of the current period only, which means adjusting for accruals and prepayments as follows:
(i) We must exclude any subscriptions paid in advance and relating to the next period. These will form part of the next period's subscription income.
(ii) We must include any subscriptions which are in arrears at the end of the accounting period in so far as they relate to the current period. In the next accounting period we must be sure to exclude those subscriptions, since we have already accounted for them.

An example should help to clarify the adjustments which we need to make.
The Bootle Squash Club receives subscriptions in 1984 amounting to $£ 6,223$, of which $£ 57$ relates to 1985 . At 31 December $1984 £ 53$ is owing to the club in respect of 1984 subscriptions.

|  | $£$ |
| :--- | ---: |
| Subscriptions received | 6,223 |
| add subscriptions in arrears | 53 |
|  | 6,276 |
| less subscriptions paid in advance | 57 |
| Income from subscriptions to be shown in accounts | $£ 6,219$ |

$£ 53$ in arrears will appear as a debtor in the club's balance sheet and $£ 57$ as a creditor.
If in 1985 the club receives subscriptions amounting to $£ 7,010$ (including 1984 arrears) and at 31 December 1985 there are subscriptions paid in advance of $£ 41$ and subscriptions due unpaid of $£ 93$, its subscription income for 1985 would be calculated as follows:

|  |  | $£$ |  |
| :--- | :--- | ---: | ---: |
| Subscriptions received <br> less subscriptions in arrears at 1 Jan. 1985 | 53 | 7,010 |  |
| $\quad$ subscriptions paid in advance (i.e. re 1986) | $\underline{41}$ |  | 94 |
|  |  |  | 6,916 |
| add subscriptions paid in advance at 1 Jan. 1985 | 57 |  |  |
| $\quad$ subscriptions in arrears at 31 Dec. 1985 | $\underline{93}$ | $\underline{150}$ |  |
| Income from subscriptions to be shown in accounts |  | $\underline{£ 7,066}$ |  |

Note: It is irrelevant that the full $£ 53$ may not have been received and therefore included in the $£ 7,010$. We accrued $£ 53$ in 1984 and we must therefore reverse that accrual in 1985. We must accept that 1984 accounts have been completed and finalised and cannot be altered.

We can also calculate our subscription income by preparing the subscription account as it would appear in the ledger. Prepayments represents a creditor to the business and therefore a credit balance. Arrears represents a debtor and therefore a debit balance. Subscriptions actually received would be debited to the bank account and credited to the subscriptions account. The balancing figure is the amount transferred to the income and expenditure account. Shown below is the subscription account as it would appear in the books of the Bootle Squash Club.

| Subscriptions |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1984 | £ | 1984 |  | £ |
| Dec. 31 Balance b/d | 57 | Dec. 31 | Bank | 6,223 |
| Dec. 31 Income and expenditure account | 6,219 | Dec. 31 | Balance c/d | 53 |
|  | 6,276 |  |  | 6,276 |
| 1985 |  | 1985 |  |  |
| Jan. 1 Balance b/d | 53 | Jan. 1 | Balance b/d | 57 |
| Dec. 31 Income and expenditure account | 7,066 | Dec. 31 | Bank | 7,010 |
| Dec. 31 Balance c/d | 41 | Dec. 31 | Balance c/d | 93 |
|  | 7,160 |  |  | 7,160 |
| 1986 |  | 1986 |  |  |
| Jan. 1 Balance b/d | 93 | Jan. 1 | Balance b/d | 41 |

### 15.4 Bar trading account

In order to calculate the bar profit, we normally prepare a bar trading account in the same way as we prepare trading accounts for trading organisations. The bar
profit is then transferred to the income and expenditure account. A trading account can be prepared similarly for any subsidiary trading activity carried on by the organisation.

### 15.5 Other club activities

Other club activities can be dealt with by way of a separate trading account as above. Alternatively, similar items can be netted off on the face of the balance sheet. For example, the cost of raffle prizes can be shown as a deduction from the amounts received from raffle ticket sales, to show a net profit on the raffle.

### 15.6 Receipts and payments account

We must distinguish the receipts and payments account from an income and expenditure account. The receipt and payments account is a record only of amounts actually received and paid, the balance representing our bank and cash balances. It does not recognise accruals and prepayments but often it will be the document from which we prepare an income and expenditure account, adjusting for accruals and prepayments.

### 15.7 Worked examples

## Example 15.1

The assets and liabilities of the Parkside Cricket Club at 30 September 1981 were:
premises $£ 250,000$; subscriptions in arrears $£ 48$; equipment $£ 3,200$; bank $£ 1,896$; bar stocks £920; subscriptions in advance $£ 29$; creditors for bar supplies $£ 340$; accumulated fund £255,695.

Receipts and payments for the year ended 30 September 1982 were:
Receipts - subscriptions $£ 694$ (including $£ 42$ owing from last year); bar takings $£ 7,200$; socials and dances $£ 320$; sub-letting of cricket ground $£ 200$;
Payments - equipment $£ 1,000$; ground maintenance $£ 1,260$; rates $£ 1,200$; creditors for bar supplies $£ 2,980$; light and heat $£ 220$; insurance $£ 86$; general expenses $£ 104$.

At the end of September 1982, the following further information was available.

1. Subscriptions not received from year ended 30 September 1981 are to be written off.
2. Depreciate equipment by $£ 200$.
3. Creditors for bar supplies $£ 786$.
4. Subscriptions in arrears $£ 45$.
5. Light and heat owing $£ 30$.
6. Insurance prepaid $£ 14$.
7. Bar stocks $£ 821$.

## REQUIRED

(a) For the year ended 30 September 1982:
(i) an account showing the profit or loss on the bar;
(ii) the income and expenditure account

Note: A balance sheet is not required.
(b) A statement of the main difference between a non-commercial organisation and a busi-

## Solution 15.1

(a) (i)

Bar trading account for year ended 30 September 1982

|  |  | $£$ |
| :--- | ---: | :---: |
| Bar takings |  | 7,200 |
| Stock (1 Oct. 1981) | 920 |  |
| Purchases (1) | $\underline{3,426}$ |  |
|  | $\boxed{4,346}$ |  |
| less Stock (31 Sept. 1982) | $\boxed{821}$ |  |
| Cost of sales |  | $\underline{3,525}$ |
| Bar profits |  | $\underline{£ 3,675}$ |

NOTE
(1) Payments $£ 2,980$ add creditors ( 31 Sept. 1982) $£ 786$ less creditors ( 1 Oct. 1981) $£ 340=£ 3,426$.
(ii)

Income and expenditure account of Parkside Cricket Club for year ended 30
September 1982

| Ground maintenance |  |  | $£$ |
| :--- | ---: | :--- | ---: |
| Rates | 1,260 | Bar profit | 3,675 |
| Light and heat $(£ 220+£ 30)$ | 1,200 | Subscriptions (1) | 720 |
| Insurance $(£ 86-£ 14)$ | 250 | Socials and dances | 320 |
| General expenses | 72 | Sub-letting | 200 |
| Depreciation equipment | 104 |  |  |
| Surplus income over expenditure | 200 |  |  |
|  | $\underline{1,829}$ |  | $\underline{4,915}$ |

NOTE (1)

| Dr. | Subscriptions |  |  |  | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1981 |  | £ | 1981 |  | £ |
| Oct. 1 | Balance b/d | 48 | Oct. 1 | Balance b/d | 29 |
| 1982 |  |  | 1982 |  |  |
| Sept. 30 | Income and expenditure account | 720 | Sept. 30 | Bank | 694 |
|  |  |  |  | Balance c/d | 45 |
|  |  | 768 |  |  | 768 |
| Oct. 1 | Balance b/d | 45 |  |  |  |

While not required by the question, a balance sheet is shown for illustrative purposes.
Balance sheet of Parkside Cricket Club at 30 September 1982

| Fixed Assets |  |
| :--- | ---: |
| Premises | 250,000 |
| Equipment $(£ 3,200+£ 1,000-£ 200)$ | 4,000 |
|  | 254,000 |


| Current Assets |  |  |  |
| :---: | :---: | :---: | :---: |
| Bar stock |  | 821 |  |
| Subscriptions in arrears |  | 45 |  |
| Prepayments |  | 14 |  |
| Bank |  | 3,460 |  |
|  |  | 4,340 |  |
| less Current Liabilities |  |  |  |
| Bar creditors | 786 |  |  |
| Expense creditors | 30 | 816 | 3,524 |
| Net Assets |  |  | £257,524 |
| Accumulated fund at 1 Oct. 1981 add Surplus for year |  |  | 255,695 |
|  |  |  | 1,829 |
| Accumulated fund at 31 Sept. 1982 |  |  | £257,524 |
| (b) Refer to text. |  |  |  |

## Example 15.2

The Balance Sheet of the Compendium Club on 31 December 1982 showed the following:

|  | £ |
| :---: | :---: |
| Subscriptions paid in advance | 310 |
| Subscriptions in arrear | 24 |
| Bar stocks at cost | 540 |
| Bar creditors | 173 |
| Balance at bank and cash in hand (including funds held on behalf of charities) | 1,437 |
| Furniture and fittings | 3,110 |

The treasurer records receipts and payments in a columnar cash book. The totals of the various columns for the year ended 31 December 1983 are as follows:

|  | $\not$ |
| :--- | ---: |
| Subscriptions | 5,110 |
| Bar sales | 5,716 |
| Sales of dance tickets | 2,176 |
| Dance expenses | 749 |
| Rent and rates of premises | 2,200 |
| Lighting and heating | 1,420 |
| Barman's wages | 2,500 |
| Steward's salary | 5,000 |
| Collections made on behalf of charities | 2,650 |
| Distributions to outside charities | 2,600 |
| Purchase of new furniture | 1,460 |
| Sale of old furniture (book value $£ 270)$ | 150 |
| Payments for bar purchases | 2,610 |

Take into consideration the following on 31 December 1983:
£
(i) Subscriptions in arrear 40
(ii) Subscriptions in advance 410
(iii) Bar stocks at cost 470
(iv) Bar creditors 190
(v) Rent unpaid 200
(vi) Depreciation of furniture at 5 per cent of book value on 31 December 1983.
(a) Prepare a Receipts and Payments Account for the year ended 31 December 1983.
(b) Prepare an Income and Expenditure Account for the year ended 31 December 1983. This account should show clearly the profit or loss on the various activities.
Note: A Balance Sheet is not required.

## Solution 15.2

(a)

Receipts and payments account of Compendium Club for year ended 31 December 1982

|  | £ |  | £ |
| :---: | :---: | :---: | :---: |
| Opening balance $\mathrm{b} / \mathrm{d}$ | 1,437 | Dance expenses | 749 |
| Subscriptions | 5,110 | Rent and rates | 2,200 |
| Bar sales | 5,716 | Lighting and heating | 1,420 |
| Sale of dance tickets | 2,176 | Barman's wages | 2,500 |
| Collections on behalf of charities | 2,650 | Steward's salary | 5,000 |
| Sale of furniture | 150 | Distributions to charities | 2,600 |
| Closing balance $\mathrm{c} / \mathrm{d}$ | 1,300 | New furniture | 1,460 |
|  |  | Bar purchases | 2,610 |
|  | £18,539 |  | £18,539 |
|  |  | Closing balance $\mathrm{b} / \mathrm{d}$ | 1,300 |

(b)

Income and expenditure account of Compendium Club for year ended 31 December 1982

| Dr. | £ |  |  | Cr. |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Loss on sale of furniture | 120 | Bar sales |  | 5,716 |
| Rent and rates (£2,200 + £200) | 2,400 | Opening stock | 540 |  |
| Lighting and heating | 1,420 | Purchases (1) | 2,627 |  |
|  |  |  | 3,167 |  |
| Steward's salary | 5,000 | less Closing stock | 470 |  |
| Depreciation furniture ( 5 per cent $\times £ 4,300$ ) | 215 |  | 2,697 |  |
|  |  | add Barman's wages | 2,500 | 5,197 |
|  |  | Bar profit |  | 519 |
|  |  | Dance tickets | 2,176 |  |
|  |  | less expenses | 749 | 1,427 |
|  |  | Subscriptions (2) |  | 5,026 |
|  |  | Deficit - excess expenditure over income |  | 2,183 |
|  | £9,155 |  |  | £9,155 |

## notes

(1) Payments $£ 2,610$ add creditors (31 Dec. 1983) $£ 190$ less creditors (31 December 1982) $£ 173=£ 2,627$
(2)

Subscriptions

|  |  | £ |  |  | £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 1 | Balance b/d | 24 | Jan. 1 | Balance b/d | 310 |
| Dec. 31 | Income and expenditure account | 5,026 | Dec. 31 | Bank | 5,110 |
|  | Balance c/d | 410 |  | Balance c/d | 40 |
|  |  | 5,460 |  |  | 5,460 |
| 1983 |  |  | 1983 |  |  |
| Jan. 1 | Balance b/d | 40 | Jan. 1 | Balance b/d | 410 |

## Example 15.3

The following information relates to the affairs of Clydeville Social Club, which ended its financial year on 31 December 1983:

|  |  |  |
| :--- | :--- | ---: |
| 1 January 1983 | Subscriptions for 1982 in arrear | 120 |
| During 1983 | Subscriptions for current year received | 4,710 |
|  | Arrears for 1982 received | 90 |
|  | Subscriptions paid in advance for 1984 | 27 |
| 31 December 1983 | Subscriptions for 1983 not received | 84 |
| 1 January 1983 | Rates in arrears | 200 |
| 8 January 1983 | Rates due in November 1982 paid | 400 |
| 8 May 1983 | Rates due and paid | 450 |
| 7 November 1983 | Rates due and paid | 450 |

Rates due in November each year covers the period from 1 October that year to 31 March in the following year.
Calculate for the year ended 31 December 1983 the amount for (i) subscriptions and (ii) rates which should be shown in the
(a) Receipts and Payments Account,
(b) Income and Expenditure Account,
(c) Balance Sheet at 31 December 1983, as an asset or liability.

## Solution 15.3

(i)


NOTE
(1) This assumes $£ 30$ arrears for 1982 is to be written off. Alternative is for arrears at 31 Dec. 1983 to be increased to $£ 114$, making amount at (b) $£ 4,794$.
(ii)

|  |  |  | £ |
| :---: | :---: | :---: | :---: |
| Rates paid | 8 Jan. |  | 400 |
|  | 8 May |  | 450 |
|  | 7 Nov. |  | 450 |
| (a) Receip | ts and payments account |  | 1,300 |
|  | arrears at 1 January | 200 |  |
|  | prepayments at 31 December | 225 | 425 |

(b) Income and expenditure account
(c) Balance sheet 31 Dec. 1983
Assets £
Subscriptions in arrears ..... 84
Rates prepaid ..... 225
Liabilities
Subscriptions paid in advance ..... 27£875

### 15.8 Further exercises

## Question 15.1

The sixth form committee at Camden Square Secondary School run a tuck shop throughout the year with the object of providing funds to pay for a disco for staff and sixth formers at the end of the summer term.
On 1 September 1982, the sixth form took over, from the previous accounting period, a cash balance $£ 25$, creditors $£ 15$ and stock $£ 8$. A summary of the cash account for the ten months ended 30 June 1983 is given below.

|  | Cash Account |  |  |
| :--- | ---: | :--- | ---: |
| Balance b/d | 25 | Purchases | 253 |
| Raffle proceeds | 52 | Creditors | 420 |
| Sales | 873 | Raffle prizes | 8 |
| Building Society interest | 4 | Raffle tickets | 3 |
|  |  | Cost of collecting goods from suppliers | 12 |
|  |  | Refreshments | 6 |
|  |  | Building Society deposit | 100 |
|  |  | Balance c/d | 152 |
|  | $\underline{954}$ |  | $\underline{954}$ |

At 30 June 1983, creditors were owed $£ 42$ and IOUs totalling $£ 12$ (for goods sold) were discovered in the cash box. There was no closing stock.

## REQUIRED

(a) For the 10 months ended 30 June 1983,
(i) a total creditors account showing the calculation of credit purchases; [3 marks]
(ii) a trading account to show gross profit on sales;
(iii) an income and expenditure account incorporating the gross profit made by the tuck shop.
[4 marks]
(b) A balance sheet as at 30 June 1983.
[5 marks]
The end of year disco was held on 5 July 1983, at a total cost of $£ 242$. Sixty staff and one hundred sixth formers attended. Staff were given free admission but sixth formers had to pay an admission fee.

## REQUIRED

(c) Assuming creditors were paid in full, all IOUs were received and all funds generated by sixth form activities were utilised, what fee would need to have been charged to each sixth former for admission to the disco?
[2 marks]
(d) Assuming selling price of goods was determined by adding 25 per cent to cost (including carriage), explain why you may be dissatisfied with the gross profit figure you have calculated. Give two possible reasons for any discrepancy.
[2 marks]
(AEB)

Answer 15.1
(a) (i)

| Creditors |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1983 |  | £ | 1982 |  | £ |
| June 30 | Bank | 420 | Sept. 1 | Balance b/d | 15 |
| June 30 | Balance c/d | 42 | June 30 | Trading account | 447 |
|  |  | 462 |  |  | 462 |
|  |  |  | July 1 | Balance b/d | 42 |

(ii)

Trading account of tuck shop for 10 months ended 30 June 1983

|  |  |  | $£$ |
| :--- | ---: | :---: | :---: |
| Sales $(£ 873+£ 12)$ |  |  | 885 |
| Stock $(1$ Sept. 1982) |  | 8 |  |
| Purchases $(£ 253+£ 447)$ <br> add collection costs | 700 |  |  |
| Cost of sales | -12 | $\underline{712}$ |  |
| Gross profit |  |  | $\underline{720}$ |
| Ciin) |  |  | $£ 165$ |

(iii)

Income and expenditure account of tuck shop for 10 months ended 30 June 1983

|  | £ |  |  |  | £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Refreshments | 6 | Gross profit |  |  | 165 |
| Surplus - excess income over expenditure | 204 | Raffle proceeds |  | 52 |  |
|  |  | less tickets | 3 |  |  |
|  |  | prizes | 8 | 11 |  |
|  |  | Profit on raffles |  |  | 41 |
|  |  | Interest received |  |  | 4 |
|  | 210 |  |  |  | 210 |

(b)

Balance sheet of tuck shop as at 30 June 1983

Current Assets

£

Debtors 12
Building Society 100
Bank 152
264
less Current Liabilities
Creditors
Net Assets
42
222
Financed by
Fund balance at 1 Sept. $1982(£ 25+£ 8-£ 15) 18$
add Surplus 1982/1983 204
Fund balance at 30 June 1983 £222
(c)

Cost of disco
Cost of disco 242
Fund at 30 June 1983222
Deficit £20

Each student would need to have been charged 20p ( $£ 20 \div 100$ ).
(d)

Cost of sales $£ 720$
Therefore anticipated sales $£ 900(720+25$ per cent $)$. Sales are $£ 15$ less than would have been anticipated. This could be due to
(i) misappropriation of stock;
(ii) misappropriation of cash takings;
(iii) sale of stock at less than the correct prices.

## Question 15.2

Wentworth Cricket Club had the following assets and liabilities at 1 January 1984:

|  | $£$ |
| :--- | ---: |
| ground and pavilion | 250,000 |
| equipment | 2,300 |
| fixtures and fittings | 3,900 |
| subscriptions in arrears (from 1983) | 92 |
| subscriptions received in advance (for 1984) | 106 |
| light and heat owing | 81 |
| insurance prepaid | 209 |
| bar stocks | 943 |
| members' long term (interest free) loans | 50,000 |
| accumulated fund | 210,549 |

Wentworth Cricket Club
Receipts and Payments account for year ending
31 December 1984
£ £

| Balance b/d |  | Bar purchases | 7,306 |
| :--- | ---: | :--- | ---: |
| Subscriptions | 3,292 | 809 | Equipment |
| Bar sales | 10,243 | Lottery tickets and prizes | 860 |
| Sales of monthly lottery tickets | 4,391 | Ground maintenance | 4,202 |
| Net proceeds from fruit machines | 5,002 | Light and heat | 320 |
| Loans from members | 5,000 | Insurance | 609 |
|  |  | Extension to pavilion | 11,500 |
|  |  | Affiliation fees | 30 |
|  | $\boxed{28,737}$ |  | $\underline{3,089}$ |
|  | $\underline{28,737}$ |  |  |

At 31 December 1984, the following matters were outstanding:
(1) subscriptions in arrears (for 1984) $£ 23$ and subscriptions received in advance (for 1985) £86;
(2) subscriptions still outstanding for $1983 £ 22$ were to be written off;
(3) equipment, including additions, had depreciated by $10 \%$;
(4) insurance prepaid $£ 220$ and light and heat owing $£ 90$;
(5) bar stocks at 31 December 1984 was valued at $£ 1,100$.

## REQUIRED

(a) An income and expenditure account of the Wentworth Cricket Club for the year ended 31 December 1984.
[15 marks]
Note. As a balance sheet is NOT required, you will not need to use all of the items given above.
(b) An explanation of the difference, in accounting treatment at year end, between: (i) subscriptions in arrears and light and heat owing, and; (ii) subscriptions in advance and insurance prepaid.
[5 marks]
(AEB)

Answer 15.2
(a)

Wentworth Cricket Club Income and Expenditure account for year ended 31 December 1984

|  | $£$ |  | $£$ |
| :--- | ---: | :--- | ---: |
| Ground maintenance | 4,202 | Bar profit (1) | 3,094 |
| Light and heat $(£ 320+£ 90-£ 81)$ | 329 | Subscriptions $(2)$ | 760 |
| Insurance $(£ 609-£ 220+£ 209)$ | 598 | Lottery surplus $(£ 4,391-£ 821)$ | 3,570 |
| Affiliation fees | 30 | Proceeds fruit machines | 5,002 |
| Depreciation $(10 \% \times £ 3,160)$ | 316 |  |  |
| Surplus income over expenditure | $\underline{6,951}$ |  | $\underline{12,426}$ |

## workings

(1) Bar Trading account Sales 10,243

| Opening stock | 943 |  |
| :--- | ---: | ---: |
| Purchases | $\underline{7,306}$ |  |
|  | 8,249 |  |
| less Closing stock | $\underline{1,100}$ | $\underline{7,149}$ |
| Gross profit |  | 3,094 |

(2) Subscriptions account
19841984

| Jan. 1 | Balance b/d | 92 |  | Jan. 1 | Balance b/d |
| :--- | :--- | ---: | :--- | :--- | ---: |
| Dec. 31 | Income and Expenditure | 760 |  | Dec. 31 | Receipts |
| Dec. 31 | Balance c/d | $\underline{86}$ |  | Dec. 31 | Balance c/d |

(b) Subscriptions in arrears is an item of income due to us at the balance sheet date and is therefore treated as a debtor. Light and heat owing is an item of expenditure due by us at the balance sheet date and is therefore treated as a creditor. Subscriptions in advance, conversely, is an amount prepaid to us and is therefore a creditor. Insurance prepaid is an amount prepaid $b y$ us and is therefore a debtor.

## Question 15.3

The treasurer of the Downtown Club keeps its accounts on the double-entry system.
The following were the balances in the books at 31 March 1983, omitting only the General Fund Account (the Club's 'Capital Account').
£
Overdrawn balance at the bank 622
Miscellaneous expenses $\quad 1,885$
Members' subscriptions 1,625
Loans to members 520
Expenses of dances and socials 2,424
Equipment (cost) 3,650
Owing to suppliers of refreshments 392
Provision for depreciation of equipment $\quad 1,430$

| Sale of tickets for dances and socials | 2,260 |
| :--- | ---: |
| Cash in hand | 320 |
| Donations received | 120 |

Cash in hand320
Donations received ..... 120
You are asked to prepare the trial balance at 31 March 1983, the General Fund Accountbeing included as the balance figure.

## Answer 15.3

|  |  | £ |
| :---: | :---: | :---: |
| Overdrawn balance at bank |  | 622 |
| Miscellaneous expenses | 1,885 |  |
| Members' subscriptions |  | 1,625 |
| Loans to members | 520 |  |
| Expenses of dances and socials | 2,424 |  |
| Equipment (cost) | 3,650 |  |
| Owing to suppliers of refreshments |  | 392 |
| Provision for depreciation of equipment |  | 1,430 |
| Sale of tickets for dances and socials |  | 2,260 |
| Cash in hand | 320 |  |
| Donations received |  | 120 |
| General Fund account |  | 2,350 |
|  | £8,799 | £8,799 |

## 16 Partnership Accounts: 1

### 16.1 Definition

A partnership is a relationship between persons carrying on business in common with a view of profit. A key feature is that each partner accepts full liability for the debts of the partnership, which means that if the business becomes insolvent, the partners are liable for the full debts of the business in the same way as a sole trader. However, if one partner is unable to meet his share of the debts, it must be met by the other partners.

### 16.2 The partnership agreement

It is advisable for the partners to draw up an agreement covering the following areas:
(i) Capital. How much each should contribute and leave in the business.
(ii) Profit sharing. One partner may be entitled to a greater share of the profits because he has more experience or is doing a greater share of the work.
(iii) Salaries. One or more partners may be entitled to a salary because of the work they are performing.
(iv) Interest on capital. This might be appropriate where one or more partners is contributing a materially greater sum than others.
(v) Drawings. The agreement should cover the amount of profits that may be withdrawn and may further discourage drawings by charging interest on them.

Any points not covered in the partnership agreement are decided by reference to the Partnership Act 1890, which states:
(i) Profits are shared equally.
(ii) No partnership salaries.
(iii) Partners shall receive no interest on capital but should receive 5 per cent interest per annum on any loans to the business.
In many ways the accounts of partnerships are similar to accounts for sole traders, but we shall now look at the areas in which they differ.

### 16.3 Capital accounts

In sole traders' accounts we have one capital account, whereas with partnership accounts we need a separate capital account for each partner. This will record
the capital introduced by the partner and act as a permanent record of the capital contributed to the business by each partner.

### 16.4 Partners' current accounts

Partner's current accounts will record many of the transactions that are entered on the capital account in the sole trader's books. The current account will be credited with the partner's share of the profits of the business together with any interest and salary due to him. The current account will be debited with any drawings by the partners which will be transferred from the drawings account at the end of each accounting period.

### 16.5 Partners' loan accounts

If the business is short of cash, a partner may make a temporary loan to the partnership. This will be recorded in a separate loan account, although any interest to which the partner is entitled will normally be credited to his current account.

### 16.6 Profit and loss appropriation account

In a sole trader's books the profit and loss account balance representing the net profit of the business is transferred to the owner's capital account. In a partnership, as we have seen, the division of the profit will include accounting for salaries, interest on capital and the agreed profit-sharing ratio. To deal with these items, we extend the profit and loss account to create a further section or account, namely the appropriation account.

The net profit from the profit and loss account is carried down to the credit of the appropriation account. The next step is to debit the appropriation account and credit the individual partners' current accounts with any salary and interest to which they are entitled. If any interest is chargeable on drawings, this will be debited to the partners' current accounts and credited to the appropriation account. Finally, the remaining balance on the appropriation account will be distributed to the partners in the agreed profit-sharing ratio by debiting the appropriation account and crediting the partners' current accounts.

You should realise that interest on loans is an expense of the partnership, not an appropriation of profit, and therefore belongs in the profit and loss account proper and not in the appropriation account.

### 16.7 Worked examples

## Example 16.1

(a) What is the purpose of the appropriation account when compiling the final accounts of a partnership?
(b) Black, White and Grey are in partnership and share profits and losses in the ratio of 3:2:1, respectively. From the following information prepare:
(i) the appropriation account for the partnership,
(ii) the partners' current accounts as they appear in the ledger.

|  |  | $\begin{gathered} £ \\ 24,000 \end{gathered}$ |
| :---: | :---: | :---: |
| Net profit for year |  |  |
| Capital |  |  |
| Black | 12,000 |  |
| White | 6,000 |  |
| Grey | 10,000 | 28,000 |
| Loan account |  |  |
| Grey |  | 10,000 |
| Current accounts |  |  |
| Black |  | 4,000 (DR) |
| White |  | 3,000 (CR) |
| Grey |  | 5,000 (CR) |
| Partnership salaries |  |  |
| Black | 8,000 |  |
| White | 10,000 | 18,000 |
| Drawings |  |  |
| Black | 5,000 |  |
| White | 10,000 | 15,000 |
| Interest on drawings |  |  |
| Black | 600 |  |
| White | 900 | 1,500 |

Interest on partners' capital is allowed at 10 per cent per annum. Interest on Grey's loan is at 20 per cent per annum.

## Solution 16.1

(a) Refer to text. To show the allocation of the profit to the partners in accordance with the partnership agreement.
(b) (i)

Profit and loss appropriation account of Black, White and Grey for the year ended...

| Net profit (less loan interest deducted in profit and loss account) ( $£ 24,000-£ 2,000$ ) |  | $\begin{gathered} £ \\ 22,000 \end{gathered}$ |
| :---: | :---: | :---: |
| Interest on drawings |  | 1,500 |
|  |  | 23,500 |
| Interest on capital |  |  |
| Black (10 per cent $\times £ 12,000$ ) | 1,200 |  |
| White ( 10 per cent $\times £ 6,000$ ) | 600 |  |
| Grey ( 10 per cent $\times £ 10,000$ ) | 1,000 | 2,800 |
|  |  | 20,700 |
| Salaries |  |  |
| Black | 8,000 |  |
| White | 10,000 | 18,000 |
|  |  | 2,700 |
| Residual profits |  |  |
| Black ( $\frac{1}{2} \times £ 2,700$ ) | 1,350 |  |
| White ( $\frac{1}{3} \times £ 2,700$ ) | 900 |  |
| Grey ( $\left.\frac{1}{6} \times £ 2,700\right)$ | 450 | £ 2,700 |

(ii)

Partners' current accounts

|  | Black £ | White <br> £ | Grey £ |  | Black <br> £ | White <br> £ | Grey $£$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance b/d | 4,000 |  |  | Balance b/d |  | 3,000 | 5,000 |
| Interest on drawings | 600 | 900 |  | Interest on loan |  |  | 2,000 |
| Drawings | 5,000 | 10,000 |  | Interest on capital | 1,200 | 600 | 1,000 |
| Balance c/d | 950 | 3,600 | 8,450 | Salaries | 8,000 | 10,000 |  |
|  |  |  |  | Residual profits | 1,350 | 900 | 450 |
|  | 10,550 | 14,500 | 8,450 |  | 10,550 | 14,500 | 8,450 |
|  |  |  |  | Balance b/d | 950 | 3,600 | 8,450 |

## Example 16.2

Wood and Garner are in partnership as accountants, with capitals of $£ 25,000$ for Wood and $£ 15,000$ for Garner.
The partners have agreed to allow interest on capital at 9 per cent per annum and share profits/losses three-fifths Wood and two-fifths Garner.
The firm's accounts show the following balances at 31 August 1982, after preparation of the profit and loss account for the year ended on that date.

|  |  |
| :--- | ---: |
| Cash and bank | 8,565 |
| Fees receivable | 6,800 |
| Staff salaries owing | 2,460 |
| Premises | 33,375 |
| Office equipment at cost | 5,000 |
| Provision for depreciation of equipment | 3,000 |
| Net trading profit for the year (before partners' items) | 15,700 |
| Drawings for the year $\quad$ - Wood | 6,000 |
|  | - Garner |
| Current accounts at 1 September 1981 - Wood (debit) | 3,200 |
|  | - Garner (credit) |
|  | 2,300 |

Additional information.
Garner used his home for business purposes and it has been agreed that $£ 700$ per annum running expenses be allowed. No entries have been made in the books.

## REQUIRED

(a) (i) The profit and loss appropriation account and the partners' current accounts for the year ended 31 August 1982.
[7 marks]
(ii) A balance sheet as at 31 August 1982.
(b) Comments on why partners might agree to:
(i) allow interest on capital;
(ii) charge interest on drawings.
[4 marks]
(a) (i)

Profit and loss appropriation account of Wood and Garner for year ended 31 August 1982

|  | $£$ |  |
| :--- | :---: | :---: |
| Net profit (less $£ 700$ allowance to Garner <br> charged in profit and loss account) |  | 15,000 |
| Interest on capital | 2,250 |  |
| $\quad$ Wood $(9 \% \times £ 25,000)$ | $\underline{1,350}$ | $\frac{3,600}{11,400}$ |
| $\quad$ Garner $(9 \% \times £ 15,000)$ |  |  |
|  | 6,840 |  |
| Residual profits | $\underline{4,560}$ | $\underline{11,400}$ |
| $\quad$Wood ( $\left.\frac{3}{5} \times £ 11,400\right)$ |  |  |

Partners' current accounts

|  | Wood £ | $\begin{aligned} & \text { Garner } \\ & £ \end{aligned}$ |  | Wood £ | Garner £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balance b/d | 520 |  | Balance b/d |  | 2,300 |
| Drawings | 6,000 | 3,200 | Allowance |  | 700 |
| Balance c/d |  |  | Interest on capital | 2,250 | 1,350 |
|  | 2,570 | 5,710 | Residual profits | 6,840 | 4,560 |
|  | $\underline{9,090}$ | $\underline{8,910}$ |  | $\underline{9,090}$ | 8,910 |
|  |  |  | Balance c/d | 2,570 | 5,710 |

(ii)

Balance sheet of Wood and Garner as at 31 August 1982

| Fixed Assets |  | £ |
| :---: | :---: | :---: |
| Premises |  | 33,375 |
| Office equipment |  | 2,000 |
|  |  | 35,375 |
| Current Assets |  |  |
| Fees receivable | 6,800 |  |
| Cash and bank | 8,565 |  |
|  | 15,365 |  |
| less Current Liabilities |  |  |
| Salaries owing | 2,460 |  |
| Working capital |  | 12,905 |
| Net Assets |  | £48,280 |
| Capital Accounts |  |  |
| Wood |  | 25,000 |
| Garner |  | 15,000 |
|  |  | 40,000 |
| Current Accounts |  |  |
| Wood | 2,570 |  |
| Garner | 5,710 | 8,280 |
|  |  | £48,280 |

(b) (i) Refer to Section 16.2. Reward partner contributing more capital than other partners.
(ii) Refer to Section 16.2. Discourage withdrawals.

## Example 16.3

T. Edwards and R. Jones decided to start a retail grocery business. They started to make their arrangements on 1 March 1984, intending to open their store seven days later.

During the first week the following arrangements were made:
A bank account was opened into which each partner paid his agreed capital.

|  |  | £ |
| :---: | :---: | :---: |
|  | T. Edwards | 120,000 |
|  | R. Jones | 150,000 |
| 1984 |  |  |
| 1 March | The purchase of premises was completed and a cheque drawn in full settlement | 251,400 |
|  | The cheque for the purchase of the premises included an amount to cover rates paid in advance by the vendor | 1,400 |
|  | T. Edwards made over to the business a delivery van which he owned | 7,000 |
|  | Furniture from a business previously owned by R. Jones was delivered as part of Jones' capital | 10,000 |
| 2 March | Stock was purchased and paid for immediately by cheque | 10,000 |
|  | Additional furniture and fittings purchased and paid for by cheque | 5,600 |
| 3 March | T. Edwards suddenly changed his mind and with the agreement of R. Jones withdrew all his capital by cheque | 127,000 |
|  | S. Williams agreed to take T. Edward's place and paid into the business bank account as his capital | 150,000 |
|  | S. Williams brought into the business a second delivery van valued at | 9,000 |
|  | Tax and insurance on vans paid to 28 February 1985 by cheque | 1,000 |
|  | Annual insurance premium on premises paid by cheque | 3,000 |
| 4 March | Additional stock bought on credit | 7,500 |

(a) Write up the bank account for the first four days.
(b) Write up the capital accounts of T. Edwards, R. Jones and S. Williams.
(c) Prepare the opening Balance Sheet of the business as on 8 March 1984.

Solution 16.3
(a)

| Bank |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | £ |  |  | £ |
| Mar. 1 Capital Edwards | 120,000 | Mar. 1 | Premises | 250,000 |
| Mar. 1 Capital Jones | 150,000 | Mar. 1 | Rates | 1,400 |
| Mar. 3 Capital Williams | 150,000 | Mar. 2 | Purchases | 10,000 |
|  |  | Mar. 2 | Furniture and fittings | 5,600 |
|  |  | Mar. 3 | Capital Jones | 127,000 |
|  |  | Mar. 3 | Vehicle expenses | 1,000 |
|  |  | Mar. 3 | Insurance | 3,000 |
|  |  | Mar. 8 | Balance c/d | 22,000 |
|  | 420,000 |  |  | 420,000 |
| Mar. 8 Balance b/d | 22,000 |  |  |  |

(b)

Capital

(c)

Balance sheet of Jones and Williams at 8 March 1984

| Fixed Assets |  | £ |
| :---: | :---: | :---: |
| Premises |  | 250,000 |
| Furniture |  | 15,600 |
| Delivery vans |  | 16,000 |
|  |  | 281,600 |
| Current Assets |  |  |
| Stock | 17,500 |  |
| Prepayments (1) | 5,400 |  |
| Bank | 22,000 |  |
|  | 44,900 |  |
| less Current Liabilities |  |  |
| Creditors | 7,500 | 37,400 |
|  |  | £319,000 |
| Capital Accounts |  |  |
| Jones |  | 160,000 |
| Williams |  | 159,000 |
|  |  | £319,000 |

NOTE
(1) Prepayments reflects payments for rates $£ 1,400$, van tax and insurance $£ 1,000$ and premises insurance $£ 3,000$. The few days which have expired on these items and should therefore be expensed in the profit and loss account have been ignored.

### 16.8 Further exercises

## Question 16.1

Edgar and Edward are partners in a small private hotel. After preparing a trading and profit and loss account for the year ended 31 December 1984, the following balances remain in their books:

|  |  | $£$ | $£$ |
| :--- | :--- | ---: | ---: |
|  | Edgar |  | 30,000 |
|  | Edward |  | 30,000 |
| Current accounts | Edgar |  | 750 |
|  | Edward | 250 |  |
| Fixed assets | Total | 70,000 |  |
| Net current assets |  | 7,500 |  |
| Net profit for year |  |  | 23,000 |
| Drawings in cash: | Edgar | 2,400 |  |
|  | Edward | $\underline{3,600}$ |  |
|  |  | $\underline{83,750}$ | $\underline{83,750}$ |

When preparing the profit and loss account, no account had been taken of the following:
(i) Private accommodation occupied by the partners in the hotel valued at $£ 3,000$ each per annum.
(ii) Repairs paid for Edgar’s private car $£ 750$ from the firm's bank account and included in the business expenses.
(iii) Mrs Edgar and Mrs Edward work in the hotel and are entitled to salaries:

| Mrs Edgar | $£ 3,000$ |
| :--- | :--- |
| Mrs Edward | $£ 4,000$ |

These salaries have not been paid.
(iv) The partners agree that $£ 5,000$ each of the profits should be transferred to their capital accounts so that the total of the capital should equal the value of the fixed assets.

Profits and losses are to be shared equally.
Prepare
(a) an account showing the correct net profit
(b) an appropriation account
(c) the partners' current accounts.

Answer 16.1

| (a) | £ |
| :---: | :---: |
| Net profit as given | 23,000 |
| add (i) reimbursement for private accommodation | 6,000 |
| (ii) repairs to private motor car | 750 |
|  | 29,750 |
| less (iii) salaries due | 7,000 |
| Adjusted net profit | £22,750 |

(b)

Profit and loss appropriation account of Edgar and Edward for year ended 31 December 1984

|  |  | $£$ |
| :--- | :---: | :---: |
| Net profit |  | 22,750 |
| Transfers to capital accounts |  |  |
| $\quad$ Edgar | 5,000 |  |
| $\quad$ Edward | 5,000 | $\underline{10,000}$ |
|  |  | 12,750 |
| Residual profits |  |  |
| $\quad$ Edgar | 6,375 |  |
| $\quad$ Edward | $\underline{6,375}$ | $\underline{£ 12,750}$ |

(c)

Partners' current accounts

|  | $\begin{aligned} & \text { Edgar } \\ & £ \end{aligned}$ | Edward £ |  | $\begin{aligned} & \text { Edgar } \\ & £ \end{aligned}$ | Edward £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balance b/d |  | 250 | Balance b/d | 750 |  |
| Drawings | 2,400 | 3,600 | Residual profits | 6,375 | 6,375 |
| Private accommodation | 3,000 | 3,000 |  |  |  |
| Private car repairs | 750 |  |  |  |  |
| Balance c/d | 975 |  | Balance c/d |  | 475 |
|  | 7,125 | 6,850 |  | 7,125 | 6,850 |
| Balance b/d |  | 475 | Balance b/d | 975 |  |

## Question 16.2

Messrs Fairway and Rough, partners in a consultancy business, have the following balances in their books at 31 December 1984 (after extraction of the trading and profit and loss accounts):

|  | £ |
| :---: | :---: |
| capital accounts (1 January 1984) |  |
| Fairway | 20,000 |
| Rough | 25,000 |
| current accounts (1 January 1984) |  |
| Fairway | 4,200 Cr |
| Rough | 2,060 Dr |
| drawings (for the year ended 31 December 1984) |  |
| Fairway | 12,000 |
| Rough | 15,000 |
| motor van at cost | 6,000 |
| provision for depreciation on motor van | 4,500 |
| premises | 50,000 |
| cash at bank | 3,298 |
| wages accrued | 1,968 |
| debtors | 3,210 |
| bank loan (repayable in 1986) | 15,000 |
| interest on bank loan owing | 600 |
| net trading profit | 20,300 |
| interest on drawings |  |
| Fairway | 200 |
| Rough | 900 |

The partners had agreed to allow $8 \%$ interest on capital and to share remaining profits equally.

## REQUIRED

(a) For the year ended 31 December 1984:
(i) the profit and loss appropriation account of the partnership;
[3 marks]
(ii) each partner's current account. [6 marks]
(b) The balance sheet of the partnership as at 31 December 1984.

## Answer 16.2

(a)
(i) Messrs Fairway and Rough Profit and Loss appropriation account for year ended 31 December 1984


Spiros and Zorba are equal partners in a Greek takeaway food business. The business commenced on 1 January 1983, when each partner contributed $£ 10,000$ capital. For the first
year it was agreed that partners be allowed 10 per cent interest on capital, a salary of $£ 8,000$ each, the remaining profits being shared equally.
The balances in the firm's books at 31 December 1983, with the exception of the partners' current accounts, were:
premises $£ 15,500$; fittings and equipment $£ 6,800$; creditors $£ 2,432$; stock $£ 520$; balance at bank $£ 6,390$; cash in hand $£ 86$; capital - Spiros $£ 10,000$; capital - Zorba $£ 10,000$.

During the year each partner withdrew his salary from the business.

## REQUIRED

(a) Preparation of
(i) a closing statement of affairs in simple form, to ascertain the balance of each partner's current account at 31 December 1983;
(ii) the current account of Spiros for year ended 31 December 1983;
(iii) the balance sheet of the partnership as at 31 December 1983, distinguishing between fixed and current assets and current liabilities and showing working capital within the balance sheet.
[16 marks]
(b) (i) One reason why partners might agree to charge interest on drawings.
(ii) An explanation of how interest on drawings of $£ 400$ each would be treated in the final accounts of Spiros and Zorba.
[4 marks]
Answer 16.3
(a) (i)

Statement of affairs of Spiros and Zorba at 31 December 1983

|  | £ |
| :---: | :---: |
| Premises | 15,500 |
| Fittings and equipment | 6,800 |
| Stock | 520 |
| Bank | 6,390 |
| Cash | 86 |
|  | 29,296 |
| less Creditors | 2,432 |
| Net Assets | £26,864 |
| Capital account balances | 20,000 |
| Current account balances (balancing figures) (1) |  |
| Spiros 3,432 |  |
| Zorba $\quad$ 3,432 | 6,864 |
|  | £26,864 |

NOTE
(1) Since both partners are entitled to the same interest and residual profit and both have the same drawings, their current accounts must be equal.
(ii)

Spiros current account

|  | $£$ |  | $£$ |
| :--- | :---: | :--- | :---: |
| Drawings | 8,000 | Salary | 8,000 |
| Balance c/d (as (i)) | 3,432 | Interest | 1,000 |
|  |  | Residual profit (balancing figure) | $\frac{2,432}{11,432}$ |
|  | $\underline{11,432}$ |  | $\frac{1}{3,432}$ |

(iii)

Balance sheet of Spiros and Zorba at 31 December 1983

| Fixed Assets |  | £ |
| :---: | :---: | :---: |
| Premises |  | 15,500 |
| Fittings and equipment |  | 6,800 |
|  |  | 22,300 |
| Current Assets |  |  |
| Stock | 520 |  |
| Bank | 6,390 |  |
| Cash in hand | 86 |  |
|  | 6,996 |  |
| less Current Liabilities |  |  |
| Creditors | 2,432 |  |
| Working Capital |  | 4,564 |
| Net Assets |  | £26,864 |
| Financed by |  |  |
| Capital |  |  |
| Spiros |  | 10,000 |
| Zorba |  | 10,000 |
|  |  | 20,000 |
| Current accounts |  |  |
| Spiros | 3,432 |  |
| Zorba | 3,432 | 6,864 |
|  |  | £26,864 |

(b)
(i) Refer to Section 16.2. Discourage withdrawals.
(ii) Refer to Section 16.6. Dr. current accounts, cr. profit and loss appropriation account.

## Question 16.4

The information given below relates to the partnership of J. Hale and D. Harty
Capital, 1 April 1982: J. Hale
D. Harty

New capital introduced on 1 October 1982 by D. Harty $£ 2,500$
Profit-sharing arrangements:
Salary to D. Harty, $£ 8,000$ per annum;
Interest on capital, 12 per cent per annum;
Remaining profit to be shared equally.
Profit for the year to 31 March 1983, before deducting partners' interest and salary: $£ 32,600$.
You are asked to prepare the Appropriation Section of the partnership's Profit and Loss
Account for the year ended 31 March 1983.

## Answer 16.4

Profit and loss appropriation account of Hale and Harty for year ended 31 December 1983

|  |  | £ |
| :---: | :---: | :---: |
| Net profit |  | 32,600 |
| Salary Harty |  | 8,000 |
|  |  | 24,600 |
| Interest on capital |  |  |
| Hale ( 12 per cent $\times £ 18,000$ ) | 2,160 |  |
| Harty ( 12 per cent $\times £ 12,500$ plus $\frac{6}{12} \times 12$ per cent $\times £ 2,500$ ) | 1,650 | 3,810 |
|  |  | 20,790 |
| Residual profit |  |  |
| Hale ( $\frac{1}{2} \times £ 20,790$ ) | 10,395 |  |
| Harty ( $\frac{1}{2} \times £ 20,790$ ) | 10,395 | £20,790 |

## Question 16.5

(a) (i) What is the purpose of the appropriation section of the profit and loss account to a partnership?
[1 mark]
(ii) Name four items that can be found in the appropriation section and explain, in each case, where the double entry would be found.
(b) A partner withdraws goods valued at $£ 200$ cost price.
(i) How would this item be entered in the ledger accounts?
(ii) How would these drawings be shown in the final accounts?
[1 mark]
(c) In the absence of a partnership agreement, how would partners resolve disputes with respect to:
(i) share of profit;
(ii) partners' salaries;
(iii) interest on loan by a partner?
(a) (i) Refer to Section 16.6 to show appropriation of profit to partners.
(ii) Refer to Section 16.6

Salaries: dr. appropriation account, cr. current account; interest on drawings: dr. current account, cr. appropriation account; interest on capital: dr. appropriation account, cr. current account; residual profit: dr. appropriation account, cr. current account.
(b) (i) dr. drawing's account, cr. purchases.
(ii) Deduction from purchases and debit to current account.
(c) All as Partnership Act 1980:
(i) equally;
(ii) none;
(iii) 5 per cent per annum.

## 17 Partnership Accounts: 2

### 17.1 Introduction

In Chapter 16 we looked at examples where the partnership had commenced as a new business. We shall now examine the situation where a partnership is formed by the amalgamation of two existing businesses. In a simple case where the partners bring in cash or assets the entries are the same as those illustrated in worked example 16.3 in Chapter 16 - that is,

## Dr. Asset account <br> Cr. Partner's capital account

The asset account being debited would be cash, fixtures or delivery van, for example, according to the asset introduced. The disadvantage which could arise for a new partner would be in the case where the business is worth more than the total of the individual assets which the partner has introduced into the business. For example, a partner may introduce assets as follows:

|  | $£$ |
| :--- | ---: |
| Premises | 50,000 |
| Fixtures | 8,000 |
| Stock | 10,000 |
|  |  |
|  | $£ 68,000$ |

The business may, however, for reasons examined below, be worth $£ 100,000$. The difference between the worth of the business and the value of its total assets, in this case $£ 32,000$ ( $£ 100,000$ less $£ 68,000$ ), we call goodwill.

### 17.2 Goodwill

Having defined goodwill above, we shall now look at some of the reasons why goodwill exists and, more important, why it has some value. Remember we are basically looking for reasons why a business is worth more than the value of its individual assets. Another way of stating the problem is: why would a person pay more for a business than it would cost to buy individual assets similar to those owned by the business?
(i) The existing trade built up by the business, especially if the business has a good reputation. This reputation will often mean that the sales and profits will continue for some time after the business has been taken over. When a new business is started, the trade has to be built up over a period of time and often will not make profits from day 1 .
(ii) The labour force and management of a business is an asset which does not show in the balance sheet. This may be particularly valuable where skills are rare or morale is high. When a new business commences, labour has to be trained and staff relationships built up.
(iii) The business may be in a particular location which has advantages, and new premises, for example, could not be found in that area.

We must appreciate that goodwill can exist in a business of any size. In the large businesses it will often be due to the reputation of the company, whereas with a sole trader it will depend more on the reputation of its owner.

There are practical problems with regard to the valuation of goodwill which result in long negotiations. There are several methods for calculating the value of goodwill. However, examination questions at this level will only involve the accounting treatment rather than its valuation.

### 17.3 Goodwill on amalgamation of businesses

The accounting treatment of goodwill on amalgamation of businesses involves opening a goodwill account. We then treat goodwill in the same way as we record any other asset brought into the business by a partner - that is,

Dr. Goodwill account
Cr. Partner's capital account
The balance on the goodwill account will remain on the books as an asset of the business and appear as an asset on its balance sheet. This will apply until the partners decide to write off the asset, which we consider below in Section 17.5.

### 17.4 Goodwill on admission of new partner

We have seen how a business once it has been trading for some time builds up an asset goodwill. This will not normally be recorded in the books, since there would be little point, it is difficult to value and it is not a physical asset. However, we saw in Section 17.1 that the valuation of goodwill is important when two existing businesses amalgamate. Another case when its value is important is when a new partner is admitted to a business. The existing partners will have built up goodwill in the partnership but it will not appear as such on the balance sheet. If the new partner is admitted without due recognition of this, then the new partner immediately shares in all future profits and benefits from that goodwill built up by existing partners. It will therefore be usual to value goodwill on the admission of a new partner. The accounting entries to create goodwill are

Dr. Goodwill account
Cr. Partners' capital accounts
Unless otherwise stated, the allocation of goodwill to the partners' capital accounts will be according to the profit-sharing ratio of the partnership before the admission of the new partner.

### 17.5 Writing off goodwill

We have looked at how goodwill arises in the books of a business either on the taking over of an existing business or when it is created on the admission of a new partner. We stated in Section 17.2 that during the normal course of events a busi-
ness will not show an asset goodwill on its books. In fact its very appearance on a balance sheet can be off-putting to creditors and prospective purchasers because of its lack of tangibility. For this reason the partners may decide either immediately or at some future date to write off that goodwill. As with its creation, unless otherwise stated, it will be written off according to profit-sharing ratios, but those of the new partnership rather than the old. The accounting entries to eliminate goodwill will be

Dr. Partners' capital accounts
Cr. Goodwill account

### 17.6 Worked examples

## Example 17.1

C. Walters and R. Strange are the proprietors of two separate retail businesses. Their Balance Sheets on 31 December 1983 are given below.
C. Walter Balance Sheet as at 31 December 1983

|  |  |  | $£$ |
| :--- | :---: | :--- | ---: |
| Capital |  | Premises | 65,000 |
| Creditors |  | Delivery vans | 15,000 |
|  |  | Stock | 7,400 |
|  |  | Bank | 1,500 |
|  |  | Cash | 120 |
|  | $\underline{89,020}$ |  | $\underline{89,020}$ |

R. Strange Balance Sheet as at 31 December 1983

|  |  |  |  |
| :--- | :---: | :--- | ---: |
| Capital | 98,410 | Premises | $£ 0,000$ |
| Creditors | 1,470 | Furniture | 12,000 |
|  |  | Stock | 4,700 |
|  | Debtors | 1,400 |  |
|  | Bank | 1,700 |  |
|  | Cash | 80 |  |
|  | $\underline{99,880}$ |  | $\underline{99,880}$ |

They decide to amalgamate into a partnership running two branches from 1 January 1984. Profits and losses will be shared equally.
The following valuations and revaluations were agreed by the partners:

|  | C. Walters | R. Strange |
| :--- | :---: | :---: |
|  | $£$ | $£$ |
| Goodwill | 20,000 | 15,000 |
| Premises | 120,000 | 90,000 |
| Furniture |  | 8,000 |

R. Strange will not bring his debtors into the partnership.
(a) Calculate the capital each partner is introducing into the business.
(b) Write off the goodwill.
(c) Set out the Balance Sheet of the new business as at 1 January 1984, after writing off the goodwill.
(d) On 2 January 1984 Walters and Strange agreed to bring in extra or take out cash so that their capitals should be equal at $£ 125,000$. This was done immediately.
Write up the partners' capital accounts from 1 January 1984 showing the capital adjustments, and the bank columns of the cash books showing the resultant bank balance.
[24 marks]
(Assume no other transactions take place).

Solution 17.1
(a) Capital introduced

|  | C. Walters | R. Strange |
| :---: | :---: | :---: |
|  | £ | £ |
| Premises | 120,000 | 90,000 |
| Furniture |  | 8,000 |
| Delivery vans | 15,000 |  |
| Goodwill | 20,000 | 15,000 |
| Stock | 7,400 | 4,700 |
| Bank | 1,500 | 1,700 |
| Cash | 120 | 80 |
|  | 164,020 | 119,480 |
| less creditors | 2,140 | 1,470 |
|  | £161,880 | £118,010 |

(b)
C. Walters capital account

Dr.
Cr
R. Strange capital account

17,500

Goodwill account
17,500
(c)

Balance sheet of Walters and Strange as at 1 January 1984
£

| Fixed Assets |  |
| :--- | ---: |
| Premises |  |
| Furniture |  |
| Delivery vans |  |
|  |  |
| Current Assets |  |
| Stock | 12,100 |
| Bank | 3,200 |
| Cash | $\underline{15,500}$ |

less Current Liabilities
$\quad$ Creditors

| Working Capital | 11,890 |
| :--- | ---: |
| Net Assets | $£ 244,890$ |

Financed by
Capital account

| C. Walters | 144,380 |
| :--- | ---: |
| R. Strange | 100,510 |
|  | $\underline{£ 244,890}$ |

(d)

Capital accounts

| 1984 |  | C. Walters | R. Strange | 1984 |  | C. Walters | R. Strange |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 1 | Goodwill | 17,500 | 17,500 | Jan. 2 | Various assets | 161,880 | 118,010 |
| Jan. 2 | Bank | 19,380 |  | Jan. 2 | Bank |  | 24,490 |
| Jan. 2 | Balance c/d | 125,000 | 125,000 |  |  |  |  |
|  |  | 161,880 | 142,500 |  |  | 161,880 | 142,500 |
|  |  |  |  | Jan. 2 | Balance b/d | 125,000 | 125,000 |

Bank

| 1984 |  | £ | 1984 |  | £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 1 | Capital C. Walters | 1,500 | Jan. 2 | Capital C. Walters | 19,380 |
| Jan. 1 | Capital R. Strange | 1,700 | Jan. 2 | Balance c/d | 8,310 |
| Jan. 2 | Capital R. Strange | 24,490 |  |  |  |
|  |  | 27,690 |  |  | 27,690 |
| Jan. 2 | Balance b/d | 8,310 |  |  |  |

## Example 17.2

(a) Define goodwill and explain how it would arise in a partnership.
(b) Newman and Redford are partners and share profits and losses equally. The balances remaining open in the books of their business as at 31 May were as follows:

|  | $£$ |
| :--- | ---: |
| Newman's capital account | 12,000 |
| Redford's capital account | 10,000 |
| Stock | 7,000 |
| Debtors | 8,000 |
| Creditors | 20,000 |
| Premises | 30,000 |
| Machinery | 15,000 |
| Newman's current account | $5,000(\mathrm{CR})$ |
| Redford's current account | $2,000(\mathrm{CR})$ |
| Cash in hand | 5,000 |
| Bank overdraft | 16,000 |

On 1 June 1983 the partners admitted Woodward as a partner on terms that she brought in capital of $£ 12,000$ (which was paid directly into the bank account) and a premium of $£ 20,000$ to be entered to a goodwill account and shared between the original partners' capital in the same proportion as they shared profits.
From the above information you are required to prepare the balance sheet for the new partnership as at 1 June 1983.

Solution 17.2
(a) Refer to Sections 17.1 and 17.2.
(b)

Balance sheet of Newman, Redford and Woodward as at 1 June 1983

| Fixed Assets |  |  | £ |
| :---: | :---: | :---: | :---: |
| Premises |  |  | 30,000 |
| Machinery |  |  | 15,000 |
| Goodwill |  |  | 20,000 |
|  |  |  | 65,000 |
| Current Assets |  |  |  |
| Stock |  | 7,000 |  |
| Debtors |  | 8,000 |  |
| Cash in hand |  | 5,000 |  |
|  |  | 20,000 |  |
| less Current Liabilities |  |  |  |
| Creditors | 20,000 |  |  |
| Bank overdraft ( $£ 16,000-£ 12,000)$ | 4,000 | 24,000 |  |
| Working Capital |  |  | $(4,000)$ |
| Net Assets |  |  | £61,000 |
| Financed by |  |  |  |
| Capital Accounts |  |  |  |
| Newman |  |  | 22,000 |
| Redford |  |  | 20,000 |
| Woodward |  |  | 12,000 |
|  |  |  | 54,000 |
| Current Accounts |  |  |  |
| Newman |  | 5,000 |  |
| Redford |  | 2,000 | 7,000 |
|  |  |  | £61,000 |

### 17.7 Further exercises

## Question 17.1

Balance Sheet as at 31 March 1983

|  | $£$ |  | $£$ |
| ---: | :---: | :--- | :---: |
| Capital A | 25,000 | Fixed assets | 50,000 |
| B | 25,000 | Current assets | 3,120 |
| Creditors | $\frac{3,120}{}$ |  |  |
|  | $\underline{53,120}$ |  | $\overline{53,120}$ |

The above Balance Sheet is a summary of the state of affairs of A and B partners sharing profits and losses equally.
They decide to admit C as a partner with effect from 1 April 1983. C will bring in cash of $£ 14,000$ and the new business will share profits between $\mathrm{A}, \mathrm{B}$ and C in the ratio of $2: 2: 1$.
A, B and C agree the goodwill of the existing business of A and B to be $£ 15,000$.
(a) Draft the journal entries required to incorporate the goodwill in the account of $A$ and $B$.
(b) Show, using journal entries, the introduction of C's cash.
(c) Draft the journal entries to write off the goodwill between the three partners of the new business.
(d) Set out the opening Balance Sheet of the new business on 1 April 1983, after goodwill has been written off.
(e) There were two applicants for admission to the business, C with $£ 14,000$ in cash, and D with fixed assets valued at $£ 9,000$ and a goodwill connection valued at $£ 5,000$.
Set out the Balance Sheet as it would have appeared on 1 April 1983 on the assumption that D would have been admitted on the same terms as C . (Goodwill is not to appear in the balance sheet.)
(f) On purely business considerations, why did A and B prefer C to D ?

Answer 17.1
(a)

|  | Dr. | Cr. |
| :--- | :---: | :---: |
|  | $£$ | $£$ |
| A Capital account |  | 7,500 |
| B Capital account | 15,000 | 7,500 |
| Goodwill account |  |  |
| (b) | 14,000 |  |
| Cash |  | 14,000 |
| C Capital account |  |  |
| (c) | 6,000 |  |
| A Capital account | 6,000 |  |
| B Capital account | 3,000 | 15,000 |
| C Capital account |  |  |

(d)

Balance sheet of A, B and C as at 1 April 1983

|  |  | £ |
| :---: | :---: | :---: |
| Fixed Assets |  | 50,000 |
| Current Assets ( $£ 14,000+£ 3,120)$ | 17,120 |  |
| less Creditors | 3,120 |  |
| Working Capital |  | 14,000 |
| Net Assets |  | £64,000 |
| Financed by |  |  |
| Capital A |  | 26,500 |
| Capital B |  | 26,500 |
| Capital C |  | 11,000 |
|  |  | £64,000 |

(e)

Balance sheet of A, B and C as at 1 April 1983

| Fixed Assets |  | 59,000 |
| :---: | :---: | :---: |
| Current Assets | 3,120 |  |
| less Creditors | 3,120 |  |
| Working Capital |  | 0 |
| Net Assets |  | £59,000 |
| Financed by |  |  |
| Capital A |  | 24,500 |
| Capital B |  | 24,500 |
| Capital C |  | 10,000 |
|  |  | £59,000 |

(f) (i) No cost of goodwill.
(ii) Business in need of liquid funds.

## Question 17.2

Martina and Beryl are partners sharing profits and losses in the ratio of $3: 1$.
On 31 May 1985 the following balances remained in their books after completion of the trading and profit and loss accounts for the year:

|  | $£ 000$ |  | $£ 000$ |
| :--- | ---: | :---: | ---: |
| Fixed assets | 305 | Capital Martina | 200 |
| Stock | 10 | Beryl | 100 |
| Debtors | 7 | Creditors | 25 |
| Bank | 3 |  | - |
|  | $\underline{325}$ |  | $\underline{325}$ |
|  |  |  |  |

On that day they agreed to admit Catherine as a partner. The new partnership will share profits and losses as follows: Martina $\frac{1}{2}$, Beryl $\frac{1}{4}$, Catherine $\frac{1}{4}$.
Catherine brought into the business cash $£ 100,000$ and a goodwill connection valued at £12,000.
It was agreed that the goodwill of Martina and Beryl should be $£ 60,000$.
Goodwill will not remain in the books after the admission has been completed.
(a) Write up the capital accounts of the three partners and compile the trial balance of the new business after the goodwill has been written off.
[11 marks]
(b) Compare the working capital of the new business with that of Martina and Beryl and suggest reasons for their agreement to the admission of Catherine.
[2 marks]
(L)

Answer 17.2
(a)

Capital accounts

|  | Martina |  |  |  | Beryl | Cath. |  |  | Martina | Beryl |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Cath.

WORKINGS
(1) Goodwill of Martina and Beryl credited to them in profit sharing ratio 3:1.
(2) Goodwill of existing partners 60

Goodwill of Catherine
12
To be written off in new profit sharing ratio 72

Trial balance (all figures $£ 000$ s)

|  | $£$ | $£$ |
| :--- | ---: | ---: |
| Fixed Assets | 305 |  |
| Stock | 10 |  |
| Debtors | 7 |  |
| Bank | 103 |  |
| Capital | Martina |  |
| Beryl |  |  |
| $\quad$ Catherine |  | 909 |
| Creditors | $\boxed{425}$ | 94 |
|  |  | $\underline{425}$ |

(b)

Working capital (£000s)

|  | old | new |
| :--- | ---: | ---: |
| Stock | 10 | 10 |
| Debtors | 7 | 7 |
| Bank | 3 | $\underline{103}$ |
|  | 20 | 120 |
| less Creditors | $\underline{25}$ | $\underline{25}$ |
|  | $\underline{£(5)}$ | $\underline{£ 95}$ |

Reasons for admission of new partner: (i) to increase liquidity as demonstrated above; (ii) to increase level of business, since Catherine has a valuable goodwill connection.

## 18 Manufacturing Accounts

### 18.1 Introduction

In the examples we have looked at so far, most businesses have been trading businesses. That is to say, they have purchased goods and resold them. We now look at what happens where instead of purchasing goods the business manufactures the goods itself. Simply stated, all of the costs incurred in connection with the cost of manufacturing are collected in the manufacturing account, which we prepare to ascertain the cost of finished production. Having ascertained the cost of finished production, we transfer this amount to the trading account, where it replaces the item 'purchases' which appears in the trading account of trading businesses.

We shall now examine the types of cost which appear in the manufacturing account.

### 18.2 Types of cost

(i) Direct materials are materials and components used to make up the products which the business is manufacturing.
(ii) Direct labour is the cost of labour that is directly involved in producing items of output.
(iii) Direct expenses are expenses which can be directly allocated to a particular unit of goods being made.
(iv) Factory overheads are other costs incurred in the factory which cannot be attributed to any specific output. Also referred to as indirect costs.
(v) Prime cost is the sum total of direct materials, direct labour and direct expenses.
(vi) Production cost is the prime cost plus overheads.

### 18.3 Opening and closing stocks

In previous examples we have seen how the opening and closing stocks were brought into the cost of sales calculation in the trading account. We shall now consider how this and other stocks affect the accounts of a manufacturing business. First of all, we must consider stocks of a manufacturing business in three categories: raw materials, work in progress and finished goods.

The raw materials used by a manufacturing business are part of the cost of production. In order to calculate the cost of materials used, we must consider our expenditure on raw material purchases and adjust that figure for opening and closing stocks. The calculation will be as follows:

|  | $£$ |
| :--- | :---: |
| Opening stock of raw materials | x |
| add Purchases of raw materials | $\frac{\mathrm{x}}{\mathrm{S} / \mathrm{T}}$ |
| sub-total | $\frac{(\mathrm{x})}{\mathrm{T}}$ |
| less Closing stock of raw materials |  |
| Cost of raw materials consumed |  |

## (b) Work in Progress or Work in Process (WIP)

WIP represents partly manufactured goods, not yet completed, which are still being worked on at the accounting period end. There will be an element of raw material labour and possibly overhead included in its valuation. If we ignore the value of work in progress, our total cost of production will reflect, not the cost of finished production but the cost of finished and unfinished production. Since it is the cost of finished production which we wish to calculate, we must deduct the value of closing work in progress from our total cost of production. We carry forward the value of work in progress to the next accounting period and add it to that period's production costs. Our cost of finished production can therefore be calculated as follows:

| Total cost of production |  | x |
| :--- | :---: | :---: |
| Opening work in progress | x |  |
| less Closing work in progress | (x) | $\frac{x}{7}$ |
| Total cost of finished production |  |  |

## (c) Finished Goods

Finished goods is the value of goods completely manufactured and ready for resale, but which have not been sold at the end of the accounting period. These will be adjusted for in the trading account, just as we have in previous examples.

### 18.4 Transfer price of finished goods produced

In Section 18.1 we said that the cost of finished goods produced is transferred to the trading account, and this is the usual procedure. Some businesses, however,
transfer to trading account a value which reflects the price which would have been paid to a supplier of those finished goods. The accounting treatment in this case is as follows:

## Dr. Trading account

Cr. Manufacturing account (with transfer value of finished goods)
Dr. Manufacturing account
Cr. Profit and loss account (with balance remaining on the manufacturing account, which we term manufacturing profit)

This will result in the profit and loss account having transferred to it (a) manufacturing profit, (b) trading profit or gross profit.

### 18.5 Manufacturing accounts for separate products

If an examination question requires separate manufacturing accounts for different products, you should tackle it in the same way as a total manufacturing account and also follow the advice in Chapter 13 on departmental accounts.

### 18.6 Fixed and variable costs

A further classification of costs is as follows:
(i) Variable costs vary with the number of goods produced.
(ii) Fixed costs are the same total amount for a period of time regardless of the number of units produced.

Although, in general, variable costs are direct and fixed costs are indirect, we must not confuse the meaning of these classifications.

### 18.7 Worked examples

## Example 18.1

G. Club is a manufacturer of spare parts and the following balances were some of those appearing in his books at 31 December 1984.

|  | $£$ |
| :--- | ---: |
| Ordinary share capital | 50,000 |
| Stocks at 1 January 1984 |  |
| $\quad$ raw materials | 11,000 |
| $\quad$ work in progress | 16,000 |
| $\quad$ finished goods | 20,090 |
| Stocks at 31 December 1984 |  |
| $\quad$ raw materials | 17,000 |
| $\quad$ work in progress | 18,000 |
| $\quad$ finished goods | 18,040 |
| Wages |  |
| $\quad$ direct manufacturing | 203,080 |
| $\quad$ factory supervisors' | 13,325 |
| $\quad$ general office | 10,200 |
| warehouse | 19,300 |


| Direct factory power | 95,000 |
| :--- | ---: |
| Heating and lighting | 9,000 |
| Purchase of raw materials | 256,000 |
| Carriage outwards | 986 |
| Plant and machinery | 80,000 |
| Premises | 120,000 |
| Returns inward | 420 |
| Office equipment | 15,000 |
| Rates | 6,000 |
| Administrative expenses | 1,800 |
| Debtors | 14,000 |
| Creditors | 12,000 |
| Cash in hand | 3,662 |
| Sales | 800,290 |
| Bank overdraft | 25,641 |

## REQUIRED

(a) For the year ended 31 December 1984, preparation of the manufacturing and trading account of G. Club, apportioning heating and lighting and rates: factory $\frac{1}{2}$, warehouse $\frac{1}{3}$ and office $\frac{1}{6}$.
[15 marks]
Note: Not all of the balances listed at the beginning of the question will be needed in your solution, as you are NOT required to prepare a profit and loss account or a balance sheet.
(b) An explanation of the meaning of:
(i) 'variable expense';
(ii) 'fixed expense'.

Illustrate your answer by providing two examples of each type of expense. [5 marks]

## Solution 18.1

## (a)

Manufacturing account of G. Club for year ended 31 December 1984
£

| Raw materials |  |  |
| :---: | :---: | :---: |
| Opening stock |  | 11,000 |
| Purchases |  | 256,000 |
|  |  | 267,000 |
| less Closing stock |  | 17,000 |
| Cost of raw materials consumed |  | 250,000 |
| Manufacturing wages |  | 203,080 |
| Prime cost |  | 453,080 |
| Overheads |  |  |
| Wages factory supervisors | 13,325 |  |
| Power | 95,000 |  |
| Heating and lighting ( $\frac{1}{2}$ ) | 4,500 |  |
| Rates ( $\frac{1}{2}$ ) | 3,000 | 115,825 |
|  |  | 568,905 |
| Work in progress adjustment |  |  |
| Opening stock | 16,000 |  |
| less Closing stock | 18,000 | $(2,000)$ |
| Cost of finished goods produced |  | £566,905 |


| Trading account of G. Club for year ended 31 December 1984 |  |  |
| :---: | :---: | :---: |
| Sales |  | 800,290 |
| less Returns inward |  | 420 |
|  |  | 799,870 |
| Opening stock of finished goods | 20,090 |  |
| Cost of finished goods produced | 566,905 |  |
| less Closing stock of finished goods | 586,995 |  |
|  | 18,040 |  |
|  | 568,955 |  |
| Warehouse wages | 19,300 |  |
| Heating and lighting ( $\frac{1}{3}$ ) | 3,000 |  |
| Rates ( $\frac{1}{3}$ ) | 2,000 |  |
| Cost of Sales |  | 593,255 |
| Gross profit |  | £206,615 |

(b) Refer to Section 18.6.
(i) For example, factory power, raw materials.
(ii) For example, factory rent, machinery depreciation.

## Example 18.2

T. Morgan is the proprietor of a manufacturing business, making two products (Brand X and Brand Y). On 30 April 1982, the following Trial Balance was prepared:

|  | £ | £ |
| :---: | :---: | :---: |
| Trade debtors and trade creditors | 32,950 | 11,680 |
| Bank interest | 4,300 |  |
| Cash discounts allowed | 1,260 |  |
| Carriage outwards | 12,750 |  |
| Manufacturing wages: Brand X | 78,640 |  |
| Brand Y | 66,900 |  |
| Sundry manufacturing expenses: Brand X | 9,100 |  |
| Brand Y | 10,250 |  |
| Office salaries | 14,570 |  |
| Sundry office expenses | 7,260 |  |
| Selling expenses | 21,540 |  |
| Raw material purchases | 88,500 |  |
| Sales: Brand X |  | 189,940 |
| Brand Y |  | 165,870 |
| Stocks, 1 May 1981: Raw materials | 14,260 |  |
| Brand X | 25,200 |  |
| Brand Y | 17,900 |  |
| Land and buildings | 61,000 |  |
| Machinery and plant | 28,800 |  |
| Office equipment | 4,640 |  |
| Vehicles | 8,600 |  |
| Capital |  | 118,870 |
| Drawings | 23,500 |  |
| Petty cash | 340 |  |
| Bank overdraft |  | 45,900 |
|  | 532,260 | 532,260 |

You are asked to prepare T. Morgan's Manufacturing, Trading and Profit and Loss Account for the year to 30 April 1982, showing the net profit or loss made on each brand, and the Balance at 30 April 1982, taking the following into account:
(a) Stocks at 30 April 1982: Raw materials $£ 22,400$

Brand X £21,300
Brand Y £17,400
(b) Of the total cost of raw materials consumed in manufacturing, $£ 46,300$ applies to Brand X , and the remainder to Brand Y .
(c) Allow for depreciation at the following rates (all on book value): Machinery and plant 20 per cent, Vehicles 30 per cent, Office equipment 10 per cent. All the amounts are to be charged in equal proportions to Brand X and Brand Y. The vehicles are used for transporting goods to customers.
(d) Each brand is to be charged with one-half of any non-manufacturing expenses.

## Solution 18.2

Manufacturing account of T. Morgan for year ended 30 April 1982

|  | X | Y |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | £ | £ |  | £ |
| Raw materials |  |  |  |  |
| Opening stocks (1 May 1981) |  |  | 14,260 |  |
| Purchases |  |  | 88,500 |  |
|  |  |  | 102,760 |  |
| less Closing stocks (30 April 1981) |  |  | 22,400 |  |
| Cost of raw materials used | 46,300 | 34,060 |  | 80,360 |
| Manufacturing wages | 78,640 | 66,900 |  | 145,540 |
| Sundry manufacturing expenses | 9,100 | 10,250 |  | 19,350 |
| Prime cost | 134,040 | 111,210 |  | 245,250 |
| Overheads |  |  |  |  |
| Depreciation machinery and plant | 2,880 | 2,880 |  | 5,760 |
| Cost of production of finished goods | £136,920 | 114,090 |  | 251,010 |

Trading and profit and loss account of T. Morgan for year ended 30 April 1982

|  |  | X |  | Y |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | £ |  | £ |  | £ |
| Sales |  | 189,940 |  | 165,870 |  | 355,810 |
| Opening stock (1 May 1981) | 25,200 |  | 17,900 |  | 43,100 |  |
| Cost of production of | 136,920 |  | 114,090 |  | 251,010 |  |
| finished goods | 162,120 |  | 131,990 |  | 294,110 |  |
| less Closing stock (30 April 1982) | 21,300 |  | 17,400 |  | 38,700 |  |
| Cost of sales |  | 140,820 |  | 114,590 |  | 255,410 |
| Gross profit |  | 49,120 |  | 51,280 |  | 100,400 |
| less |  |  |  |  |  |  |
| Bank interest | 2,150 |  | 2,150 |  | 4,300 |  |
| Cash discounts | 630 |  | 630 |  | 1,260 |  |
| Office salaries | 7,285 |  | 7,285 |  | 14,570 |  |
| Sundry office expenses | 3,630 |  | 3,630 |  | 7,260 |  |
| Carriage outwards | 6,375 |  | 6,375 |  | 12,750 |  |
| Selling expenses | 10,770 |  | 10,770 |  | 21,540 |  |
| Depreciation vehicles | 1,290 |  | 1,290 |  | 2,580 |  |
| Depreciation office equipment | 232 | 32,362 | 232 | 32,362 | 464 | 64,724 |
| Net profit |  | £16,758 |  | £18,918 |  | £35,676 |

Balance sheet of T. Morgan as at 30 April 1982

| Fixed Assets |  |  | £ |
| :---: | :---: | :---: | :---: |
| Land and buildings |  |  | 61,000 |
| Machinery and plant ( $£ 28,800-£ 5,760)$ |  |  | 23,040 |
| Office equipment ( $£ 4,640-£ 464$ ) |  |  | 4,176 |
| Vehicles ( $£ 8,600-£ 2,580$ ) |  |  | 6,020 |
|  |  |  | 94,236 |
| Current Assets |  |  |  |
| Stock - raw materials | 22,400 |  |  |
| - finished goods | 38,700 | 61,100 |  |
| Debtors |  | 32,950 |  |
| Petty cash |  | 340 |  |
|  |  | 94,390 |  |
| less Current Liabilities |  |  |  |
| Creditors | 11,680 |  |  |
| Bank overdraft | 45,900 | 57,580 |  |
| Working Capital |  |  | 36,810 |
| Net Assets |  |  | £131,046 |
| Financed by |  |  |  |
| Capital (balance 1 May 1981) |  |  | 118,870 |
| add net profit |  |  | 35,676 |
|  |  |  | 154,546 |
| less drawings |  |  | 23,500 |
| Capital (balance 30 April 1982) |  |  | £131,046 |

### 18.8 Further exercises

## Question 18.1

(a) J. Cook is the owner of a manufacturing business and on 31 December 1983 he supplies you with the following information extracted from his books:
RAW MATERIALS ..... £000
Purchases ..... 600
Carriage on purchases ..... 20
Stock 1 January 1983 ..... 65
Stock 31 December 1983 ..... 60
FINISHED GOODS
Sales ..... 1,200
Stock at Factory Cost 1 January 1983 ..... 120
Stock at Factory Cost 31 December 1983 ..... 110
WORK IN PROGRESS
Stock at Factory Cost 1 January 1983 ..... 85
Stock at Factory Cost 31 December 1983 ..... 80
Factory Insurance Premiums paid for period from 1 January 1983 to 30 September 1983 ..... 6
Rent and Rates ..... 10
Lighting and Heating ..... 60
General Factory Expenses ..... 4
Manufacturing Wages ..... 350
Selling and Delivery Expenses ..... 10
SALARIES
Office Management ..... 18
Factory Management ..... 12
Debtors ..... 216
Creditors ..... 120
Office Fixtures and Fittings at Cost ..... 20
Factory Machinery at Cost ..... 100
Premises at Cost ..... 200
Cash in Hand and at Bank ..... 30
NOTES
(1) Lighting and Heating AND Rent and Rates are to be apportioned between the Factory and Office Administration in the ratio of 3:2.
(2) Depreciation: Machinery at 10 per cent of cost. Office Fixtures and Fittings at 20 per cent of cost.
(3) Factory Insurance Premiums are due but unpaid at the same rate for 3 months ending 31 December 1983.

USING THE NECESSARY INFORMATION from the opposite page [i.e. above], PREPARE A MANUFACTURING ACCOUNT AND A TRADING ACCOUNT for the year 1983. The accounts must show CLEARLY LABELLED:
(i) Cost of Raw Materials Consumed.
(ii) Prime Cost.
(iii) Cost of Goods Manufactured.
(iv) Gross Profit.

DO NOT PREPARE A PROFIT AND LOSS ACCOUNT OR BALANCE SHEET HEAD UP YOUR MONEY COLUMNS AS $£ 000$
DO NOT ADD " 000 " TO EVERY FIGURE
(b) CALCULATE the Manufacturing cost per unit if 40,000 units were manufactured during 1983.
(c) EXPLAIN the differences between:
(i) DIRECT COSTS and INDIRECT COSTS
(ii) FIXED COSTS and VARIABLE COSTS

Answer 18.1
(a)

Manufacturing account of J. Cook for year ended 31 December 1983

| Raw materials |  |  |
| :--- | ---: | ---: |
| Opening stock (1 January 1983) | 65 |  |
| Purchases | 600 |  |
| add carriage on purchases | $\boxed{20}$ | 620 |
|  | 685 |  |
| less Closing stocks (31 December 1983) | $\boxed{60}$ |  |
| Cost of raw materials consumed |  | 625 |
| Manufacturing wages |  | $\underline{350}$ |
| Prime cost |  | 975 |


| Overheads |  |  |
| :--- | ---: | ---: |
| $\quad$ Factory insurance premiums $(£ 6,000+£ 2,000)$ | 8 |  |
| Factory rent and rates | 6 |  |
| Factory lighting and heating | 46 |  |
| Factory general expenses | 12 |  |
| Factory management salaries | 10 | $\boxed{10}$ |
| Depreciation of machinery |  | 1,051 |
|  |  |  |
| Work in progress | 85 |  |
| Opening stock (1 January 1983) | $\underline{80}$ |  |
| less Closing stock (31 December 1983) |  | $\underline{51,056}$ |
| Increase in WIP |  | $\underline{5}$ |
| Cost of goods manufactured |  |  |

Trading account of J. Cook for year ended 31 December 1983

|  |  | $£$ |
| :--- | ---: | :---: |
| Sales |  | 1,200 |
| Opening stock (1 January 1983) | $\underline{1,056}$ |  |
| Cost of goods manufactured | 1,176 |  |
|  | $\underline{110}$ |  |
| less Closing stock (31 December 1983) |  | $\underline{1,066}$ |
| Cost of sales |  | $\underline{£ 134}$ |
| Gross profit |  |  |

(b) $\frac{£ 1,056,000}{40,000}=£ 26.40$ per unit
(c) (i) Refer to Section 18.2.
(ii) Refer to Section 18.6.

## Question 18.2

Mr R. Reed owns a small workshop in which he manufactures cricket bats in two qualities, 5 star and 3 star. The following information is provided from his records for the year to 31 March 1982.

| Stocks at 1 April 1981: | £ |
| :---: | :---: |
| Raw materials | 3,860 |
| Finished goods 5 star | 1,225 |
| 3 star | 3,200 |
| Purchases of raw materials | 124,514 |
| Carriage on raw materials | 320 |
| Workshop wages 5 star | 16,000 |
| 3 star | 48,000 |
| Workshop light and heat | 1,300 |
| Workshop general expenses | 800 |
| Workshop rent and rates | 1,800 |
| Raw materials returned to suppliers | 480 |
| Sales 5 star | 100,000 |
| 3 star | 200,000 |
| Stocks at 31 March 1982: |  |
| Raw materials | 1,320 |
| Finished goods 5 star | 594 |
| 3 star | 2,125 |

Workshop records show that, of the raw materials consumed in production in the year ended 31 March 1982, £50,894 was used in the production of 5 star and the remainder in
the production of 3 star. All workshop costs not allocated are to be apportioned one-quarter to the production of 5 star and three-quarters to the production of 3 star.

## REQUIRED

For the year ended 31 March 1982:
(a) a manufacturing account showing clearly the prime cost and the factory cost of goods manufactured for each grade of the product;
[10 marks]
(b) a trading account for each grade of the product;
[5 marks]
(c) a brief explanation of the significance of the factory cost of goods manufactured.
[2 marks]
Note: You are recommended to adopt the columnar form of presentation for the manufacturing and trading accounts.
(AEB)
Answer 18.2
(a)

Manufacturing account of R. Read for the year ended 31 March 1982

| Raw materials | 5 star |  | 3 star |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | £ |  | £ |  | £ |
| Opening stock (1 April 1981) |  |  |  |  |  | 3,860 |
| Purchases |  |  |  |  | 124,514 |  |
| add carriage |  |  |  |  | 320 |  |
|  |  |  |  |  | 124,834 |  |
| less returns |  |  |  |  | 480 | 124,354 |
|  |  |  |  |  |  | 128,214 |
| less Closing stock (31 March 1982) |  |  |  |  |  | 1,320 |
| Cost of raw material consumed |  | 50,894 |  | 76,000 |  | 126,894 |
| Workshop wages |  | 16,000 |  | 48,000 |  | 64,000 |
| Prime cost |  | 66,894 |  | 124,000 |  | 190,894 |
| Overheads |  |  |  |  |  |  |
| Workshop light and heat | 325 |  | 975 |  | 1,300 |  |
| Workshop general expenses | 200 |  | 600 |  | 800 |  |
| Workshop rent and rates | 450 | 975 | 1,350 | 2,925 | 1,800 | 3,900 |
| Cost of finished production |  | £67,869 |  | £126,925 |  | £194,794 |

(b)

Trading account of R. Reed for the year ended 31 March 1982

| Sales |  | 100,000 |  | 200,000 |  | 300,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Opening stock (1 April 1981) | 1,225 |  | 3,200 |  | 4,425 |  |
| Cost of finished production | 67,869 |  | 126,925 |  | 194,794 |  |
|  | 69,094 |  | 130,125 |  | 199,219 |  |
| less Closing stock (31 March 1982) | 594 |  | 2,125 |  | 2,719 |  |
| Cost of goods sold |  | 68,500 |  | 128,000 |  | 196,500 |
| Gross profit |  | £31,500 |  | £72,000 |  | £103,500 |

(c) Refer to Section 18.1.

## Question 18.3

W. Wilkins manufactures concrete ornamental birdbaths in one standard pattern. The following information relates to the manufacture of 1,000 birdbaths during the month ended 31 May 1984, and to his sales, during that month.

|  |  | £ |
| :---: | :---: | :---: |
| 1 May | Stock of finished birdbaths: 150 valued at | 375 |
|  | Stock of: sand | 100 |
|  | cement | 1,300 |
|  | gravel chippings | 70 |
|  | Purchases during month: sand | 75 |
|  | cement | 1,200 |
|  | gravel chippings | 100 |
| 31 May | Stock of: sand | 90 |
|  | cement | 1,450 |
|  | gravel chippings | 95 |
|  | Carriage inwards paid during month | 85 |
|  | Workshop wages paid | 900 |
|  | Workshop rent and rates | 150 |
|  | Workshop heating and lighting | 75 |
|  | Power used by mixing machines, etc. | 140 |
|  | Water charges for mixer | 25 |

During the month 1,000 birdbaths were completed and 950 sold for $£ 3$ each.
(a) Prepare a manufacturing account and a trading account for the month of May 1984. (Show clearly your calculations of the number and value of birdbaths in stock at the end of the month.)
(b) After having completed the accounts for the month W. Wilkins learns that his employees' union has negotiated a wage increase backdated to 1 May 1984. This will increase his wages bill for the month to $£ 1,000$. Re-calculate:
(i) Prime cost,
(ii) Cost of production,
(iii) Value of closing stock,
(iv) Cost of goods sold,
(v) Gross profit.

## Answer 18.3

(a)

Manufacturing account of W. Wilkins for the month ended 31 May 1984

| Raw materials |  | $£$ |
| :--- | ---: | :---: |
| Opening stock (1 May 1984) <br> Purchases <br> add carriage inwards | 1,375 | 1,470 |
| less Closing stock (31 May 1984) | -85 | 1,460 |


| Cost of raw materials consumed | 1,295 |  |
| :--- | ---: | ---: |
| Wages |  | 900 |
|  |  | 2,195 |
| Overheads | 150 |  |
| $\quad$ Rent and rates | 75 |  |
| Heating and lighting | 140 |  |
| Power used | -25 | $\mathbf{3 9 0}$ |
| $\quad$ Water charges |  | $\mathbf{£ 2 , 5 8 5}$ |
| Cost of finished production |  |  |

Trading account of W. Wilkins for the month ended 31 May 1984

|  |  | $£$ |
| :--- | ---: | ---: |
| Sales $(950 \times £ 3)$ | 375 | 2,850 |
| Opening stock (1 May 1984) | $\frac{2,585}{2,960}$ |  |
| Cost of finished production | -517 |  |
|  | - | 2,443 |
| less Closing stock $(200 \times £ 25.85)(1)$ |  | $£ 407$ |

NOTE

| (1) Stock of birdbaths (1 May) | 150 |
| :--- | ---: |
| add birdbaths completed | $\underline{1,000}$ |
|  | 1,150 |
| Stock at 31 May | $\underline{950}$ |

Total cost of finished production $£ 2,585$
divided by number of birdbaths completed 1,000
cost per finished birdbath £2.585
(b) (i) $£ 2,295$
(ii) $£ 2,685$
(iii) $\frac{£ 2,685}{1,000}=£ 2.685 \quad 200 \times £ 2.685=£ 537$
(iv) $£ 2,523$
(v) $£ 327$

# 19 Stock Valuation 

### 19.1 Introduction

We have already seen that stock is an asset of the business. In all of the examples so far, a closing stock valuation has been given to us in the question. We shall now look closer at how the stock valuation figure is arrived at and the problems involved. We first of all should consider the various bases on which we can value stock.

### 19.2 Bases of stock valuation

We can summarise the bases as follows:
(i) Selling price.
(ii) Net realisable value. This we can define as selling price less costs to be incurred to bring the stock into a saleable condition and then sell it. In other words, selling price less processing costs and selling costs still to be incurred.
(iii) Original cost.
(iv) Current replacement cost.

We can ignore (iv), because it is used only in current cost accounting and not conventional historical cost accounting, the latter being the only type with which we are concerned. If we consider the valuation of stock at selling price, this would clearly be unreasonable, since, when we eventually sell the goods, we would make a loss to the extent of processing and selling costs incurred after the stock valuation date. Therefore by valuing stock at selling price we would be recognising a false profit.
Having dismissed (i) and (iv), we are therefore left with the choice of valuing stock at cost or net realisable value. In making the choice between these two bases we must first of all bear in mind accounting convention, which says that stock should be valued at cost until it is sold. In other words, no profit should be recognised until the profit is realised, which is when the sale takes place. Having said that stock should be valued at cost and the profit not recognised until the stock is sold, what if we now consider that we will not be able to sell to stock at a profit? The answer to this problem lies in an accounting concept of prudence. This concept forces us to recognise a loss immediately we are aware of it, and therefore, if the net realisable value of stock is lower than cost, then we should value it at its net realisable value.

If we accept that accounting convention requires us to value stock at the lower of cost and net realisable value, the next question is one of how to apply this basis.

Consider the following example:

| Item | Cost | Net realisable value (NRV) | Lower of Cost and NRV |
| :---: | :---: | :---: | :---: |
|  | $£$ | $£$ | $£$ |
| A | 100 | 150 | 100 |
| B | 600 | 540 | 540 |
| C | 410 | 450 | 410 |
| Total | $\underline{£ 1,110}$ | $\underline{£ 1,140}$ | $\underline{£ 1,050}$ |

Can we value the stock at $£ 1,110$, since in total the cost of the stock is lower than the net realisable value? The answer is no, we must look separately at each item of stock, although, if this is impracticable, we may look at groups of items and apply the lower of cost or NRV rule to each group of items. In the above example, therefore, stock should be valued at $£ 1,050$.

We have mentioned the word 'cost' without defining what cost is, and the different methods of ascertaining cost, which we shall now do.

### 19.3 Valuation of stocks at cost

You may consider that valuation of stocks at cost is a simple matter, but consider the example of a trader buying and selling cabinets with the following transactions:

| Date | Purchases | Sales | Stock remaining |
| :--- | :---: | :---: | :---: |
| Jan. 1 | 10 at £15 |  | 10 |
| Jan. 21 | 10 at £17 |  | 20 |
| Jan. 27 |  | 8 | 12 |
| Feb. 8 | 20 at £20 |  | 32 |
| Feb. 21 |  | 24 | 8 |

What is the cost of the 8 cabinets in stock - $£ 15, £ 17, £ 20$ each, or some other figure? We shall now look at some bases for determining cost and see how it affects the answer to this question.

## (a) First in First out (FIFO)

Using this method, we assume that the stock which has been held longest is used first. Therefore, the stock balance represents the latest purchases. In our above example the 8 cabinets would be valued at $£ 20$ each.

## (b) Last in First out (LIFO)

Using this method, we assume that the stock purchased more recently is used first. Applying this to our example above, we would value the 8 cabinets at $£ 15$ each, the explanation being that the 8 sold on 27 January would be from the purchases on 21 January and the 24 sold on 21 February would be as follows:

```
20 purchased on 8 February
2 remaining from 21 January purchases
2 from purchases on 1 January
```

24

Therefore the 8 remaining are from the 10 purchased on 1 January.

## (c) Average Cost

Using this method, we calculate the average cost ruling when the stock is sold or used. There are variations in practice but the most common way of applying it to our above example would be as follows:

| Date | Purchases | Sales | Stock remaining |
| :---: | :---: | :---: | :---: |
| Jan. 1 | $10 \times £ 15=£ 150$ |  | $10 \times £ 15=150$ |
| Jan. 21 | $10 \times £ 17=£ 170$ |  | $10 \times £ 15=150$ |
|  |  |  | $10 \times £ 17=170$ |
|  |  |  | 20 £320 |
| Jan. 27 |  | (1) $8 \times £ 16=£ 128$ | $12 \times £ 16=£ 192$ |
| Feb. 8 | $20 \times £ 20=£ 400$ |  | $12 \times £ 16=£ 192$ |
|  |  |  | $\underline{20} \times £ 20=\underline{£ 400}$ |
|  |  |  | 32 £592 |

Feb. 21
(2) $24 \times £ 18.50=£ 4448 \times £ 18.50=£ 148$

NOTES
(1) The $£ 16$ is calculated by dividing the total cost of stock purchased by the quantity purchased $(£ 320 \div 20=£ 16) . £ 16$ is used to value the outgoing stock and the remaining balance.
(2) The $£ 18.50$ is calculated by dividing the value of stock in hand by the quantity held at 21 February $£ 592 \div 32=£ 18.50$ ). Again the $£ 18.50$ is used to value the outgoing stock and the balance of stock in hand.

### 19.4 Choice of method

If we summarise the value using the above three methods, we have
FIFO $\quad 8 \times £ 20=£ 160$
LIFO $8 \times £ 15=£ 120$
Average $\quad 8 \times £ 18.50=£ 148$
There are other less common methods of valuing stock at cost, but we need not be concerned with those here. Examining the three methods above, we can see that LIFO gives us a lower stock valuation than FIFO, and this will always be the case when prices are rising. Each business is free to choose the method of stock valuation which it considers most appropriate. It is worth noting that FIFO is the most common method and most appropriate in the majority of cases. It also resembles most closely what happens in practice - that is, the oldest stock is sold or used first.

### 19.5 Effect on profits

It is important that we understand the effect on profits of different stock valuations. Closing stock decreases our cost of sales; therefore, an increase in the closing stock valuation will increase our gross and net profit. Conversely, if we decrease
the value of our closing stock, then cost of sales increases and gross and net profits decrease. You should note that the effect will be the opposite when in the next accounting period the closing stock valuation from the previous accounting period becomes the opening stock for the current period. An increase in the opening stock valuation increases cost of sales and therefore decreases gross and net profits. A decrease in opening stock valuation decreases the cost of sales and therefore increases gross and net profits.

### 19.6 Worked examples

## Example 19.1

(a) Explain the meaning of each of the following categories of stock, found in the accounts of a sole trader who manufactures radios:
(i) stock of finished goods;
(ii) work in progress;
(iii) packing materials.

How would each item be treated in the preparation of final accounts? [8 marks]
(b) "Cost or net realisable value, whichever is the lower". Explain and illustrate the meaning of this statement, which is used in connection with stock valuation. [7 marks]

Solution 19.1
(a) (i) Refer to Section 18.3 (c). Goods ready for sale. Opening stock debited in trading account, included as a plus figure in the cost of sales calculation. Closing stock credited in trading account, included as a minus figure in the cost of sales calculation.
(ii) Refer to Section 18.3 (b). Partly manufactured goods not yet completed and still being worked on. Opening stock debited in manufacturing account, closing stock credited in manufacturing account.
(iii) Stock of packing materials purchased but unused. Refer to Section 12.4. Deduct from packing materials expense.
Note: Additionally all three items of stock will appear as an asset in the balance sheet under current assets.
(b) Refer to Section 19.2.

## Example 19.2

The items below have been extracted from the final accounts and balance sheets of the wholesaling business owned by J. White:

|  | $£$ |
| :---: | ---: |
| Net profit: | for 1981 |
| for 1982 | 25,600 |
| Gross profit: for 1981 | 29,240 |
| for 1982 | 218,450 |
| Stock: 31 December 1981 | 231,620 |
| 31 December 1982 | 41,970 |
| Capital: 31 December 1981 | 212,940 |
| 31 December 1982 | 220,650 |

It has now been discovered that some errors were made at the 31 December 1981 stocktaking: the correct value for stock at that date was $£ 35,250$, not $£ 37,970$.
You are asked to write out the list of items given above, showing them all at their correct amounts.
(OLE)

## Solution 19.2

The decrease in the closing stock valuation at 31 December 1981 will increase cost of sales and therefore decrease gross profit and net profit. Since the net profit is transferred to the capital account, the effect on the balance sheet will be to decrease the capital figure. The asset stock will be decreased similarly, so that the balance sheet balances. We can tabulate the effect as follows:

|  | Present | Adjustment | $\underline{\text { Revised }}$ |
| :---: | :---: | :---: | :---: |
|  | £ | £ | £ |
| Net profit for 1981 | 25,600 | - 2,720 | 22,880 |
| Gross profit for 1981 | 218,450 | - 2,720 | 215,730 |
| Stock 31 December 1981 | 37,970 | + 2,720 | 40,690 |
| Capital 31 December 1981 | 212,940 | - 2,720 | 210,220 |

In 1982 the reduced opening stock valuation at 1 January 1982 will reduce the cost of sales and therefore increase gross and net profit. Again we can tabulate the effect as follows:

| Net profit for 1982 | 29,240 | $+2,720$ | 31,960 |
| :--- | ---: | :--- | ---: |
| Gross profit for 1982 | 231,620 | $+2,720$ | 234,340 |
| Stock 31 December 1982 | 41,810 | no change | 41,810 |
| Capital 31 December 1982 |  | $-2,720(1981$ profit) | 220,650 (see below) |
|  | 220,650 | $+2,720(1982$ profit) |  |

In 1981 the balance on the capital account was reduced by $£ 2,720$ because of the decreased net profit. The figure brought forward into 1982 would therefore be similarly decreased. However, since the 1982 profit is increased by the same amount of $£ 2,720$, the balance on the capital account at 31 December 1982 will be the same as previously.

### 19.7 Further exercises

## Question 19.1

P. Smithers was unable to take stock on 31 December 1981 but carried out the operation on 4 January 1982.
On 4 January 1982 he had the following in stock:

| Item no. | Quantity | Cost price <br> per 100 | Selling price <br> per 100 |
| :--- | :--- | :--- | :--- |
|  |  | $£$ | $£$ |
| 1 | 4,000 | 1.10 | 1.70 |
| 2 | 3,700 | 1.00 | 1.40 |
| 3 | 2,000 | 1.20 | 1.60 |
| 4 | 1,500 | 2.10 | 0.50 |
| 5 | 1,600 | 2.00 | 2.40 |

Smithers points out that the demand for item no. 4 had collapsed and that he was clearing his stock at a very reduced selling price.
Between 1 January 1982 and 4 January 1982 (inclusive) the following had been delivered to P. Smithers' warehouse and had been included in his stock on 4 January:

| Item no. | Quantity |
| :--- | :--- |
| 2 | 400 |
| 5 | 300 |

Sales records shows that the following sales had taken place between 1 January and 4 January 1982:

| Item no. | Quantity |
| :--- | :--- |
| 1 | 100 |
| 2 | 200 |
| 4 | 100 |

(a) Calculate the value of P. Smithers' stock on 31 December 1981.
(b) Why is it important to ascertain stock valuations correctly at the end of a trading period?

Answer 19.1
(a)

| Item | Quantity <br> 4 Jan. 82 | Adjustment for Jan. movements | Quantity <br> 31 Dec. 84 | Value <br> per 100 (1) | Stock <br> value |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\left(\begin{array}{c} +100 \\ +200 \\ -400 \end{array}\right)$ |  | £ | £ |
| 1 | 4,000 |  | 4,100 | 1.10 | 45.10 |
| 2 | 3,700 |  | 3,500 | 1.00 | 35.00 |
| 3 | 2,000 |  | 2,000 | 1.20 | 24.00 |
| 4 | 1,500 | + 100 | 1,600 | 0.50 | 8.00 |
| 5 | 1,600 | - 300 | 1,300 | 2.00 | 26.00 |
|  |  |  |  |  | £138.10 |

NOTE
(1) Lower of cost or net realisable value, in this case the selling price.
(b) Effect on profits of incorrect calculation.

## Question 19.2

(a) From the following stock list calculate the value of J. Brown's stock on 31 December 1983.

| Item Catalogue <br> number | Quantity in <br> stock | Cost price <br> each | Selling price <br> each |
| :--- | :--- | :---: | :---: |
| 1 |  | $£$ | $£$ |
| 2 | 30 | 2.40 | 3.60 |
| 3 | 37 | 3.10 | 4.50 |
| 4 | 25 | 4.20 | 2.00 |
|  | 30 | 3.70 | Nil |

(b) A trading account shows the gross profit for three years ended 31 December to be as follows:

|  | $£$ |
| :---: | :---: |
| 1981 | 16,000 |
| 1982 | 15,000 |
| 1983 | 17,000 |

It came to light that a quantity of stock, at cost price $£ 400$, purchased in 1981 and sold during 1983 had not been included in the stock valuations on 31 December 1981 and 1982.

Calculate the correct gross profit for the three years ended 31 December 1981, 1982 and 1983.
(c) A firm started in business during 1982. On 31 December 1982 stock-taking showed the value of goods held to be $£ 3,700$. On 31 December 1983 the value of stock was $£ 4,200$. Write up the stock account for the two years 1982 and 1983.

Answer 19.2
(a)

| Item | Quantity | Value (each) (1) | Stock value |
| :---: | :---: | :---: | :---: |
|  |  | £ | £ |
| 1 | 30 | 2.40 | 72 |
| 2 | 27 | 3.10 | 84 |
| 3 | 25 | 2.00 | 50 |
| 4 | 30 | Nil | £206 |

NOTE
(1) Lower of cost and net realisable value.
(b)

|  | $\frac{\text { As given }}{}$ |  | Adjustment |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | $\frac{\text { Revised amount }}{£}$ |  |  |
| 1981 | 16,000 | +400 |  | 16,400 |  |
| 1982 | 15,000 | +400 |  | 15,000 |  |
|  |  | -400 |  |  |  |
| 1983 | 17,000 | -400 |  | 16,600 |  |

1981 Closing stock increased; therefore, cost of sales decreased and profits increased.
1982 Opening and closing stocks both undervalued by $£ 400$; therefore, no effect on cost of sales or profit.
1983 Opening stock increased by $£ 400$; therefore, cost of sales increased and profits decreased.
(c)

Stock

| 1982 |  | $£$ | 1982 |  | $£$ |
| :--- | :--- | :---: | :--- | :--- | :---: |
| Dec. 31 | Trading account | $\underline{3,700}$ | Dec. 31 | Balance c/d | $\underline{3,700}$ |
|  |  | $\underline{3,700}$ |  |  | $\underline{3,700}$ |
| 1983 |  |  | 1983 |  |  |
| Jan. 1 | Balance b/d | 3,700 |  | Dec. 31 | Trading account |
| Dec. 31 | Trading account | $\underline{4,200}$ | Dec. 31 | Balance c/d | $\underline{4,200}$ |
|  |  | $\underline{7,900}$ |  |  | $\underline{7,900}$ |
| 1984 |  |  | 1984 |  |  |
| Jan. 1 | Balance b/d | 4,200 |  |  |  |

## Question 19.3

(a) Explain the meaning of the following terms, used in connection with stock valuation:
(i) first in first out (FIFO);
(ii) last in first out (LIFO).
(b) Use an example to show which of the two methods (FIFO or LIFO) will produce a higher figure of stock valuation in times of rising stock prices.
[5 marks]
(c) Explain the effect on a firm's gross profit of overvaluing closing stock.
[5 marks]
(AEB)
Answer 19.3
(a) (i) Refer to Section 19.3(a).
(ii) Refer to Section 19.3(b).
(b) Refer to Sections 19.3 and 19.4.
(c) Refer to Section 19.5.

## 20 Comprehension and Interpretation of Accounts

### 20.1 Introduction

We have so far been concerned with the preparation of final accounts without any examination of those accounts and without asking ourselves what those accounts mean or what they are telling us. In order to remedy this situation, we need to calculate some ratios from the figures in the final accounts. In addition to the calculation of ratios, we really need a yardstick or something else with which to compare our figures. For this purpose we may use any or all of the following: (a) previous year's figures; (b) competitors' figures; (c) average figures for the type of business which we are running. We shall now look at some accounting ratios in detail.

### 20.2 Return on capital employed (ROCE)

This is the most important of ratios which we calculate, since it measures the profit of the business compared with the investment in that business or the capital employed by the business. The formula is

$$
\frac{\text { profit }}{\text { capital employed }} \times 100
$$

For example,

$$
\frac{£ 15 \text { (net profit) }}{£ 200 \text { (capital employed) }} \times 100=7.5 \text { per cent }
$$

Our return on capital employed is 7.5 per cent.
If we wished to improve our ROCE, we could either increase profits or reduce the capital employed, which leads us into our next two sets of ratios.

### 20.3 Profitability ratios

If in the above example our $£ 15$ had been arrived at as follows:

|  |  |
| :--- | ---: |
| Sales | 50 |
| Cost of sales | 30 |
| Gross profit | 20 |
| Expenses | 5 |
| Net profit | $£ 15$ |

We can calculate the following:
(a) Net profit margin, defined as $\frac{\text { net profit }}{\text { sales }} \times 100$
as follows: $\frac{£ 15 \text { (net profit) }}{£ 50(\text { sales })} \times 100=30$ per cent
(b) Gross profit margin, defined as $\frac{\text { gross profit }}{\text { sales }} \times 100$
as follows: $\frac{£ 20 \text { (gross profit) }}{£ 50 \text { (sales) }} \times 100=40$ per cent
You should be careful not to confuse gross profit margin with mark-up. Margin is the gross profit expressed as a percentage of sales; mark-up is gross profit expressed as a percentage of cost of goods sold. For example, a mark-up of 50 per cent means that if the cost price is $£ 100$, the selling price is $£ 100+£ 50-$ that is, £150. The gross margin in this example is

$$
\frac{£ 50}{£ 150} \times 100=33 \frac{1}{3} \text { per cent }
$$

### 20.4 Asset efficiency ratios

As might be expected, the asset efficiency ratio shows how efficient we have been in the use of our assets. The formula is

$$
\frac{\text { sales }}{\text { net assets }}
$$

Using the same figures as for the previous example, and remembering that if capital employed by the business is $£ 200$, then our net assets must also be $£ 200$, because of the balance sheet equation referred to in Chapter 4,

$$
\frac{£ 50 \text { (sales) }}{£ 200 \text { (net assets) }}=0.25
$$

The higher the ratio the more efficient we are in using our net assets.
At this stage we should appreciate the relationship referred to in the last paragraph of Section 20.2, which we can now express mathematically as

ROCE $=$ profit margin $\times$ asset turnover
or, using the figures from our example used so far,
7.5 per cent $=30$ per cent $\times 0.25$

This re-emphasises the point that ROCE depends upon profit margin and asset efficiency.

In considering asset efficiency we should also look at the efficiency of the business with regard to individual assets. We shall now look at two of those assets, stock and debtors.

## (a) Stock Turnover

Assets efficiency means keeping the asset figures as low as possible in relation to sales. Stock turnover measures our efficiency in keeping stock as low as pos-
sible in relation to sales - that is to say, turning over the stock as many times as possible. The formula is

$$
\frac{\text { cost of sales }}{\text { stock }}
$$

The stock figure may be average stock or the closing stock. If in the example used so far the closing stock was $£ 12$, our stock turnover would be

$$
\frac{£ 30 \text { (cost of sales) }}{£ 12 \text { (stock) }}=2.5
$$

This means that we are turning over our stock $2 \frac{1}{2}$ times a year. The higher the stock turnover the more efficient we are.

## (b) Debt Collection Period

This measures how efficient we are at keeping our debtors as low as possible in relation to our sales. The formula is

$$
\frac{\text { debtors }}{\text { credit sales }} \times 365=\text { debt collection period, in days }
$$

If in the above example our debtors were $£ 8$ and all of our sales were on the credit, the calculation would be

$$
\frac{£ 8(\text { debtors })}{£ 50(\text { sales })} \times 365=58 \text { days }
$$

This means that the debtors figure of $£ 8$ is equivalent to 58 days of sales, or, put another way, it is taking on average 58 days to collect from our debtors the amounts due from them. The lower the collection period the more efficient we are, both from the point of view of keeping our total assets as low as possible in relation to sales and of reducing the risk of bad debts arising.

### 20.5 Liquidity ratios

Liquidity ratios measure our ability to be able to finance our day-to-day operations, or, in other words, pay our debts as they become due.

## (a) Current Ratio or Working Capital Ratio

The current ratio measures the relationship between current assets and current liabilities by dividing the former by the latter. If the ratio is high, meaning a high level of current assets compared with current liabilities, we should have little difficulty in meeting our debts as they become due.

There are many opinions as to what the ratio should or should not be. Some suggest 2 or even 3 as a rule of thumb, but really it depends on the type of business. Sainsbury's current ratio at 28 March 1984 was 0.49 , owing to minimal debtors and low stocks, but this cannot be interpreted as indicating any financial instability. In the case of the current ratio, it is important to look at how the figure has changed when compared with the previous year rather than the figure itself. A decrease compared with the previous year would be a warning sign as to the financial stability of the business. Finally, we should not fail to note that
while a high current ratio denotes strong financial stability, it may also indicate poor asset efficiency.

## (b) Acid Test Ratio

The formula for the acid test ratio is

```
current assets (less stock)
current liabilities
```

Like the current ratio, it measures liquidity but is less commonly used. The same comments apply with regard to meaning and interpretation as to the current ratio.

### 20.6 Worked examples

## Example 20.1

(a) The following figures, in $£ 000$ s, relate to two similar businesses, X and Y .

|  | X | Y |
| :--- | :---: | ---: |
|  | $£ 000 \mathrm{~s}$ | $£ 000 \mathrm{~s}$ |
| Turnover | 18,000 | 24,000 |
| Capital | 15,000 | 16,800 |
| Net profit | 1,800 | 3,360 |
| Gross profit | 4,500 | 6,000 |
| Average stock at cost | 1,500 | 1,500 |

Calculate for businesses X and Y :
(i) net profit percentage on capital;
(ii) net profit percentage on sales;
(iii) gross profit percentage on sales;
(iv) rate of stock turnover.
(b) A financial magazine publishes an article claiming the following figures should be the norm for a well-run business:

| Net profit on capital | 15 per cent |
| :--- | :--- |
| Net profit on sales | 12 per cent |
| Gross profit on sales | 25 per cent |
| Rate of stock turnover | 10 |

Compare the relationships which you have calculated in (a) with the published norm and state, with reasons, which business is the better managed.

Solution 20.1
(a)

|  | X |
| :---: | :---: |
| (i) | $\frac{1,800}{15,000} \times 100=12$ per cent |
| (ii) | $\frac{3,360}{16,800} \times 100=20$ per cent |
| 18,000 |  | $100=10$ per cent $~ \frac{3,360}{24,000} \times 100=14$ per cent

(iii) $\frac{4,500}{18,000} \times 100=25$ per cent $\quad \frac{6,000}{24,000} \times 100=25$ per cent
(iv) $\frac{13,500}{1,500}=9$ times $\quad \frac{18,000}{1,500}=12$ times
(b) Y is making a better return on capital employed ( 20 per cent compared with X's 12 per cent and a norm of 15 per cent). This is partly due to Y making a better net profit margin ( 14 per cent compared with X's 10 per cent and a norm of 12 per cent). Since both X and Y are making a gross profit margin of 25 per cent (in line with the norm), Y is incurring a lower level of overhead expenses compared with sales than X . The other reason for Y's better net profit margin is asset efficiency, as shown by an asset turnover of 1.43 compared with X's 1.2. One of the reasons for this is Y's ability to turn over his stock 12 times per year compared with a norm of 10 and X's 9 . Y is therefore the better-managed business, with net profit margin and stock turnover being better than for X and the norm. This results in a better return on capital employed.

## Example 20.2

The trading and profit and loss accounts of two separate businesses, engaged in the same trade and of similar size, are given below.

Trading and Profit and Loss Accounts for year ended 31 December 1983:

|  | CORFU Ltd £ | RHODES Ltd £ |  | CORFU Ltd £ | RHODES Ltd £ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Opening Stock | 2,600 | 5,300 | Sales | 48,900 | 43,500 |
| Purchases | ? | ? | Less Returns | 900 | 250 |
|  | ? | ? |  |  |  |
| Less Closing Stock | ? | 4,700 |  |  |  |
| Cost of goods sold | ? | ? |  |  |  |
| Gross Profit | ? | ? |  |  |  |
|  | ? | ? |  | ? | ? |
| Total Expenses | ? | ? | Gross Profit | ? | ? |
| Net Profit | 6,000 | 2,500 |  |  |  |
|  | ? | ? |  | ? | ? |

Additional information:

Capital employed
Rate of turnover of stock
Mark up on cost

| CORFU Ltd | RHODES Ltd |
| :--- | :--- |
| $£ 20,000$ | $£ 20,000$ |
| 16 | not given |
| 50 per cent | 25 per cent |

## REQUIRED

(a) A copy of the above trading and profit and loss accounts, including all the missing figures denoted by question marks.
[8 marks]
(b) Calculations for each business of
(i) gross profit expressed as a percentage of net sales:
(ii) net profit expressed as a percentage of net sales:
(iii) return on capital employed.
[5 marks]
(c) Consider the information given above and the figures you have calculated and give two reasons why you feel one of the businesses produced a better performance than the other, during the period concerned.
[3 marks]
(d) Give two other bases of comparison that are frequently used to evaluate the performance of a business.
[1 mark]
(AEB)

Solution 20.2
(a)

|  |  | $\begin{aligned} & \text { Corfu Ltd } \\ & \quad £ \end{aligned}$ | Rhodes £ |  | Corfu Ltd <br> £ | Rhodes Ltd £ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Opening stock |  | 2,600 | 5,300 | Sales | 48,900 | 43,500 |
| Purchases | (7) | 31,000 | 34,000 | less Returns | 900 | 250 |
|  | (6) | 34,000 | 39,300 |  |  |  |
| less Closing stock | (5) | 2,000 | 4,700 |  |  |  |
| Cost of goods sold | (4) | 32,000 | 34,600 |  |  |  |
| Gross profit | (3) | 16,000 | 8,650 |  |  |  |
|  | (2) | 48,000 | 43,250 |  | (1) 48,000 | 43,250 |
| Total expenses | (8) | 10,000 | 6,150 | Gross profit | (3) 16,000 | 8,650 |
| Net Profit |  | 6,000 | 2,500 |  |  |  |
|  |  | 16,000 | 8,650 |  | 16,000 | 8,650 |

NOTES
(1) Sales $=$ sales less returns.
(2) Debit side $=$ credit side of trading account.
(3) Corfu Ltd mark-up on cost 50 per cent; therefore, gross profit margin $33 \frac{1}{3}$ per cent of sales or $33 \frac{1}{3}$ per cent $\times £ 48,000=£ 16,000$. Rhodes Ltd mark-up on cost 25 per cent; therefore, gross profit margin 20 per cent of sales or 20 per cent $\times £ 43,250=£ 8,650$.
(4) Cost of goods sold $=$ sales less gross profit.
(5) Corfu stock turnover 16; therefore closing stock is cost of goods sold divided by 16 - that is $£ 32,000 \div 16=2,000$.
(6) Cost of goods sold plus closing stock.
(7) Line (6) less opening stock.
(8) Gross profit less net profit.
(b)

Corfu Ltd
(i) $\frac{16,000}{48,000} \times 100=33 \frac{1}{3}$ per cent $\quad \frac{8,650}{43,250} \times 100=20$ per cent
(ii) $\frac{6,000}{48,000} \times 100=12.5$ per cent $\quad \frac{2,500}{43,250} \times 100=5.8$ per cent
(iii) $\frac{6,000}{20,000} \times 100=30$ per cent $\quad \frac{2,500}{20,000} \times 100=12.5$ per cent
(c) Corfu Ltd's gross profit margin is higher and therefore it could be selling at higher prices than Rhodes Ltd or buying at lower prices. Corfu Ltd is incurring a higher level of expenses and therefore could be paying more for rent, rates, wages or any other item of overhead.

### 20.7 Further exercises

## Question 20.1

P. Farrell is a wholesaler. The following information is available from his accounts for year ended 31 December 1981.

|  | $£$ |
| :--- | ---: |
| Stock at 31 December 1981 | 2,990 |
| Purchases | 22,254 |
| Sales | 30,260 |
| Returns inward | 140 |
| Returns outward | 210 |

Mark up: 50 per cent on cost
In the following year Farrell's closing stock was 10 per cent higher than the corresponding figure for 1981 but the rate per cent of gross profit on sales was the same for 1982 as in 1981. In 1982 net sales increased by 10 per cent on the previous year's figure.

## REQUIRED

(a) Preparation of Farrell's trading account for year ended 31 December 1981, showing the value of stock at 1 January 1981.
[6 marks]
(b) Preparation of Farrell's trading account for year ended 31 December 1982, showing the value of purchases. (There were no returns outward.)
[7 marks]
(c) Calculation of the amount of profit and loss account expense items (to the nearest $£$ ) which would give a net profit to sales ratio of 15 per cent for year ended 31 December 1982.
[4 marks]
(d) An explanation of the effect on a firm's net profit of undervaluing closing stock.
[3 marks]
(AEB)
Answer 20.1
(a)

Trading accounts of P . Farrell
Year ending 31 Dec. $1981 \quad$ Year ending 31 Dec. 1982
Sales (less returns inwards)
£
£
Opening stock
Purchases (less returns outward)
(4) $1,026 \quad 30,120$
(9) 2,990

| $\frac{22,044}{}$ | (11) $\frac{22,387}{23,070}$ |
| ---: | ---: |
| 2,990 | (10) |
| 25,377 |  |

less Closing stock
(2) 20,080
(8) 22,088

Cost of sales
(1) 10,040
(7) 11,044

## WORKINGS

(1) Gross profit mark-up 50 per cent; therefore, margin $33 \frac{1}{3}$ per cent. Gross profit therefore $33 \frac{1}{3}$ per cent $\times £ 30,120=£ 10,040$.
(2) Sales less gross profit.
(3) Cost of sales plus closing stock.
(4) Line (3) less purchases.
(5) $£ 2,990$ plus 10 per cent.
(6) $£ 30,120$ plus 10 per cent.
(7) As for (1): $33 \frac{1}{3}$ per cent $\times £ 33,132$
(8) As for (2).
(9) Closing stock at 31 December 1981.
(10) As for (3).
(11) Line (10) less line (9).
(c)

|  | 1981 | 1982 |
| :--- | :---: | :---: |
|  | $£$ | $£$ |
| Net profit | 4,518 | 4,970 |
| Expenses (gross profit |  |  |
| less net profit) | 5,522 | 6,074 |

(d) Closing stock decreases cost of sales and therefore increases profit. Refer to Chapter 19.

## Question 20.2

The following is the Trial Balance of E. Bowie AFTER he has calculated his Gross Profit for the year ending 31 March 1984.

Trial Balance of E. Bowie as at 31 March 1984

|  | £ | £ |
| :---: | :---: | :---: |
| Gross Profit |  | 25,600 |
| Debtors and Creditors |  | 11,900 |
| Drawings | 7,300 |  |
| Selling and Administrative Expenses | 11,100 |  |
| Provision for Doubtful Debts |  | 800 |
| Premises at cost | 62,000 |  |
| Motor Vehicles at cost | 18,600 |  |
| Fixtures and fittings at cost | 8,400 |  |
| Provisions for Depreciation |  |  |
| Premises |  | 16,400 |
| Motor Vehicles |  | 6,600 |
| Fixtures and Fittings |  | 2,360 |
| Stock 31 March 1984 | 14,640 |  |
| Cash Balance | 1,420 |  |
| Bank Balance |  | 5,800 |
| Capital Account |  | 70,290 |
|  | £139,750 | £139,750 |

STUDY the above Trial Balance, then answer the following questions:
(a) Calculate the COST OF GOODS SOLD if the rate of gross profit to sales is 20 per cent.
(b) Calculate the PERCENTAGE MARK-UP (gross profit on cost of goods sold).
(c) Calculate the PURCHASES for year ending 31 March 1984 if the stock on 31 March 1983 was valued at $£ 15,360$.
(d) (i) HOW does the Provision for Depreciation on Motor Vehicles (as shown in the Trial Balance) help to provide for the eventual replacement of the Motor Vehicles?
(ii) Give ONE REASON why this aim (in part (d) (i)) may not always be achieved.
(e) Calculate the RATE OF STOCK TURNOVER for the year ending 31 March 1984 (giving your answer to one decimal place).

Answer 20.2
(a) Sales $=£ 25,600 \times \frac{100}{20}=£ 128,000$
(b) $\frac{£ 25,600}{(£ 128,000-£ 25,600)} \times 100=25$ per cent
(c) Opening stock

Purchases (balancing figure) 101,680
117,040
Closing stock
14,640
Cost of goods sold
£102,400
(d) (i) Refer to Chapter 11.
(ii) Inflation.
(e) $\frac{£ 102,400}{£ 14,640}=7.0$ times, using closing stock method
or
$\frac{£ 102,400}{£ 15,000}=6.8$ times, using average stock method.

# 21 Accounts of Limited Companies 

### 21.1 Introduction

The format of the final accounts of limited companies is laid down in the Companies Act 1985. We need not concern ourselves at this level with a detailed study of the published formats, but you should carefully study the worked examples and follow the format which is used there in answering questions on accounts of limited companies. First of all, what is a limited company and what does 'limited' refer to? The answer is that the owner's liability is limited to the capital of the business. In the case of sole traders and partnerships, if the business runs up debts, the proprietor is responsible for those debts and his personal assets can be taken in order to pay them. This is not so with a limited company. Outsiders are therefore more willing to invest in such a company than in a partnership, because they know the maximum amount which they can lose - i.e. the nominal value (explained later) of the shares they agree to buy.

### 21.2 Share capital

The owner's capital in a limited company consists of share capital. When a company commences, it issues shares to investors, who then become shareholders. These shares are denominated in units of monetary value - for example, 25 p or $£ 1$. This value is called the nominal value. When discussing share capital, we must be careful to distinguish between the following:
(i) Authorised capital is the maximum amount of share capital that a company is empowered to issue by its constitution. It must appear by way of note on the balance sheet.
(ii) Issued capital is the amount of a company's authorised share capital that it has actually issued. A company will not normally issue all of its authorised share capital when it commences, but will wait until it needs additional funds. Provided that all of the issued shares have been paid for in full, it is the nominal value of the issued share capital which will appear on the balance sheet.
(iii) Preference shares carry the right to a fixed dividend (explained later) before any dividend can be paid to other shareholders.
(iv) Ordinary shares are the most common type of shares and carry no right to a fixed dividend, but are entitled to all profits after payment of dividends to preference shareholders. Effectively, it is the ordinary shareholders who control a company, since they have the right to vote at meetings.

### 21.3 Debentures

Simply stated, debentures are loans to a company. The company pays interest on the loans to the debenture holders. Interest is an expense of the company, just like any other expense such as wages and rent. If the interest is paid in arrears and is outstanding at the balance sheet date, we must accrue for it in the same way as we accrue for any other unpaid expense. In the worked examples you should notice how debentures are deducted from the net assets of the company and not shown with capital.

### 21.4 Dividends

Assuming that a company makes a profit it has the choice between (a) paying out the profits to shareholders, which is called a dividend, and (b) retaining the profits in the company to finance investment in additional assets.

Dividends are an appropriation of profit and are usually paid in two stages:
(i) Interim dividend, paid when the half-year results or profits are known.
(ii) Final dividend, usually paid after the end of the year, when the profit for the year is known. Dividends are expressed as a percentage of the nominal value of the shares.
Both dividends must be shown as an appropriation of profit in the profit and loss account, whether paid or unpaid. To the extent that they are unpaid, they must be shown as a current liability in the balance sheet. Often the unpaid dividends are referred to as proposed dividends.

### 21.5 Retained profits

The balance which remains on the profit and loss account after deducting dividends is referred to as profit and loss account balance, retained earnings, retained profits or undistributed profits. All of these terms mean the same, and we shall now consider the accounting treatment.

In the case of the sole trader, the profit and loss account is closed by transferring the balance to the owner's capital account. In the case of a company, the balance remains on the profit and loss account, which means that it appears on the balance sheet and is carried forward to the next year. The profit and loss account balance shown on the balance sheet will therefore represent retained earnings (which is profit less dividends) in respect of all previous years.

We also refer to retained earnings as part of the reserves of the company, since it represents profits held back and not distributed as dividends. In using the word 'reserve' we must not think that there is cash in the business of that amount; there usually will not be. As we stated previously, those retained profits are used to purchase fixed assets and finance working capital requirements.

### 21.6 General reserve

Sometimes a company prefers not to show a large profit and loss account balance on its balance sheet. The reason is that it may be misconstrued as representing a cash surplus which is available for distribution as dividends. To overcome this, we transfer an amount from our profit and loss account to a general reserve account. The transfer to reserve is shown as an appropriation of profit on the profit and
loss account (explained in Section 21.8) and the balance on the general reserve account is shown on the balance sheet.

### 21.7 Shareholders' funds

This term is used to describe the share capital and reserves of the business. The two examples of reserves that we have met so far are profit and loss account and general reserve account. Shareholders' funds therefore represents the shareholders' investment in the company.

### 21.8 Profit and loss appropriation account

This account performs much the same function in companies' books as with a partnership. It commences with the net profit of the business and shows appropriations of profit by way of dividends (paid and proposed) and transfers to general reserve. The account will also be credited with the balance brought forward from the previous accounting period, representing undistributed profits from previous years.

### 21.9 Worked examples

## Example 21.1

John Arnold is the owner of 25,000 ordinary shares in Arnold Ltd. His wife, Pauline, is the only other shareholder, owning 5,000 ordinary shares. The business is a small firm engaged in the manufacture of footwear. In order to reduce accountancy charges, Mr Arnold decided to prepare the final accounts himself. However, he did not meet with complete success, as can be seen from an examination of his balance sheet, at 31 December 1982, given below.

Balance Sheet of Arnold Limited for period ended 31 December 1982

Liabilities
$35,000 £ 1$ Ordinary shares
(Auth. Cap.) $\quad 35,000$

Net profit for $1982 \quad 2,865$
Profit and loss balance 1 January 1982
Provision for depreciation on machinery and plant 5,500
Provision for bad debts 90
Stock of work in progress at 31 December $1982 \quad 2,900$ Creditors 899
Bank loan (to be repaid in 1985) 1,000
54,484

Assets

| Premises at cost | 25,000 |
| :--- | ---: |
| Machinery and plant at cost | 10,500 |
| Stock of finished goods at |  |
| $\quad 31$ December 1982 | 960 |

Stock of raw materials at 31 December 1982 3,270
Cash 528
Debtors 2,800
Electricity accrued 66
Income receivable 692

Mr Arnold is certain that all figures given above are correct. However, he feels that some of the items may be incorrectly classified. A dividend of $£ 3,000$ is proposed for 1982.

## REQUIRED

(a) (i) Preparation of the profit and loss appropriation account for the year ended 31 December 1982.
[2 marks]
(ii) Preparation of the balance sheet in good form distinguishing between fixed and current assets. Show within the balance sheet the value of authorised and issued capital, working capital, reserves and shareholders' funds.
(b) An explanation of the meaning of (i) "authorised capital",
(ii) "issued capital".
[3 marks]
(AEB)

## Solution 21.1

(a) (i)

Profit and loss appropriation account of Arnold Ltd for year ended 31 December 1982

| Net profit for the year | $£$ |
| :--- | :---: |
| add Profit and loss account balance as at the beginning of the year | 2,865 |
|  | $\underline{6,230}$ |
| less Proposed dividends | $\underline{9,095}$ |
| Profit and loss account balance as at the end of the year | $\underline{\mathbf{£ 6 , 0 9 5}}$ |

(ii)

Balance sheet of Arnold Ltd at 31 December 1982

| Fixed Assets | Cost | Depreciation | Net book value |
| :---: | :---: | :---: | :---: |
|  | £ | £ | £ |
| Premises | 25,000 |  | 25,000 |
| Machinery and plant | 10,500 | 5,500 | 5,000 |
|  | 35,500 | 5,500 | 30,000 |
| Current Assets |  |  |  |
| Stock - raw materials | 3,270 |  |  |
| - work in progress | 2,900 |  |  |
| - finished goods | 960 | 7,130 |  |
| Debtors | 2,800 |  |  |
| less provision for bad debts | 90 | 2,710 |  |
| Accrued income |  | 692 |  |
| Cash |  | 528 |  |
|  |  | 11,060 |  |
| less Creditors: amounts falling due within one year (1) |  |  |  |
| Creditors | 899 |  |  |
| Accrued expenses | 66 |  |  |
| Proposed dividends | 3,000 | 3,965 |  |
| Net Current Assets (or working capital) |  |  | 7,095 |
| Net Assets |  |  | 37,095 |
| less Creditors: amounts falling due after more than one year (2) |  |  |  |
| Bank loan |  |  | 1,000 |
|  |  |  | £36,095 |



NOTES
(1), (2) You should note all terms used but in particular how current liabilities and other liabilities are described in company accounts.
(b) (i) Refer to Section 21.2(a).
(ii) Refer to Section 21.2(b).

## Example 21.2

The Green Meadow Cleaning Company is registered with an authorised capital of $£ 25,000,000$ divided into $5,000,00010$ per cent preference shares of $£ 1$ each and $20,000,000$ ordinary shares of $£ 1$ each.

The following trial balance was extracted from the company's books on 31 December 1983.

|  | £000s |  | £000s |
| :--- | ---: | :--- | ---: |
| Premises | 20,000 | Preference capital | 5,000 |
| Machinery | 4,000 | Ordinary capital | 15,000 |
| Motor vans | 100 | Profit and loss | 10 |
| Electric power | 10,300 | 12 per cent debentures | 1,000 |
| Wages | 26,000 | Provision for depreciation: |  |
| Heat and light | 1,500 | Machinery | 600 |
| Cleaning materials | 400 | Vans | 20 |
| Rates | 700 | Creditors | 15 |
| Van expenses | 50 | Receipts for cleaning | 42,318 |
| Bank | 902 |  |  |
| Cash | 11 |  | $\underline{63,963}$ |

Prepare an account to show the cleaning company's profit or loss for the year ended 31 December 1983, and a Balance Sheet on that date before the appropriation account is prepared and dividends declared or paid.

Take into consideration the following:

|  | $£ 000 \mathrm{~s}$ |
| :--- | ---: |
| (i) Rates paid in advance | 140 |
| (ii) Heat and light account unpaid | 7 |
| (iii) Provision for depreciation of machinery to be increased to | 900 |
| (iv) Provision for depreciation of motor vans to be increased to | 70 |
| (v) Provision for the debenture interest | 120 |

Profit and loss account of The Green Meadow Cleaning Company for the year ended 31 December 1983

| Turnover |  |  |  | $\begin{aligned} & £ 000 \\ & 42,318 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Wages |  | 26,000 |  |
| Other operating charges |  |  |  |  |
|  | Electric power | 10,300 |  |  |
|  | Heat and light ( $£ 1,500+£ 7$ ) | 1,507 |  |  |
|  | Cleaning materials | 400 |  |  |
|  | Rates (£700-£140) | 560 |  |  |
|  | Van expenses | 50 |  |  |
|  | Depreciation machinery | 300 |  |  |
|  | Depreciation motor vans | 50 | 13,167 | 39,167 |
|  |  |  |  | 3,151 |
| less Interest payable |  |  |  | 120 |
| Net profit for the year |  |  |  | £3,031 |

Balance sheet of The Green Meadow Cleaning Company as at 31 December 1983

| Fixed Assets Cost | Depreciation | Net book value |
| :---: | :---: | :---: |
| £ | £ | £ |
| Premises 20,000 |  | 20,000 |
| Machinery 4,000 | 900 | 3,100 |
| Motor vans 100 | 70 | 30 |
| 24,100 | 970 | 23,130 |
| Current Assets |  |  |
| Prepayments | 140 |  |
| Cash at bank and in hand | 913 |  |
|  | 1,053 |  |
| less Creditors: amounts falling due within 1 year |  |  |
| Creditors 15 |  |  |
| Accrued expenses (£120 + £7) 127 | 142 |  |
| Net Current Assets (or working capital) |  | 911 |
| Net Assets |  | 24,041 |
| less Creditors: amounts falling due after more than 1 year |  |  |
| 12 per cent debentures |  | 1,000 |
|  |  | £23,041 |
| Shareholders' Funds |  |  |
| Authorised share capital |  |  |
| $5,000,00010$ per cent preference shares of $£ 1$ | 5,000 |  |
| $20,000,000$ ordinary shares of $£ 1$ | 20,000 |  |
|  | 25,000 |  |
| Issued share capital |  |  |
| $5,000,00010$ per cent preference shares of £1 |  | 5,000 |
| $15,000,000$ ordinary shares of $£ 1$ |  | 15,000 |
|  |  | 20,000 |
| Reserves - profit and loss account |  |  |
| - balance brought forward | 10 |  |
| - add net profit for the year | 3,031 | 3,041 |
|  |  | £23,041 |

### 21.10 Further exercises

## Question 21.1

Ogden Limited had an authorised capital of $£ 100,000$, divided into 75,000 ordinary shares of $£ 1$ each and 25,0008 per cent preference shares of $£ 1$ each. The following balances remained in the account of the company after the trading and profit and loss accounts had been prepared for the year ended 31 December 1982.

|  | $\begin{gathered} \text { Debit } \\ £ \end{gathered}$ | Credit £ |
| :---: | :---: | :---: |
| Ordinary share capital: fully paid |  | 50,000 |
| 8 per cent preference shares: fully paid |  | 15,000 |
| Machinery and plant at cost | 40,000 |  |
| Provision for depreciation on machinery and plant |  | 19,000 |
| Premises at cost | 50,000 |  |
| Profit and loss account balance (1 January 1982) |  | 5,600 |
| Net profit (for year ended 31 December 1982) |  | 9,026 |
| Light and heat |  | 280 |
| Cash at bank | 3,508 |  |
| Stock | 3,860 |  |
| Debtors and Creditors | 2,300 | 894 |
| Insurance | 132 |  |
|  | 99,800 | 99,800 |

The directors have recommended an ordinary dividend of 12 per cent and wish to provide for payment of the year's preference share dividend.

## REQUIRED

(a) The profit and loss appropriation account for year ended 31 December 1982 [3 marks]
(b) The balance sheet as at 31 December 1982, in a form which shows clearly the shareholders' funds and the working capital.
[13 marks]
(c) An explanation of the term "limited liability".
(d) A statement of three differences between an ordinary share and a debenture.

Answer 21.1
(a)

Profit and loss appropriation account of Ogden Ltd for the year ended 31 December 1982

|  |  | £ |
| :---: | :---: | :---: |
| Net profit for the year |  | 9,026 |
| add Profit and loss account balance as at the beginning of the year |  | 5,600 |
|  |  | 14,626 |
| less Dividends - preference shares | 1,200 |  |
| - ordinary shares | 6,000 | 7,200 |
| Profit and loss account balance as at end of year |  | £7,426 |

(b)

Balance sheet of Ogden Ltd as at 31 December 1982

| Fixed Assets | Cost | Depreciation | Net book value |
| :---: | :---: | :---: | :---: |
|  | £ | £ | £ |
| Premises | 50,000 |  | 50,000 |
| Plant and machinery | 40,000 | 19,000 | 21,000 |
|  | 90,000 | 19,000 | 71,000 |
| Current Assets |  |  |  |
| Stock |  | 3,860 |  |
| Debtors |  | 2,300 |  |
| Prepayments |  | 132 |  |
| Cash at bank |  | 3,508 |  |
|  |  | 9,800 |  |

less Creditors: amounts falling due within 1 year

| Creditors | 894 |  |
| :--- | ---: | ---: |
| Dividends | 7,200 |  |
| Expense creditors | 280 | $\underline{8,374}$ |


| Net Current Assets (or working capital) |  | 1,426 |
| :---: | :---: | :---: |
| Net Assets |  | £72,426 |
| Shareholders' Funds |  |  |
| Authorised share capital |  |  |
| 75,000 £1 Ordinary shares | 75,000 |  |
| 25,000 £18 per cent Preference shares | 25,000 |  |
|  | 100,000 |  |

Issued share capital

| $50,000 £ 1$ Ordinary Shares | 50,000 |
| :--- | ---: |
| $15,000 £ 18$ per cent Preference shares | $\underline{15,000}$ |
|  | 65,000 |
| Reserves - profit and loss account | $\underline{7,426}$ |
|  | $£ 72,426$ |

(c) Refer to Section 12.1 .
(d) Debentures are loans to the company; ordinary shares are an investment in the company. Debenture holders are creditors of the company, not shareholders. Debentures are usually repayable, and as loans have preference for repayment over shareholders in the event of a winding up. Interest is payable on debentures and must be paid irrespective of whether profits are made, whereas ordinary shareholders earn dividends, which are only payable if profits are made. Interest is an expense of the company; dividends are an appropriation of profit.

## Question 21.2

The Polite Company Ltd is registered with an authorised capital of $£ 850,000$ divided into $250,00010 \%$ preference shares of $£ 1$ each and 600,000 ordinary shares of $£ 1$ each. The following balances remain in the books after completion of trading, profit and loss accounts for the year ended 31 March 1985.

|  | $£ 000$ |
| :--- | ---: |
| Ordinary capital | 550 |
| Preference capital | 250 |
| Land and buildings | 800 |
| Provisions for depreciation |  |
| $\quad$ Fixtures and fittings | 100 |
| $\quad$ Motor vehicles | 80 |
| Fixtures and fittings | 220 |
| Motor vehicles | 120 |
| Creditors | 20 |
| Profit and loss (Cr) b/f | 5 |
| Trading profit for year | 100 |
| Stocks | 70 |
| Debtors | 15 |
| Debentures 7\% | 100 |
| Bank overdraft | 23 |
| Cash in hand | 3 |

The directors propose to pay the preference dividend and a dividend of $12 \%$ on the ordinary shares.
(a) Prepare a profit and loss appropriation account and a Balance Sheet on that date showing the effect of these proposals.
[21 marks]
(b) Comment on the liquidity position of the company if the dividends are paid. [3 marks]

## Answer 21.2

(a)

Polite Company Ltd Profit and loss appropriation account for the year ended 31 March 1985

|  | £000s |  |
| :--- | ---: | ---: |
| Trading profit | 100 |  |
| Dividends: preference |  |  |
| $\quad$ ordinary | -72 | -97 |
| Retained profit for the year |  | 3 |
| Retained profits b/f |  | 5 |
| Retained profits c/f | 8 |  |

Polite Company Ltd Balance sheet as at 31 March 1985

| Fixed Assets | Cost | Depreciation | £000s <br> Net book <br> value |
| :--- | :---: | :---: | :---: |
| Land and buildings |  |  | 800 |
| Fixtures and fittings | 200 | - | 120 |
| Motor vehicles | $\underline{120}$ | $\underline{100}$ | $\underline{40}$ |
|  | $\underline{1,140}$ | $\underline{180}$ | 960 |

## Current Assets

Stock 70
Debtors 15
Cash in hand 3
88
less Creditors: amounts falling due within one year
Creditors
Dividends payable 97
Bank overdraft 23Net Current Assets(52)
Net Assets ..... 908
less Creditors: amounts falling due after more than one year
Debentures ..... 100
£808
Capital and Reserves
Authorised share capital
600,000 Ordinary shares of $£ 1$ ..... 600
250,000 10\% Preference shares of $£ 1$ ..... 250
850
Issued share capital
550,000 Ordinary shares of $£ 1$ ..... 550
250,000 10\% Preference shares of $£ 1$ ..... 250
Profit and loss account ..... 8
(b) The company clearly has insufficient resources to pay the proposed dividends. The creditors falling due within one year of $£ 140,000$ are substantially in excess of current assets at $£ 88,000$. The dividend policy should therefore be reviewed in order to avoid increasing the existing bank overdraft of $£ 23,000$, even if the bank is prepared to allow the increase.

## 22 Forecasts and Budgets

### 22.1 Introduction

The object of going into business is to make a profit. But how do we ensure that we achieve that objective? The answer is that we must plan what we are going to do. If we plan what we are going to do, we can set out that plan in figures. The profit and loss accounts prepared in the examples so far have told us historically how much profit or loss we have made. In planning we prepare profit and loss accounts and balance sheets for future periods of time. If we then examine our plans or forecasts we can take any of the following actions:
(i) Accept the plan as giving us a satisfactory profit and make business decisions based upon that plan.
(ii) Amend the plan because we consider the profit inadequate.
(iii) Scrap the plan completely and start on fresh plans.

In addition to helping us to achieve a satisfactory profit, planning also helps us to establish whether we have sufficient resources to implement that plan. One important resource will be finance, and our plan will tell us whether we have sufficient financial resources to implement the plan and achieve our required profit.

### 22.2 Preparation of plans

In preparing forecasts or estimates of future profits, we prepare trading and profit and loss accounts in similar format to our historic accounts in previous chapters. We may, however, require a different approach where we are given the profit that a business is required to make. In this case, instead of commencing with our sales figures and deducting costs to arrive at our profit, we must work in reverse. That is to say, we commence with our net profit and add on our costs to arrive at a sales figure required to achieve the given profit.

### 22.3 Worked examples

Example 22.1
Mike Baldwin began business as a manufacturer of pocket calculators on 1 April 1983, with a cash capital of $£ 100,000$. For the first year the target production is 42,000 calculators and target sales 40,000 . The following additional forecasts have been made:
raw materials $£ 2$ per unit;
direct labour $£ 1.50$ per unit;
variable factory expenses 30 p per unit;
variable selling expenses 10 p per unit;
fixed factory expenses $£ 8,400$;
fixed selling expenses $£ 6,000$.
Stock at 31 March 1984: 2,000 calculators valued at factory cost.
The selling price is to be determined by adding 25 per cent to the factory cost of finished output.

## REQUIRED

(a) For the year ended 31 March 1984,
(i) the forecast manufacturing account, showing clearly the prime cost and the factory cost of goods manufactured;
[6 marks]
(ii) your calculation of the factory cost per calculator:
[1 mark]
(iii) the forecast trading and profit and loss accounts, showing clearly the factory cost of the goods sold.
[7 marks]
(b) (i) An explanation of the meaning of variable expense and fixed expense; [2 marks]
(ii) a statement of the significance to a business of distinguishing between fixed and variable expenses.
(AEB)
Solution 22.1
(a) (i)

Forecast manufacturing account of M . Baldwin for the year ending 31 March 1984

| Raw materials | $£$ |
| :--- | ---: |
| $\quad 42,000$ at $£ 2$ per unit | 84,000 |
| Wages |  |
| 42,000 at $£ 1.50$ per unit | 63,000 |
| Direct expenses (1) |  |
| 42,000 at 30 p per unit | 12,600 |
| Prime Cost | 159,600 |
| Factory Overheads | $\underline{8,400}$ |
| Factory cost of goods manufactured | $\underline{£ 168,000}$ |

NOTE
(1) Variable expenses have been assumed to be direct.
(ii) Factory cost per calculator:

$$
\frac{£ 168,000}{42,000}=£ 4 \text { per calculator }
$$

(iii)

Forecast trading and profit and loss account for M. Baldwin for the year ending 31 March 1984

|  |  | $£$ |
| :--- | ---: | :---: |
| Sales $(40,000 \times(£ 4+25$ per cent $))$ |  | 200,000 |
| Cost of goods manufactured | 168,000 |  |
| $\quad$ less Closing stock $(2,000 \times £ 4)$ | 8,000 |  |
| Factory cost of goods sold |  | $\underline{160,000}$ |
| Gross profit |  | 40,000 |


| less |  |  |
| :--- | ---: | ---: |
| $\quad$ Variable selling expenses $(40,000 \times 10 \mathrm{p})$ | 4,000 |  |
| $\quad$ Fixed selling expenses | $\underline{6,000}$ | $\underline{10,000}$ |
| Net profit |  | $\underline{£ 30,000}$ |

(b) (i) Refer to Section 18.6. Variable costs vary with number of goods produced, fixed remain at the same total amount for a period of time regardless of the number of units produced.
(ii) Fixed costs will be incurred regardless of the quantity of units produced and therefore the margin between selling price and variable cost per unit must be sufficient to cover fixed costs before a profit is earned.

## Example 22.2

D. Bell is a retailer. The following is a summary of his store's trading results for the latest financial year:

|  | $£$ |
| :--- | ---: |
| Sales | 120,000 |
| Cost of goods sold | 90,000 |
| Gross profit | 30,000 |
| Running expenses | 17,600 |
| Net profit | 12,400 |

He is thinking of opening a second store in a new shopping centre, in the same line of business and adopting the same pricing policy. The following information about the proposed new store is available:
(a) Bell will need to borrow $£ 48,000$, paying interest at 14 per cent per annum.
(b) He will have to pay $£ 4,400$ per annum for assistants' wages.
(c) Rent and rates will cost $£ 2,460$ per annum.
(d) Other fixed expenses will amount to $£ 1,000$ per annum.
(e) Variable expenses are estimated according to turnover, as follows:

| Sales | Variable expenses |
| :--- | :---: |
|  | $£$ |
| Up to $£ 40,000$ | 1,200 |
| $£ 40,000-£ 60,000$ | 1,400 |
| $£ 60,000-£ 80,000$ | 1,600 |
| $£ 80,000-£ 100,000$ | 1,800 |
| $£ 100,000-£ 120,000$ | 2,000 |

(f) Bell will require a clear profit of $£ 6,000$ per annum from the new store.

You are asked:
(1) to calculate what level of sales must be achieved in order to reach the required level of profit;
(2) to prepare estimated accounts for the new store showing the gross and net profit in its first year, assuming the level of sales calculated in (1) is achieved.

Solution 22.2
(1) The fixed costs which have to be covered will be as follows:

|  | $£$ |
| :--- | ---: |
| Interest (£48,000 $\times 14$ per cent $)$ | 6,720 |
| Wages | 4,400 |
| Rent and rates | 2,460 |
| Other | 1,000 |
| In addition, a profit is required of | 14,580 |
| Contribution required to fixed costs and profit | $\underline{6,000}$ |
|  |  |

We can calculate that Bell's gross profit margin is 25 per cent $\left(\frac{30,000}{120,000}\right)$. Therefore the sales figure required is
$\frac{100}{25} \times £ 20,580=$ 82,320

Additionally, we must cover variable expenses $\frac{100}{25} \times £ 1,800 \quad 7,200$ £89,520
(2) Estimated trading and profit and loss account of D. Bell's new store for first year of trading

|  |  | $£$ |
| :--- | :---: | :---: |
| Sales |  | 89,520 |
| Cost of goods sold (75 per cent $\times £ 89,520)$ |  | $\mathbf{6 7 , 1 4 0}$ |
| Gross profit |  | 22,380 |
| less |  |  |
| $\quad$ Variable expenses | 1,800 |  |
| $\quad$ Fixed expenses (as (1) above) | $\underline{14,580}$ | $\underline{16,380}$ |
|  |  | $\underline{£ 6,000}$ |

### 22.4 Further exercises

## Question 22.1

Juan Thomas has decided to trade as a retailer from 1 February 1986 with $£ 50,000$ capital, which he will pay into a business bank account. He has prepared the following forecast for the first year.

|  | $£$ |
| :--- | ---: |
| Expenses for the year: | rates |
|  | sales assistants' wages |
|  | sundry expenses |
|  | 9,200 |
|  | depreciation on fixed assets |
|  | 1,500 |
|  |  |

Net profit will be $£ 10,000$.

| Items to be purchased in February 1986: premises | 00 |
| :--- | ---: |
| delivery van | 6,000 |

Thomas will withdraw $£ 650$ per month from the business for his own use.
Selling price will be determined by marking up $50 \%$ on cost.
Closing stock at 31 January 1987, valued at cost price, will be $£ 10,000$.

All receipts and payments will be through the firm's bank account.
At year end, there will be no trade debtors or trade creditors and no expenses will be prepaid or in arrears.

## REQUIRED

(a) For the year ended 31 January 1987,
(i) a forecast trading and profit and loss account, incorporating your calculation of cost of goods sold, purchases and sales;
[9 marks]
(ii) a forecast bank account.
[6 marks]
(b) Two reasons why firms prepare forecast accounts.
[3 marks]
(c) The effect on the balance sheet of the owner withdrawing goods from the business for private use, cost price $£ 500$.
[2 marks]
(AEB)
Answer 22.1
(a)
(i) Juan Thomas forecast trading and profit and loss account for year ending 31 January 1987

|  |  | $£$ |
| :--- | ---: | :---: |
| Sales (1) |  | 69,450 |
| Purchases (2) | 56,300 |  |
| less Closing stock | $\underline{0,000}$ | $\underline{46,300}$ |
| Cost of sales |  | 23,150 |
| Gross profit | 650 |  |
| less Rates | 9,200 |  |
| $\quad$ Wages | 1,500 | $\underline{13,150}$ |
| $\quad$ Sundry | $\underline{1,800}$ | $\underline{£ 10,000}$ |
| $\quad$ Depreciation |  |  |

## WORKINGS

(1) Sales figure will be the total of net profit, overheads and cost of sales as follows:

| Net profit |  | 10,000 |
| :--- | ---: | ---: |
| Expenses: rates | 650 |  |
| $\quad$ wages | 9,200 |  |
| sundry | 1,500 | $\underline{13,150}$ |
| depreciation | 1,800 | 23,150 |
| Gross profit |  | $£ 69,450$ |
| Sales $\frac{150}{50} \times £ 23,150=$ |  |  |

(2) Purchases will be the total of cost of sales and closing stock:

Cost of sales $(£ 69,450-£ 23,150)=46,300$
Closing stock
10,000
£56,300
(ii) Forecast bank account
19861987

| Feb. 1 | Capital | 50,000 | Jan. 31 Rates | 650 |  |
| :--- | :--- | ---: | :--- | :--- | ---: |
| 1987 |  |  | Jan. 31 Wages | 9,200 |  |
| Jan. 31 | Sales | 69,450 | Jan. 31 Sundry | 1,500 |  |
|  |  |  | Jan. 31 Premises | 25,000 |  |
|  |  |  | Jan. 31 Van | 6,200 |  |
|  |  |  | Jan. 31 | Drawings | 7,800 |

Feb. 1 Balance b/d
£12,800
(b) Refer to Section 22.1.
(i) To formulate business plan.
(ii) To ensure we have sufficient resources.
(c) Reduce both closing stock and owner's capital account.

## Question 22.2

The final accounts for J. Berry's business covering the year ended 31 October 1983 are summarised below:

|  |  | $£$ |
| :--- | ---: | ---: |
| Sales |  |  |
| less cost of goods sold: |  | 180,000 |
| Opening stock | 27,000 |  |
| Purchases | $\underline{124,000}$ |  |
|  | 151,000 |  |
| Closing stock | $\underline{31,000}$ | $\underline{120,000}$ |
| Gross profit |  | $\underline{60,000}$ |
| Running expenses |  | $\underline{25,600}$ |
| Net profit |  | $\underline{34,400}$ |

Mr Berry was disappointed with the level of net profit and decided that for the next year's trading the rate of mark-up would be reduced to 40 per cent on cost. He estimated that, as a result, the volume of sales would increase by one-third (i.e. he would, in effect, sell four articles for every three sold in the year ended 31 October 1983).
Mr Berry decided to reduce his stock to $£ 30,000$ by 31 October 1984. He expected his running expenses for the year ending 31 October 1984 to be 5 per cent higher than the previous year's figure.
You are asked to prepare estimated final accounts for the year ended 31 October 1984, assuming that all Mr Berry's expectations are realised. Your working must be shown. [18]
(OLE)
Answer 22.2

Estimated trading and profit and loss account of J. Berry for the year ending 31 October 1984

|  | $£$ |  |
| :--- | ---: | ---: |
| Sales (Working 1) |  |  |
| Opening stock | 224,000 |  |
| Purchases (Working 3) | $\underline{159,000}$ |  |
|  | 190,000 |  |
| less Closing stock | $\underline{30,000}$ |  |
| Cost of sales (Working 2) |  | $\underline{160,000}$ |
| Gross profit | $\underline{64,000}$ |  |
| Running expenses (£25,600 $\times 105$ per cent) | $\underline{26,880}$ |  |
| Net profit | $\underline{£ 37,120}$ |  |

The mark-up on cost for year ended 31 October 1983 was 50 per cent - that is, $\left(\frac{£ 60,000}{120,000} \times 100\right)$. The mark-up for year ending 31 October 1984 will be 40 per cent. Therefore, goods costing $£ 100$ will sell for $£ 140$ in year ending 31 October 1984 compared with $£ 150$ in the previous year. Sales will therefore decrease to $\frac{140}{150}$ of the previous year figure but increase by one-third in volume. Sales calculation is therefore

$$
£ 180,000 \times \frac{140}{150} \times \frac{4}{3}=£ 224,000
$$

WORKING 2
$\frac{100}{140} \times £ 224,000=£ 160,000$

WORKING 3

|  | $£$ |
| :--- | ---: |
| Cost of sales per Working (2) | 160,000 |
| less opening stock | 31,000 |
|  | 129,000 |
| add closing stock | $\underline{30,000}$ |
|  | $£ 159,000$ |

## Question 22.3

Trading Account for the year ended 31 December 1981.

|  | $£$ |  |  |
| :--- | ---: | :---: | :---: |
| Stock 1 January 1981 | 3,000 | Sales | 60,000 |
| Purchases | $\frac{47,000}{50,000}$ |  |  |
| Stock 31 December 1981 | $\frac{4,500}{}$ |  |  |
| Cost of sales | 45,500 |  |  |
| Gross profit | $\underline{14,500}$ |  | $\underline{60,000}$ |
|  | $\underline{60,000}$ |  |  |

R. Sheldon presents you with the trading account set out above. He always calculates his selling price by adding $33 \frac{1}{3}$ per cent of cost on to the cost price.
(a) If he had adhered strictly to the statement above, what should be the percentage of gross profit to sales?
(b) Calculate his actual percentage of gross profit to sales.
(c) Give two reasons for the difference between the figures you have calculated above.
(d) His suppliers are proposing to increase their prices by 5 per cent, but R. Sheldon considers that he would be unwise to increase his selling price. To obtain some impression of the effect on gross profit if his costs should be increased by 5 per cent, he asks you to reconstruct his trading account to show the gross profit if the increase had applied from 1 January 1981.
(e) Using the figures given in the trading account at the beginning of the question, calculate R. Sheldon's rate of stock turnover.
(f) R. Sheldon's expenses amount to 10 per cent of his sales. Calculate his net profit for the year ended 31 December 1981.
(g) If all expenses remained unchanged, but suppliers of stock increased their prices by 5 per cent as in (d) above, calculate the percentage reduction in the amount of net profit which R. Sheldon's accounts would have shown.
(L)

Answer 22.3
(a) $\frac{33 \frac{1}{3}}{133 \frac{1}{3}} \times 100=25$ per cent
(b) $\frac{14,500}{60,000} \times 100=24.17$ per cent
(c) (i) Selling prices reduced.
(ii) Stock lost or stolen.

|  | $£$ |  | $£$ |
| :--- | ---: | :---: | :---: |
| (d) | 000 | Sales | 60000 |
| Stock 1 January 1981 | $\underline{49,350}$ |  |  |
| Purchases | 52,350 |  |  |
|  |  |  |  |
| Stock 31 December 1983 | 4,725 |  |  |
| Cost of Sales | 47,625 |  | $\overline{60000}$ |

(e) $\frac{£ 45,500 \text { (cost of sales) }}{£ 3,750 \text { (average stock) }}=12.13$ times
or
$\frac{£ 45,500 \text { (cost of sales) }}{£ 4,500 \text { (closing stock) }}=10.11$ times
(f)

Gross profit
Expenses ( 10 per cent $\times £ 60,000$ )
£
14,500

Net profit
£8,500
(g) $\frac{(14,500-12,375)}{8,500}=25.00$ per cent

## 23 Funds Flow Statements

### 23.1 Purpose of funds flow statements

So far, in the preparation of final accounts, we have concerned ourselves mainly with two statements: first, the profit and loss account, which tells us the profit or loss for the accounting period and how that profit or loss has been arrived at; second, the balance sheet, which provides us with details of assets and liabilities at that date.

There are, however, some important questions which may be asked about the accounts for the business which are not readily answered by the above two statements. Some of these questions will be:
(a) Why, if we have made a profit, hasn't the bank balance increased by the same amount?
(b) How is it that, although we have made a loss, the bank balance has not decreased by all that much?
(c) What has happened to all the money we received when we sold off some fixed assets?

In order to answer the above questions, we need to prepare a statement which reconciles the net profit to the change in bank balances. This statement we call a funds flow statement.

### 23.2 Preparation of the funds flow statement

From what we have stated above, we can deduce that we need the following items in our statement of reconciliation:
(a) net profit;
(b) funds from other sources, e.g. sale of fixed assets;
(c) change in cash or bank balances.

First, let us consider item (a) and its effect upon the change in bank balance. We might initially expect our bank balance to improve by the amount of our net profit. However, there will be some items of expenditure which do not mean cash has gone out of the business. The most common of these non-cash expenses is depreciation, since the fixed assets have been paid for in a previous accounting period. This means that our bank balance will improve to the extent of the net profit before any non-cash expenses are charged. The net profit figure to be used in our funds flow statement needs to be the net profit from our profit and loss account, with an adjustment to add back any non-cash expenses.

We shall now turn our attention to another important item in our funds flow statement, which is the increase or decrease in working capital items (e.g. stocks, debtors and creditors). To explain these working capital items, let us consider the following simple example.

On Saturday morning Alan, who runs a stall selling shirts in a street market, starts the day with 50 shirts, which cost him $£ 10$ each. His stock is therefore worth $£ 500$, and since he has no other assets or liabilities, this represents his capital. During the day he sells all of the shirts for $£ 15$ each, thus making a profit of $£ 250$ $(50 \times £ 5)$. On Monday morning he goes to his supplier and replaces the stock by purchasing 50 shirts at $£ 12$ each. Let us compare his balance sheet now with how it would have looked on Saturday morning.

|  | Before | Now |
| :--- | :---: | :--- |
| Assets |  |  |
| Stock | 500 | 600 |
| Cash | - | $\underline{150}(1)$ |
|  | $\underline{500}$ | $\underline{750}$ |
| Capital | $\underline{-}$ | $\underline{750}(2)$ |

## WORKINGS

(1) Sales $£ 750$ less replacement of stock $£ 600$.
(2) Opening capital of $£ 500$ plus profit of $£ 250$.

We can now reconcile his profit to his change in cash as follows:

| Net profit | 250 |
| :--- | ---: |
| less increase in stock $(£ 600-£ 500)$ | $\underline{100}$ |
| Increase in cash balance | $£ 150$ |

We can see that the bank balance has not increased by the net profit made, because of an increase in stock.

If Alan were to sell on credit, a similar adjustment would be necessary in respect of an increase in debtors. That is to say, in reconciling net profit to change in cash or bank balance we must make a deduction for any increase in debtors.

Conversely, if Alan can negotiate credit terms with his suppliers, this will benefit his cash balance, since he has stock which he has not paid for. This will mean that in our reconciliation we must add to the net profit any increase in creditors.

You will probably have started to realise that the reconciliation can best be prepared by an examination of the two balance sheets, and this is a recommended approach. Changes in balance sheet figures will represent either an increase in cash balance, which we call a source of funds, or a reduction in cash balance, which we refer to as an application of funds.

We can now summarise all that we have looked at so far and categorise the adjustments into sources of funds and applications.

## Source of funds

(1) Net profit (with any depreciation added back)
(2) Sale of fixed assets
(3) Any increase in liabilities, such as creditors
(4) Any decrease in current assets, such as debtors and stock

Application of funds
(1) Purchase of fixed assets
(2) Any increase in current assets, such as debtors and stocks
(3) Any decrease in liabilities, such as creditors

The last item in each column has not been mentioned so far, except that they are the reverse effects of the events previously examined.

Just as an increase in stock and/or debtors will decrease our cash balance, so a reduction in those items will increase our cash balance. Similarly, in the same way that an increase in creditors helps our cash balance, so a decrease in creditors will have an adverse effect upon it.

You may find it a good idea to refer back constantly to the above table in looking at the worked examples and further exercises.

### 23.3 Worked examples

## Example 23.1

The following Balance Sheets relate to a business run by Trevor Jordan:

|  |  | $\begin{gathered} £ \\ 31 \text { Dec. } 1985 \end{gathered}$ |  | $\begin{gathered} £ \\ 31 \text { Dec. } 1986 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Fixed Assets |  | 40,000 |  | 70,000 |
| Current Assets |  |  |  |  |
| Stock | 8,000 |  | 26,000 |  |
| Debtors | 2,000 |  | 4,000 |  |
| Bank | 22,000 |  | 2,000 |  |
|  | 32,000 |  | 32,000 |  |
| Creditors | 4,000 |  | 12,000 |  |
| Working Capital |  | 28,000 |  | 20,000 |
|  |  | 68,000 |  | 90,000 |
| Capital |  | 68,000 |  | 80,000 |
| Loan |  |  |  | 10,000 |
|  |  | £68,000 |  | £90,000 |

Trevor considers he has not done well, since his bank balance has decreased from $£ 22,000$ to $£ 2,000$ in spite of the fact that he has borrowed $£ 10,000$ and left $£ 12,000$ of his profit in the business.
(a) Set out a statement showing Trevor how the money has been spent.
(b) Comment on Trevor's judgement of his success.

## Solution 23.1

(a)

Statement of source and application of funds for the year ended 31 December 1986

| Source of funds | $£$ |  |
| :--- | ---: | ---: |
| $\quad$ Net profit left in business (1) |  | 12,000 |
| Increase in creditors | 8,000 |  |
| Increase in loan | $\underline{10,000}$ |  |
|  |  | 30,000 |
| Application of funds |  |  |
| Increase in fixed assets | 30,000 |  |
| Increase in stock | 18,000 |  |
| Increase in debtors | $\underline{2,000}$ |  |
|  |  | $\underline{50,000}$ |
| (Decrease) in bank balance |  | $\underline{£(20,000)}$ |

WORKING
(1) Calculated from change in capital balance ( $£ 80,000$ less $£ 68,000$ ).
(b) The above statement demonstrates that funds generated by trading are increased by additional credit taken and loan raised. However, the purchase of fixed assets and increased levels of stocks and debtors amount to more than the sources of funds, which causes an overall decrease in the bank balance.

## Example 23.2

The following Balance Sheets relate to the business of Martin Calaby.
£
31 Jan. 1986
Fixed Assets

| Buildings |  |
| :--- | ---: |
| Fixtures | 15,000 |
| less Depreciation | 5,000 |
| vehicle | 10,000 |
| less Depreciation | 5,000 |

Current Assets
Stock
Debtors
Bank
Cash
less Current Liabilities
Creditors $\quad 3,000$
Bank overdraft
$\underline{3,000}$

| Working capital | $\underline{8,700}$ | $\frac{4,770}{£ 86,700}$ |
| :--- | ---: | ---: |
|  | $\underline{£ 63,700}$ |  |
| Capital at 1 February | 61,860 | 63,700 |
| add Cash introduced | - | 20,000 |
| add Net profit for year | $\underline{17,800}$ | $\underline{21,070}$ |
|  | 79,660 | 104,770 |
| less Drawings | $\underline{15,960}$ | $\underline{18,000}$ |
|  | $£ 63,700$ | $£ 86,770$ |

Prepare a source and application of funds statement.

## Solution 23.2

Statement of source and application of funds for the year ended 31 January 1987
£

| Source of funds |  |
| :--- | ---: |
| Net profit for year | 21,070 |
| add back Depreciation (1) | 4,000 |
| Generated from trading operations | 25,070 |
| Increase in Creditors | 400 |
| Cash introduced | $\underline{20,000}$ |
|  | 45,470 |


| Application of funds |  |
| :--- | ---: |
| Purchase of buildings | 28,000 |
| Purchase of fixtures | 3,000 |
| Increase in Stock | 2,210 |
| Increase in Debtors | 2,610 |
| Drawings | $\underline{18,000}$ |

53,820
Net decrease in Cash and Bank balances (2) £ 8,350

WORKINGS
(1) Increase in Depreciation provision
Fixtures ( $£ 6,500-£ 5,000$ )
1,500
Motor vehicle ( $£ 7,500-£ 5,000$ )
(2) Change in Bank balance from $£ 1,600$ to overdraft of $£ 6,700$ represents a

| Decrease of | $£ 8,300$ |
| :--- | ---: |
| Decrease in Cash in hand | 50 <br>  <br> $£ 8,350$ |

### 23.4 Further exercise

## Question 23.1

John Drakes, a sole trader, has provided the following balance sheets:
Drakes - Balance Sheets as at 31 March

|  | 1986 |  |  | 1987 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cost $£$ | Dep'n | Net £ | Cost £ | Dep'n £ | Net £ |
| Fixed Assets |  |  |  |  |  |  |
| Freehold land | 20,000 |  | 20,000 | 20,000 |  | 20,000 |
| Fittings | 1,000 | 750 | 250 | 1,200 | 870 | 330 |
| Vehicle | 800 | 400 | 400 | 800 | 600 | 200 |
|  | £21,800 | £1,150 | 20,650 | £22,000 | £1,470 | 20,530 |
| Current Assets |  |  |  |  |  |  |
| Stock |  | 11,000 |  |  | 15,400 |  |
| Debtors |  | 1,000 |  |  | 540 |  |
| Cash |  | 9,550 |  |  | 3,030 |  |
|  |  | 21,550 |  |  | 18,970 |  |
| Current Liabilities |  |  |  |  |  |  |
| Creditors |  | 12,000 |  |  | 8,000 |  |
| Net Current Assets |  |  | 9,550 |  |  | 10,970 |
|  |  |  | £30,200 |  |  | £31,500 |
| representing: |  |  |  |  |  |  |
| Capital brought forward add: |  |  | 28,000 |  |  | 30,200 |
| Profit for the year |  |  | 5,400 |  |  | 5,800 |
|  |  |  | 33,400 |  |  | 36,000 |

less:
Drawings $\begin{array}{r}\underline{3,200} \\ \underline{£ 30,200} \\ \hline 31,500 \\ \hline\end{array}$
You are required to prepare a statement of sources and application of funds for the year to 31 March 1987.

## Answer 23.1

Statement of source and application of funds for the year ended 31 March 1987

| Source of funds |  |  |
| :--- | ---: | ---: |
| Net profit |  |  |
| add back depreciation |  | 5,800 |
| Generated from trading operations | 320 |  |
| Decrease in Debtors | 6,120 |  |
|  |  | 460 |
| Application of funds | 6,580 |  |
| Purchase of fittings | 200 |  |
| Increase in Stock | 4,400 |  |
| Decrease in Creditors | 4,000 |  |
| Drawings | $\underline{4,500}$ | $\underline{13,100}$ |
|  |  | $\mathfrak{£}(6,520)$ |
| (Decrease) in Cash balance |  |  |

## 24 Multiple Choice Questions

### 24.1 Introduction

Many of the examining boards include in their papers a section with multiple choice questions. These questions do no more than test your knowledge of accounting within areas covered elsewhere in this book. However, just as with all types of questions in all examinations, familiarity with the style of question with which you will be faced is important.

### 24.2 Worked examples

## Example 24.1

Given below are questions/statements followed by four possible answers, and you are required to select the correct or most appropriate answer.

1 The total of the Sales day book:
A Is posted to the debit of the Sales account
B Is posted to the credit of the Sales account
C Is posted to the debit of the personal account of the business to whom the goods were sold
D Is not posted to the ledger
2 Invoices received for goods purchased would first be entered in:
A The Sales day book
B The Purchases account
C The Purchases day book
D The cash book
3 The entries for Loan interest received are:
A Debit bank account Credit Loan account
B Credit Bank account Debit Loan account
C Credit Bank account Debit Loan Interest account
D Debit Bank account Credit Loan Interest account
4 Credit balances on accounts are:
A Either liabilities or gains
B Either assets or losses
C Profits only
D Losses only
5 If premises were let on January 1 at an annual rental of $£ 100$ and the amounts paid for the year ended June 30 totalled $£ 75$, the Profit and Loss account should show the rent as:
A£75
B $£ 50$
C $£ 100$
D $£ 125$

6 Gross profit is:
A Sales minus purchases
B Net profit minus expenses
C Sales minus cost of goods sold
D None of these
7 The cost of goods sold is:
A Purchases
B Sales
C Sales minus cost of sales
D Stock at start plus purchases minus stock at end
8 A Balance Sheet is:
A Part of the double entry
B A ledger account
C A statement of outstanding balances after the preparation of the Trading and Profit and Loss accounts
D Prepared only to prove the arithmetical accuracy of the accounts
9 A provision for bad and doubtful debts is created:
A To cancel a particular bad debt
B To provide for possible bad debts
C When a debtor becomes bankrupt
D When debts are outstanding for over two months
10 The balance on the Provision for bad and doubtful debts account would:
A Appear on the trial balance as a debit
B Appear on the trial balance as a credit
C Not appear on the trial balance
D Be transferred to the personal account concerned
11 The balance of the Provision for depreciation account:
A Is shown on the trial balance as a debit
B Is shown on the trial balance as a credit
C Is not shown on the trial balance, as it is included in Depreciation
D Is not shown on the trial balance, as it has already been deducted from the asset concerned
12 Debentures are:
A The same as Ordinary shares
B The same as Preference shares
C Certificates showing that loans have been made to the company
D Shares which cannot be paid back to the shareholders
13 Which of these would appear as a current liability in the Balance Sheet:
A Wages due
B Rent receivable due
C Insurance premium paid in advance
D Advertising charges carried forward
14 In a trial balance Purchases:
A Would be shown on the debit side
B Would be shown on the credit side
C Would not appear unless they were credit purchases only
D Would not appear unless they were cash purchases only
15 A firm repays a loan to A. Paul of $£ 6,000$. The entries would be:
A Debit Bank account Credit Loan account
B Debit Loan account Credit Bank account
C Credit Bank account Debit Loan Interest account
D Debit Bank account Credit Loan Interest account

16 Which of the following accounts is a Personal account:
A Premises
B Depreciation
C Sales
D Wye Tool Co. Ltd
17 The owner of a business takes stock for his own use. The entries should be:
A Debit Purchases Credit Drawings
B Debit Drawings Credit Stock
C Debit Drawings Credit Purchases
D Debit Stock Credit Drawings
18 Mr T. Smith introduces a further $£ 1,500$ cash into his business. The entries should be:
A Debit Capital Credit Sales
B Debit Cash Credit Sales
C Debit Cash only
D Debit Cash Credit Capital
19 A. Brewster, who runs a florist's shop, makes the following payments. Which of these is considered to be capital expenditure?
A Purchase of 100 dozen daffodils
B Payment of $£ 100$ wages
C Purchase of a delivery van
D Payment of $£ 50$ electricity bill
20 C. Williams, a baker, buys new fittings on credit for one of his shops. This transaction should first be entered in:
A The cash book
B The purchases day book
C The ledger
D The journal

Solution 24.1

1. B; 2. C; 3. D;4. A;5. B; 6. C; 7. D; 8. C; 9. B; 10. B;11. B; 12. C; 13. A; 14.A; 15. B; 16. D; 17. C; 18. D; 19. C; 20. D

## Example 24.2

Given below are questions/statements followed by three answers, and you are required to indicate which of them is correct. Only one, two or all three may be correct.
1 Accounting is helpful to a business because it provides information:
A Of past profits/losses
B For estimating future results
C For analysing labour turnover
2 Which of the following may be used to make entries in the bank columns of the cash book?
A Cheques received from debtors
B Business standing orders
C Copy sales invoices

3 Study the following account and then answer the question below.

|  | Summarised Bank Account |  |  |
| :--- | :---: | :--- | ---: |
|  | $\mathfrak{£}$ |  | $\mathfrak{£}$ |
| Debtors' payments | 80,000 | Balance b/d | 4,000 |
| Net profit | 15,000 | Expenses | 10,000 |
|  |  | Purchases | 50,000 |
|  |  | Depreciation | 5,000 |
|  |  | Balance c/d | $\underline{26,000}$ |
|  | $\underline{95,000}$ |  | $\underline{95,000}$ |
| Balance b/d | 26,000 |  |  |

Assuming the figures are arithmetically correct, which of the following should not have been entered in the account?
A Depreciation
B Net profit
C Debtors' payments
4 Which of the following items may appear in a creditors' ledger control account?
A Cash paid to suppliers
B Purchase returns
C Discounts received
5 Which of the following items would cause a trial balance to disagree?
A Omission of a debtors' account
B Overvaluation of closing stock
C Failing to make a provision for bad debts
6 Dawn receives a bank statement which does not agree with her cash book balance. Which of the following may be responsible for this difference?
A Cheques paid in have not been credited
B The bank has charged overdraft interest
C A cheque sent to a supplier has not been presented
7. Which of the following accounts in the ledger of a firm would have a credit balance?
A Rent receivable account
B Overdrawn bank account
C Discount allowed account
8 Which of the following errors would affect the balancing of a trial balance?
A An amount posted to A. Harris instead of B. Harris
B An amount omitted entirely from the books
C An amount posted to the wrong side of the account
9 It is usual, at the end of the financial year, to provide for depreciation of fixed assets. This is so that:
A The cost of such assets will be written off over their useful life
B The loss of value which some fixed assets suffer over a period of years will be accounted for
C Cash will be provided to pay for new assets when replacement becomes necessary
10 At the end of a financial year a businessman would show rent he had paid in advance as:
A An expense charged in the Profit and Loss account
B A liability in the Balance Sheet
C A debit balance carried down in the Rent account

1. $\mathbf{A}$ and $\mathbf{B} ; 2$. $\mathbf{A}$ and $\mathbf{B} ; 3$. $\mathbf{A}$ and $\mathbf{B} ; 4$. A, $\mathbf{B}$ and $\mathbf{C} ; 5$. $\mathbf{A} ; 6$. A, $\mathbf{B}$ and $\mathbf{C} ; 7$. $\mathbf{A}$ and $\mathbf{B}$; 8. C; 9. A and B;10. C

### 24.3 Further exercises

## Question 24.1

Given below are questions/statements followed by four possible answers, and you are required to select the correct or most appropriate answer.
1 The owner of a travel business pays out $£ 400$ cash for wages for work done on extending his premises. The entries in the ledger should be:
A Credit Cash Debit Wages
B Credit Cash Debit Sundry expenses
C Credit Cash Debit Premises account
D There is no need to enter this transaction, as it had nothing to do with a bakery business
2 Trade discount is shown in
A The sales or purchases day book only
B The sales or purchases day book and the ledger
C The cash book only
D The cash book and the ledger
3 D. Smithers's account in a business's ledger shows a debit balance of $£ 200$ on 1 January. During the month the business sold goods to D. Smithers invoiced at $£ 250$ less 20 per cent trade discount, and received a cheque from $D$. Smithers for $£ 156$ on account after a cash discount of 2.5 per cent had been deducted. The balance on the account at the end of the month would be
A £240 debit
B £244 debit
C £290 debit
D $£ 290$ credit
4 The trial balance showed wages $£ 2,500$ and a note stated that $£ 500$ wages were due but unpaid. When preparing final accounts you should:
A Debit Profit and Loss account $£ 3,000$ and show Wages accrued $£ 500$ in the Balance Sheet
B Debit Profit and Loss account $£ 2,000$ and show Wages accrued $£ 500$ in the Balance Sheet
C Debit Profit and Loss account $£ 3,000$ and show Wages prepaid $£ 500$ in the Balance Sheet
D Debit Profit and Loss account $£ 2,000$ and show Wages paid in advance £500
5 Carriage outwards is shown on the:
A Debit of Profit and Loss account
B Credit of Profit and Loss account
C Debit of Trading account
D Credit of Trading account
6 If after preparing a balance sheet a cheque for $£ 30$ was paid to a creditor, the alterations to the balance sheet would be:
A Increase Debtors $£ 40$, decrease Creditors $£ 40$
B Decrease Bank account by $£ 40$ only
C Decrease Bank account by $£ 40$, decrease Creditors by $£ 40$
D Only decrease Creditors by $£ 40$

7 Liquid assets are:
A The difference between Fixed Assets and Current Assets
B Cash and anything that can be turned into cash quickly
C Cash only
D The difference between Current Assets and Current Liabilities
8 The balance on the sales ledger control account in the general ledger is usually:
A A credit balance
B A debit balance
C Either A or B
D None: it should balance itself like a trial balance
9 A business purchased goods from S. W. Weston Ltd for $£ 56$. In error this was posted to the debit of S. W. Weston Ltd account. The entries to correct this error are:
A Credit S. W. Weston Ltd $£ 56$ Debit suspense account $£ 56$
B Credit S. W. Weston Ltd $£ 112$ Debit suspense account $£ 112$
C Credit Purchases account $£ 56$ Debit suspense account $£ 56$
D Credit Purchases account $£ 112$ only
10 The bank statement shows a credit balance of $£ 135$. When preparing a bank reconciliation statement, it is found that cheques drawn but not yet presented for payment amounted to $£ 263$ and that there was a standing order for $£ 7$, in the bank statement but not in the cash book. What was the original balance in the cash book?
A $£ 121$ credit
B $£ 128$ credit
C $£ 405$ debit
D £391 credit
11 P. Peters, who owes $£ 100$, is bankrupt and a first and final dividend of 25 p in the pound is received. The entries to record this should be:
A Debit Bank account $£ 25$
Credit P. Peters account $£ 25$
Debit Bad Debts account $£ 75$
Credit P. Peters account $£ 75$

B Credit P. Peters account £100 Debit Bad Debts account $£ 100$
C Debit Bank $£ 75$
Credit P. Peters account $£ 75$
Debit Bad Debts account $£ 25$
Credit P. Peters account $£ 25$
D Debit Bank account $£ 100$
Credit P. Peters account $£ 100$
12 A trial balance shows Provision for Bad Debts $£ 190$ and Debtors $£ 6,800$. It is required to write off a further $£ 320$ as bad debts and maintain the provision at 2.5 per cent of debtors. To do this the profit and loss should show:
A A credit of $\mathfrak{£ 2 0}$ and a debit of $£ 320$
B A credit of $£ 28$ and a debit of $£ 320$
C A credit of $£ 490$
D A credit of $£ 394$
13 Which of the following is not a method of depreciation?
A Fixed instalment
B Reducing balance
C Straight line
D Revaluation
E None: they are all methods of depreciation
14 The Plant and Machinery account has a balance of $£ 45,000$ and the Provision for Depreciation account a balance of $£ 22,000$. A machine which was bought two years previously for $£ 14,000$ was sold for $£ 5,000$. The plant and machinery has been depreciated at 20 per cent on cost. The balance on the provision for depreciation after this sale was:
A $£ 22,000$
B $£ 16,000$

C $£ 16,400$
D $£ 400$
15 The Receipts and Payments account shows:
A The actual cash receipts and payments made during the period
B What the receipts and payments should have been during the period
C The accumulated fund
D The profit and loss for the period
16 The difference between direct and indirect expenses is:
A Direct expenses are a prime cost but indirect expenses are factory overheads
B Direct expenses are factory overheads but indirect expenses are a prime cost
C Direct expenses vary directly with wages but indirect expenses have no relation to wages
D Direct expenses are directly concerned with production but indirect expenses are only partly concerned with production
17 If there is no partnership deed, then profits and losses:
A Can be divided just as the partners wish
B Must be shared equally
C Must be shared in the same proportion as capitals
D Must be shared equally, after an adjustment for interest on capital has been made
18 In a partnership where capitals are fixed, an item in the Appropriation account shows partners' salaries $£ 2,100$. The double entry for this would be:
A Debit Profit and Loss account
B Credit Capital account
C Debit Current account
D Credit Current account
19 To create a provision for discounts allowed, the necessary entries would be:
A Debit Profit and Loss account Credit Provision for Discounts account
B Credit Profit and Loss account Debit Provision for Discounts account
C Debit Customers' accounts Credit Provision for Discounts account
D Debit Discount Allowed account Credit Provision for Discounts account
20 Which of the following transactions would affect the capital of a business?
A Goods for resale purchased on credit
B A receipt from a debtor of $£ 210$
C A sale of goods which cost $£ 150$ on credit for $£ 220$
D A purchase of a machine for $£ 350$

Answer 24.1

1. C; 2. A; 3. A; 4. A; 5. A; 6. C; 7. B; 8. B; 9. B; 10. A;11. A; 12. A; 13. E; 14. C; 15. A; 16. A; 17. B; 18. D; 19. A; 20. C

## Question 24.2

Given below are questions/statements followed by three answers and you are required to indicate which of them is correct. One, two or all three may be correct.
1 In the final accounts of a business, carriage inwards should be included in the:
A Trading account
B Profit and Loss account
C Appropriation account

2 The annual profit of a firm is not an exact figure, but an estimate calculated from the accounting information available. Which of the following items is/ are only an estimated charge?
A Depreciation of fixed assets
B Provision for doubtful debts
C Cash paid in advance for expenses
3 In a partnership, which of the following would appear in the appropriation account?
A Interest on capital
B Interest on drawings
C Interest on bank overdraft
4 Which of the following items should be taken into account by a firm when calculating its credit sales?
A Opening debtors
B Closing debtors
C Discount received
5 A debenture holder in a limited liability company is:
A Paid a fixed rate of interest each year
B A creditor of the company
C A part owner of the assets of the company
6 Which of the following should be included in the appropriation account of a limited liability company?
A Dividend paid to shareholders
B Sum transferred to general reserve
C Interest paid to debenture holders
7 Which of the following provisions in the Partnership Act, 1890, apply where no agreement exists?
A Profits and losses must be shared equally
B Interest shall be paid on drawings
C Interest on capital shall be paid at 5 per cent per annum
8 Which of the following correctly define the authorised capital of a limited liability company?
A Capital registered with the Registrar of Joint Stock Companies
B Capital issued by the managing directors
C Capital subscribed by the directors
9 Which of the following items should be used in the calculation of purchases to be charged to the trading account for a firm not keeping proper books of account?
A Cash received from trade debtors
B Goods at cost price taken by the proprietor for his own use
C Discounts received from trade creditors
10 Which of the following measures the profitability of a business?
A The total of the trade debtors
B Amount of cash at the bank
C Return on capital employed
Answer 24.2

1. $\mathbf{A} ; 2$. $\mathbf{A}$ and $\mathbf{B} ; 3$. $\mathbf{A}$ and $\mathbf{B} ; 4$. $\mathbf{A}$ and $\mathbf{B} ; 5$. $\mathbf{A}$ and $\mathbf{B} ; 6 . \mathbf{A}$ and $\mathbf{B} ; 7$. $\mathbf{A} ; 8$. $\mathbf{A}$; 9. B and C; 10. C

## Index

## Accounts

limited companies, 180-186
clubs and societies, 117
comprehension and interpretation of, 171-177
types of, 2
Accrued expenses, 83
Accumulated fund, 117
Acid test ratio, 174
Amalgamation of businesses, 142
Assets, 2
current, 22
fixed, 22
net, 22
net current, 22
value, 72

Bad debts, 59-63
provision for, 59-60
Balance sheet, 21-25
equation, 22
Balancing accounts, 4
Bank reconciliation, 39-44
Bar trading account, 118-119
Budgets, 190-197

Capital accounts, 3, 21
Capital expenditure, 23
Cash book, 26-38, 45
Cash discounts, 27-38
Control accounts, 64-71
Cost of goods sold, 16
Credit notes, 46,47
Current ratio, 173

Day books, 45-50
Debentures, 181
Debt collection period, 173
Departmental accounts, 96-101
Depreciation, 72-82
charge, 72
machine hour method, 74
meaning, 72
provision account, 75
reducing balance method, 73
straight line method, 73
Dishonoured cheques, 39
Disposal of fixed assets, 75-76
Dividends, 181

Double entry, 2-9
Drawings, 21
Errors, 13, 51-58
of commission, 52
compensating, 52
correction of, 51-53
of omission, 51
of principle, 52
Expenses, 2
Factory overheads, 151
Finished goods, 152
Fixed costs, 153
Forecasts, 190-197
Funds flow, 198-203
General reserve, 181
Goodwill, 142-144
Gross profit, 16
Gross profit margin, 172
Imprest system, 28
Income, 3
Income and expenditure accounts, 117-128
Incomplete records, 102-116
Interest on capital, 129
Interest on drawings, 129
Invoices, 45, 46
Liabilities, 2
current, 22
long-term, 22
Limited liability, 180
Liquidity ratios, 173-174
Manufacturing accounts, 151-162
Multiple choice, 204-211
Net profit, 17
Net profit margin, 172
New partner, 143
Partners' capital accounts, 129-130
Partners' current accounts, 130
Partners' loans, 130
Partners' salaries, 129
Partnership accounts, 129-150
Partnership agreement, 129
Petty cash, 28

Petty cash book, 45
Prepayments, 84
Prime cost, 151
Profit and loss account, 16-20
Profit and loss appropriation account, 130, 182
Production cost, 151
Purchases day book, 45
Purchases ledger, 66
Purchases returns, 5
Purchases returns day book, 46
Raw materials, 147
Receipts and payments account, 119
Residual value, 72
Retained profits, 181
Return on capital employed, 171
Revenue expenditure, 23
Sales day book, 46
Sales ledger, 66
Sales returns, 5
Sales returns day book, 47
Sectionalisation of ledgers, 65
Share capital, 180
authorised, 180
issued, 180
nominal value, 180
ordinary, 180
preference, 180
Shareholders' funds, 182
Statement of affairs, 102
Stock valuation, 163-170
Stock turnover, 172-173
Stolen or lost goods, 105
Subscriptions, 117-118
Sundry stocks, 84
Suspense accounts, 53
Trade discounts, 46
Trading account, 16-20
Trial balance, 11-15
Value Added Tax, 47
Variable costs, 153
Working capital, 22
Working capital ratio, 173
Work in progress, 152
Year-end adjustments, 83-95


[^0]:    May £
    2 Bought goods on credit from W. Jones 175
    Bought on credit new shop fittings from Shopfitters Ltd $\quad 1,000$
    3 Bought stock on credit from R. Wilkinson 450
    6 Returned goods to W. Jones 34
    Paid W. Jones by cheque 410
    Cash sales to date 700
    11 Personal drawings in cash 250
    13 Banked 400
    Bought stationery for business use and paid cash 40
    Paid R. Wilkinson by cheque 450
    Cash sales to date. Banked immediately 540
    Calculations indicated that a sum of money had been stolen from the till 50
    (a) Open all necessary ledger accounts, including accounts for cash and bank (a two-column cash book will be accepted instead of separate accounts), enter the opening balances and record the above transactions.

