# Cambridge

# IGCSE / O-Level

# Accounting

## (Code: 0452 / 7707)

## Section 04

# Chapter 14- Bank reconciliation statements

## 14.1 Introduction

This is similar to the **statement of account** issued by its suppliers to the customers who have purchased goods on credit

A **bank statement** is a copy of the customer's account in the books of the bank. This is a record of transactions as they affect the bank

It is important to compare the bank statement and the bank account in the cash book. If the two balances disagree, it is necessary to **reconcile** them to explain why the differences have arisen.

### 14.2 Reasons why the bank account and the bank statement may differ

Differences between the two records usually occur because of:

• the different times at which the same items are recorded

• the business not recording certain items in the cash book.

### Timing differences

These are usually due to:

**1 Cheques not yet presented**

These are cheques that have been paid by the business and entered on the credit of the cash book, but which do not appear on the bank statement.

**2 Amounts not yet credited**

These are cash and cheques that have been paid into the bank and entered on the debit side of the cash book, but which do not appear on the bank statement.

### Items not recorded in the cash book

It often happens that the business does not record certain items until the bank statement is received. These include:

1 **Bank charges and bank interest**

The bank may deduct an amount from the customer's account to cover the cost of running the account and for any interest charged on overdraft s and loans.

**2 Dishonoured cheques**

A cheque paid into the bank may be returned because the drawer did not have suff icient funds in the account.

**3 Amounts paid directly into the bank**

These are credit transfers, standing orders and direct debits where a person has instructed their bank to pay an amount of money directly into the bank account of the business.

**4 Amounts paid directly by the bank to others**

These include credit transfers, standing orders and direct debits which the business has instructed the bank to pay directly from the account of the business.

Any other differences between the two records must be investigated. **Errors made by the business** should be corrected and **errors made by the bank** should be notified to the bank.

## 14.3 Stages of bank reconciliation

**1 Compare the bank account in the cash book with the bank statement**

The debit side of the bank account should be compared with the credit side of the bank statement and the credit side of the bank account compared with the debit side of the bank statement.

**2 Update the cash book**

Enter in the cash book any items which appear on the bank statement but which have not yet been entered in the cash book.

a Items debited on the bank statement (e.g. bank charges, credit transfers paid by the bank, etc.) should be credited to the bank account in the cash book.

b Items credited on the bank statement (e.g. credit transfers and direct debits paid into the bank) should be debited to the bank account in the cash book.

**3 Correct any errors in the cash book**

**4 Balance the cash book and carry down the balance**

This balance is the correct bank balance. If it is the end of the financial year, this is the balance which should appear in the statement of financial position.

**5 Prepare a bank reconciliation statement**

This should show why the balance on the updated cash book does not agree with the balance shown on the bank statement.

a Start with the balance shown on the bank statement.

b Add any items which appear on the debit side of the cash book but which do not appear on the bank statement (e.g. amounts not yet credited).

c Deduct any items which appear on the credit side of the cash book but which do not appear on the bank statement (e.g. cheques not yet presented).

d Make any adjustments for bank errors by adding amounts debited in error by the bank and deducting amounts credited in error by the bank.

e The total of this calculation should equal the updated bank balance in the cash book.

It is possible to start the bank reconciliation statement with the updated bank account balance. In this case, it is necessary to reverse items **b, c and d.**

**A bank reconciliation statement does not form part of the double entry records of the business**

## Walkthrough 14.1

The bank columns of Fatima's cash book for the month of April 20–8 are:

**Cash book (bank columns only)**

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–8 | | | | 20–8 | | | |
| Apr 1 | Balance | | 2970 | Apr 10 | Purchases | | 234 |
| 14 | J Dhatwani | | 420 | 19 | B Malukani | | 110 |
| 26 | ABC Stores | | 217 | 29 | TeeDee Co | | 1372 |
| 28 | Sales | | 1460 | 30 | Dobhal Ltd | | 517 |
| | | | | | Balance | c/d | 2834 |
| | | | 5067 | | | | 5067 |
| 20–8 | | | | | | | |
| May 1 | Balance | b/d | 2834 | | | | |

Fatima's bank statement for the month of April 20–8 is:

**REGIONAL BANK LTD**
**West District**

**Account**: Fatima Goyal — **Account no**: 987654
**Date**: 30 April 20–8

| Date | Details | Debit $ | Credit $ | Balance $ |
|---|---|---|---|---|
| 20–8 | | | | |
| April 1 | Balance | | | 2970 Cr |
| 13 | Cheque no 2388 | 243 | | 2727 Cr |
| 19 | Credit no 6983 | | 420 | 3147 Cr |
| 20 | Credit transfer (dividend) | | 150 | 3297 Cr |
| 24 | Cheque no 2389 | 110 | | 3187 Cr |
| 30 | Bank charges | 95 | | 3092 Cr |

It is discovered that Fatima has made an error on 10 April and recorded purchases as $234, when the correct figure was $243.

**a** Make any additional entries that are required in Fatima's cash book. Balance the bank account and bring down the balance on 1 May 20–8.

**b** Prepare a bank reconciliation statement at 30 April 20–8.

The first thing to do is to compare the entries in the cash book with those on the bank statement. Place a tick (✓) against the items appearing in both the records.

The cash book and the bank statement should now look like this:

**Cash book (bank columns only)**

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–8 | | | | 20–8 | | | |
| Apr 1 | Balance | ✓ | 2970 | Apr 10 | Purchases | | 234 |
| 14 | J Dhatwani | ✓ | 420 | 19 | B Malukani | ✓ | 110 |
| 26 | ABC Stores | | 217 | 29 | TeeDee Co | | 1372 |
| 28 | Sales | | 1460 | 30 | Dobhal Ltd | | 517 |
| | | | | | Balance | c/d | 2834 |
| | | | 5067 | | | | 5067 |
| 20–8 | | | | | | | |
| May 1 | Balance | b/d | 2834 | | | | |

**REGIONAL BANK LTD**
**West District**

**Account**: Fatima Goyal — **Account no**: 987654
**Date**: 30 April 20–8

| Date | Details | Debit $ | Credit $ | Balance $ |
|---|---|---|---|---|
| 20–8 | | | | |
| April 1 | Balance | | | 2970 Cr ✓ |
| 13 | Cheque no 2388 | 243 | | 2727 Cr |
| 19 | Credit no 6983 | | 420 ✓ | 3147 Cr |
| 20 | Credit transfer (dividend) | | 150 | 3297 Cr |
| 24 | Cheque no 2389 | 110 ✓ | | 3187 Cr |
| 30 | Bank charges | 95 | | 3092 Cr |

It is now possible to update the bank account in the cash book. Firstly, the error on 10 April must be corrected. Items appearing in the debit column of the bank statement which have not been ticked off (excluding 13 April which has now been corrected in the bank account) must be credited in the bank account. Items appearing in the credit column of the bank statement which have not been ticked off must be debited in the bank account.

**a**

**Cash book (bank columns only)**

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–8 | | | | 20–8 | | | |
| May 1 | Balance | b/d | 2834 | May 1 | Correction of error | | 9 |
| | Dividend | | 150 | | Bank charges | | 95 |
| | | | | | Balance | c/d | 2880 |
| | | | 2984 | | | | 2984 |
| 20–8 | | | | | | | |
| May 1 | Balance | b/d | 2880 | | | | |

The bank reconciliation statement can now be prepared.

**b**

**Fatima**
**Bank reconciliation statement at 30 April 20–8**

| | | $ | $ |
|---|---|---|---|
| Balance shown on bank statement | | | 3092 |
| Add Amounts not yet credited | – ABC Stores | 217 | |
| | Sales | 1460 | 1677 |
| | | | 4769 |
| Less Cheques not yet presented | – TeeDee Co | 1372 | |
| | Dobhal Ltd | 517 | 1889 |
| Balance shown in cash book | | | 2880 |

It is important to remember that the bank columns are actually part of the main three column cash book – not a separate ledger account.

## 14.4 Bank reconciliation when there is a bank overdraft

Walkthrough 14.1 showed how to update the cash book and prepare a bank reconciliation statement when there is a positive bank balance

### Walkthrough 14.2

On 31 July 20–8 the bank account in Fatima's cash book showed an overdrawn balance of $1 121. On the same date her bank statement showed a debit balance of $1 091.

When comparing the cash book and the bank statement it was found that the following items appeared only in the cash book:

1 A cheque paid to PJ Motors for $163 on 29 July.
2 Cash sales amounting to $1 010 paid into the bank on 31 July.

The following items appeared only on the bank statement and not in the cash book:

1 Rent received paid directly into the bank $190.
2 Bank charges of $213.
3 A credit balance on 1 July was shown as $2 100 instead of $1 200.

a Make any additional entries that are required in Fatima's cash book. Balance the bank account and bring down the balance on 1 May 20–8.
b Prepare a bank reconciliation statement at 31 July 20–8.

The comparison of the cash book with the bank statement has already been completed and the differences are shown, so it is possible to start with the updating of the cash book.

a

| Cash book (bank columns only) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Details | Folio | $ | Date | Details | Folio | $ |
| 20–8 | | | | 20–8 | | | |
| Aug 1 | Rent received | | 190 | Aug 1 | Balance | b/d | 1 121 |
| | Balance | c/d | 1 144 | | Bank charges | | 213 |
| | | | 1 334 | | | | 1 334 |
| | | | | 20–8 | | | |
| | | | | Aug 1 | Balance | b/d | 1 144 |

b

| Fatima<br>Bank reconciliation statement at 31 July 20–8 | |
|---|---|
| | $ |
| Balance shown on bank statement | (1 091) |
| Add Amounts not yet credited – Sales | 1 010 |
| | (81) |
| Less Cheques not yet presented – PJ Motors | 163 |
| | (244) |
| Less Bank error | 900 |
| Balance shown in cash book | (1 144) |

## 14.5 Advantages of bank reconciliation

The advantages of reconciling the balance on the bank statement with that shown on the bank account in the cash book are:

1 After updating the bank account an accurate bank balance is available.

2 Errors in the bank account or on the bank statement can be identified.

3 It assists in discovering fraud and embezzlement.

4 Amounts not credited by the bank can be identified.

5 Cheques not yet presented can be identified.

6 Any 'stale' cheques (these are usually those which are over six months old, which will not be met by the bank) can be identified and written back into the bank account

# Chapter 15- Journal entries and correction of errors

## 15.1 Introduction

The **journal** or general journal is a book of prime entry. Chapter 7 explained how all transactions are recorded in a book of prime entry before they are entered in the ledger.

The **journal** is not a part of the double entry book-keeping. It is regarded as a diary in which transactions are noted before they are entered in the ledger. **Anything which is not entered in one of the books of prime entry must be entered in the journal before being recorded in the ledger.**

## 15.2 Opening journal entries

As the name suggests, opening journal entries are made when the business starts (or when the business first keeps accounting records).

### Walkthrough 15.1

Chandra started business on 1 November 20–4. He did not maintain any accounting records during his first year of trading.

On 1 November 20–5 he was able to provide the following information about his business:

| | |
|---|---|
| Assets | Premises $56 000, fixtures $19 400, motor vehicles $12 500, inventory $3 100, trade receivables $4 700, cash $200 |
| Liabilities | Trade payables $5 600, bank overdraft $2 300 |

Prepare an opening journal entry for Chandra at 1 November 20–5.

Make the appropriate entries in Chandra's ledger and cash book.

Chandra
Journal
Assets, liabilities and capital to open the books.

| Date | Details | Folio | Debit $ | Credit $ |
|---|---|---|---|---|
| 20–5 | | | | |
| Nov 1 | Premises | | 56 000 | |
| | Fixtures | | 19 400 | |
| | Motor vehicles | | 12 500 | |
| | Inventory | | 3 100 | |
| | Trade receivables | | 4 700 | |
| | Cash | | 200 | |
| | Trade payables | | | 5 600 |
| | Bank | | | 2 300 |
| | Capital | | | 88 000 |
| | | | 95 900 | 95 900 |

- It is usual to show the debit entries first.
- It is usual to slightly indent the credit entries.
- It is usual to draw a line after each separate journal entry.
- The capital was calculated as the difference between the assets and the liabilities.

Chandra
Nominal ledger
Premises account

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–5 | | | | | | | |
| Nov 1 | Balance | | 56 000 | | | | |

Fixtures account

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–5 | | | | | | | |
| Nov 1 | Balance | | 19 400 | | | | |

## 15.3 Purchase and sale of non-current assets

As the purchase and sale of non-current assets are not recorded in one of the other books of prime entry, they should be entered in the journal before being posted to the ledger.

**Walkthrough 15.2**

Chandra's financial year ends on 31 October.

Prepare the journal entries to record the following transactions on 1 September 20–6.

- Purchased additional fixtures, $1 300, on credit from Office Supplies.
- Sold the motor vehicle (cost $12 500) for $7 400 on credit to Used Vehicles Ltd.

**Chandra**
**Journal**

| Date | Details | Folio | Debit $ | Credit $ |
|---|---|---|---|---|
| 20–6 | | | | |
| Sep 1 | Fixtures | | 1 300 | |
| | Office Supplies | | | 1 300 |
| | Purchase of fixtures on credit | | | |
| | Disposal of motor vehicle | | 12 500 | |
| | Motor vehicles | | | 12 500 |
| | Used Vehicles Ltd | | 7 400 | |
| | Disposal of motor vehicle | | | 7 400 |
| | Transfer of motor vehicle to disposal account and sale of motor on credit | | | |
| Oct 31 | Income statement | | 5 100 | |
| | Disposal of motor vehicle | | | 5 100 |
| | Loss on disposal transferred to income statement | | | |

## 15.4 Non-regular transactions

As explained earlier, any transactions which cannot be recorded in another book of prime entry are recorded in the journal. These often consist of transactions which are not occurring regularly and year-end transfers to the income statement.

**Walkthrough 15.3**

Chandra's financial year ends on 31 October. He provided the following information for the year ended 31 October 20–6.

- Irrecoverable debts written off up to 30 October 20–6 amounted to $140.
- On 31 October 20–6 it was decided to:

  Write off as irrecoverable a debt of $50 owing by Ansari Stores

  Create a provision for doubtful debts of $250

**a** Prepare journal entries to record the decisions made on 31 October 20–6 and any necessary year-end transfers.

**b** Show the appropriate ledger accounts after posting these entries.

**a**

**Chandra**
**Journal**

| Date | Details | Folio | Debit $ | Credit $ |
|---|---|---|---|---|
| 20–6 | | | | |
| Oct 31 | Irrecoverable debts | | 50 | |
| | Ansari Stores | | | 50 |
| | Writing off irrecoverable debt | | | |
| | Income statement | | 250 | |
| | Provision for doubtful debts | | | 250 |
| | Creation of provision for doubtful debts | | | |

**b**

**Chandra**
**Sales ledger**
**Ansari Stores account**

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–6 | | | | 20–6 | | | |
| Oct 1 | Balance | b/d | 50 | Oct 31 | Irrecoverable debts | | 50 |
| | | | 50 | | | | 50 |

**Nominal ledger**
**Irrecoverable debts account**

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–6 | | | | 20–6 | | | |
| Oct 30 | Debtors written off | | 140 | Oct 31 | Income statement | | 190 |
| 31 | Ansari Stores | | 50 | | | | |
| | | | 190 | | | | 190 |

| Provision for doubtful debts account | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Details | Folio | $ | Date | Details | Folio | $ |
| 20–6 | | | | 20–6 | | | |
| Oct 31 | Balance | c/d | 250 | Oct 31 | Income statement | | 250 |
| | | | 250 | | | | 250 |
| | | | | 20–6 | | | |
| | | | | Nov 1 | Balance | b/d | 250 |

- On 31 October 20–7 Chandra:

  agreed to accept equipment valued at $100 from Khalid in settlement of a debt written off during the year ended 31 October 20–6.

  decided to increase the provision for doubtful debts to $310.

**c** Prepare journal entries to record the above information, including year-end transfers.

**d** Show the appropriate ledger accounts after posting these entries.

c

| Chandra Journal | | | | |
|---|---|---|---|---|
| Date | Details | Folio | Debit $ | Credit $ |
| 20–7 | | | | |
| Jun 30 | Equipment | | 100 | |
| | Debts recovered | | | 100 |
| | Equipment accepted in settlement of debt previously written off | | | |
| Oct 31 | Income statement | | 60 | |
| | Provision for doubtful debts | | | 60 |
| | Adjustment to provision for doubtful debts | | | |

d

| Chandra Nominal ledger Debts recovered account | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Details | Folio | $ | Date | Details | Folio | $ |
| 20–7 | | | | 20–7 | | | |
| Oct 31 | Income statement | | 100 | Jun 30 | Equipment | | 100 |
| | | | 100 | | | | 100 |

| Equipment account | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Details | Folio | $ | Date | Details | Folio | $ |
| 20–7 | | | | | | | |
| Oct 31 | Debts recovered | | 100 | | | | |

| Provision for doubtful debts account | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Details | Folio | $ | Date | Details | Folio | $ |
| 20–6 | | | | 20–6 | | | |
| Oct 31 | Balance | c/d | 250 | Oct 31 | Income statement | | 250 |
| | | | 250 | | | | 250 |
| 20–7 | | | | 20–6 | | | |
| Oct 31 | Balance | c/d | 310 | Nov 1 | Balance | b/d | 250 |
| | | | | 20–7 | | | |
| | | | | Oct 31 | Income statement | | 60 |
| | | | 310 | | | | 310 |
| | | | | 20–7 | | | |
| | | | | Nov 1 | Balance | b/d | 310 |

- The alternative ways of recording debts recovered are explained on Page 172:

# 15.5 Correction of errors

Errors which are not shown by a trial balance

There are six types of error which can be made which will not be revealed by the trial balance. These are:

**Error of commission**

**Error or complete reversal**

**Error of omission**

**Error of original entry**

**Error of principle**

**Compensating errors**

When such errors are discovered, they should be corrected by means of a journal entry before making entries in the appropriate ledger accounts

**Walkthrough 15.6**

Chandra's financial year ends on 31 October.

The totals of the trial balance prepared on 31 October 20–7 agreed, but the following errors were later discovered.

**a** The purchase of stationery, $30, had been debited to the purchases account.

**b** A cheque, $500, received from K Singh had been credited to the account of H Singh.

**c** The wages account had been under-cast by $100 and the purchases account had been overcast by $100.

Prepare the necessary journal entries to correct these errors.

Chandra
Journal

| | Date | Details | Folio | Debit $ | Credit $ |
|---|---|---|---|---|---|
| | 20–7 | | | | |
| **a** | Oct 31 | Stationery | | 30 | |
| | | Purchases | | | 30 |
| | | Error in posting stationery to purchases now corrected | | | |
| **b** | | H Singh | | 500 | |
| | | K Singh | | | 500 |
| | | Error in posting cheque to wrong personal account now corrected | | | |
| **c** | | Wages | | 100 | |
| | | Purchases | | | 100 |
| | | Wages under-cast and purchases over-cast, now corrected | | | |

## Errors which affect a trial balance

Some errors may occur that result in the totals of the trial balance not balancing. If the errors are not found immediately, the trial balance is balanced by inserting the difference between the two sides in a **suspense account.**

**Walkthrough 15.7**

Chandra's financial year ends on 31 October.

The totals of the trial balance prepared on 31 October 20–8 failed to agree. The difference of $260 was a shortage on the debit side. This was entered in a suspense account.

The following errors were later discovered:

**a** The purchases account had been over-cast by $110.

**b** No entry had been made for office expenses, $20, paid in cash.

**c** Credit sales, $630, to Anil had been correctly entered in the sales account but debited as $360 in Anil's account.

**d** Capital introduced by Chandra, $5 000 (paid into the bank), has been debited to the capital account and credited to the bank account.

**e** A cheque, $200, received from a debtor, Yuvraj, has been correctly entered in the bank account, but no other entry has been made.

**f** Sales returns, $150, have been correctly entered in the credit customer's account but have been credited to the purchases returns account.

Prepare the necessary journal entries to correct these errors.

Write up the suspense account in Chandra's ledger.

**Chandra**
**Journal**

| | Date | Details | Folio | Debit $ | Credit $ |
|---|---|---|---|---|---|
| | 20–8 | | | | |
| **a** | Oct 31 | Suspense | | 110 | |
| | | Purchases | | | 110 |
| | | Purchases over-cast, now corrected | | | |
| **b** | | Office expenses | | 20 | |
| | | Cash | | | 20 |
| | | Omission of cash paid for office expenses, now corrected | | | |
| **c** | | Anil | | 270 | |
| | | Suspense | | | 270 |
| | | Sales, $630, incorrectly entered in Anil's account as $360, now corrected | | | |
| **d** | | Bank | | 10 000 | |
| | | Capital | | | 10 000 |
| | | Capital introduced debited to capital and credited to bank, now corrected | | | |
| **e** | | Suspense | | 200 | |
| | | Yuvraj | | | 200 |
| | | Cheque received from Yuvraj entered only in the bank, now corrected | | | |
| **f** | | Sales returns | | 150 | |
| | | Purchases returns | | 150 | |
| | | Suspense | | | 300 |
| | | Sales returns incorrectly credited to purchases returns, now corrected | | | |

**Chandra**
**Nominal ledger**
**Suspense account**

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–8 | | | | 20–8 | | | |
| Oct 31 | Difference on trial balance | | 260 | Oct 31 | Anil | | 270 |
| | Purchases | | 110 | | Sales returns | | 150 |
| | Yuvraj | | 200 | | Purchases returns | | 150 |
| | | | 570 | | | | 570 |

- An entry was required in the suspense account to correct errors **a**, **c**, **e** and **f** as all these affected the balancing of the trial balance.
- No entry was required in the suspense account to correct errors **b** and **d** as these did not affect the balancing of the trial balance.
- Error **f** required two accounts to be debited – the sales returns and the purchases returns – with the corresponding credits in the suspense account in order to correct the error.
- Where an entry has been reversed (as in error **d**) it is necessary to double the amount of the error in order to correct it and to restore the accounts to the correct amount.

## 15.6 Effect on profit of correcting errors

If errors are discovered after the income statement has been prepared, it may be necessary to amend the profit figure.

**Walkthrough 15.8**

Chandra's financial year ends on 31 October.

The totals of the trial balance prepared on 31 October 20–8 failed to agree. The difference was entered in a suspense account and draft financial statements were prepared. The profit for the year was $15 000.

The following errors were later discovered:

- **a** The purchases account had been over-cast by $110.
- **b** No entry had been made for office expenses, $20, paid in cash.
- **c** Credit sales, $630, to Anil had been correctly entered in the sales account but debited as $360 in Anil's account.
- **d** Capital introduced by Chandra, $5 000 (paid into the bank), has been debited to the capital account and credited to the bank account.
- **e** A cheque, $200, received from a credit customer, Yuvraj, has been correctly entered in the bank account, but no other entry has been made.
- **f** Sales returns, $150, have been correctly entered in the credit customer's account but have been credited to the purchases returns account.

Prepare a statement to show the corrected profit for the year ended 31 October 20–8.

Chandra
Statement of corrected profit for the year ended 31 October 20–8

| | $ | $ |
|---|---|---|
| Profit for the year from income statement | | 15 000 |
| Add Purchases over-cast | | 110 |
| | | 15 110 |
| Less Office expenses omitted | 20 | |
| Sales returns understated | 150 | |
| Purchases returns overstated | 150 | 320 |
| Corrected profit for the year | | 14 790 |

- Errors **c**, **d** and **e** do not affect the calculation of the profit.
- If the purchases are over-cast, the profit will be understated and therefore $110 must be added.
- If expenses have been omitted, the profit will be overstated and therefore $20 must be deducted.
- If the sales returns have been understated, the profit will be overstated and so $150 must be deducted.
- If the purchases returns have been overstated, the profit will also be overstated and therefore $150 must be deducted.

## 15.7 Effect on statement of financial position of correcting errors

If errors are discovered and corrected after the preparation of financial statements, the statement of financial position may have to be amended. If the profit for the year has been corrected this will affect the capital section of the statement, but other items may also need to be amended.

**Walkthrough 15.9**

Chandra's financial year ends on 31 October.

The totals of the trial balance prepared on 31 October 20–8 failed to agree. The difference was entered in a suspense account and draft financial statements were prepared.

The following errors were later discovered:

- **a** The purchases account had been over-cast by $110.
- **b** No entry had been made for office expenses, $20, paid in cash.
- **c** Credit sales, $630, to Anil had been correctly entered in the sales account but debited as $360 in Anil's account.
- **d** Capital introduced by Chandra, $5 000 (paid into the bank), has been debited to the capital account and credited to the bank account.
- **e** A cheque, $200, received from a credit customer, Yuvraj, has been correctly entered in the bank account, but no other entry has been made.
- **f** Sales returns, $150, have been correctly entered in the credit customer's account but have been credited to the purchases returns account.

The corrected profit for the year ended 31 October 20–8 was $14 790.

Explain how correcting **each** of these errors will affect the statement of financial position at 31 October 20–8.

Errors **a**, **b**, and **f** do not affect items within the statement of financial position directly, but are used in the calculation of the corrected profit for the year. The profit which is added to the capital in the statement will need to be amended to the correct figure of $14 790.

To correct error **c** the figure for trade receivables in the current assets section of the statement will have to be increased by $270.

To correct error **d** the capital figure will have to be increased by $10 000. The figure for bank in the current assets section of the statement will also have to be increased by $10 000.

To correct error **e** the figure for trade receivables in the current assets section of the statement will have to be reduced by $200.

# Chapter 16- Control accounts

## 16.1 Introduction

Control accounts are also known as total accounts. If the trial balance fails to balance and the error cannot be readily located, it is necessary to check all the accounting records. This can take a considerable amount of time.

## 16.2 Advantages of control accounts

Where a full set of accounting records is maintained, it is usual to prepare a **sales ledger control account** and a **purchases ledger control account**. The advantages of preparing these accounts are as follows:

1 They can assist in locating errors when the trial balance fails to balance.

2 They are proof of the arithmetical accuracy of the ledgers they control.

3 The balances on these accounts are regarded as being equal to the total of the trade receivables and the total of the trade payables, so this information is available immediately.

4 Draft financial statements can be prepared quickly because of the balances provided by the control accounts.

5 They help to reduce fraud as the control accounts are prepared by someone who has not been involved in making the entries in those particular ledgers.

6 They provide a summary of the transactions affecting the trade receivables and trade payables for each financial period.

## 16.3 Sales ledger control account

This is also referred to as a **total trade receivables account**. This account resembles the account of a credit customer, but instead of containing transactions concerned with just one person or business it contains transactions relating to all the debtors

## 16.4 Purchases ledger control account

This is also known as a total trade payables account. This account resembles the account of a credit supplier, but instead of containing transactions concerned with just one person or business it contains transactions relating to all the creditors. A typical purchases ledger control account is shown here.

**Walkthrough 16.1**

Shweta maintains a full set of accounting records and prepares control accounts at the end of each month.

She provided the following information:

| | | | $ |
|---|---|---|---|
| 20–8 | March 1 | Sales ledger control account balance | 1 200 debit |
| | March 31 | Totals for the month: | |
| | | Sales journal | 4 890 |
| | | Sales returns journal | 250 |
| | | Cheques and bank transfers received from credit customers | 3 892 |
| | | Discount allowed to credit customers | 8 |
| | | Cash received from credit customers | 120 |
| | | Cash refunds to credit customers | 19 |
| | | Cheque received (included in the above figure) later dishonoured | 80 |
| | | Irrecoverable debts written off | 94 |

Prepare Shweta's sales ledger control account for the month of March 20–8.

Shweta
Nominal ledger
Sales ledger control account

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–8 | | | | 20–8 | | | |
| Mar 1 | Balance | b/d | 1 200 | Mar 31 | Sales returns | | 250 |
| 31 | Sales | | 4 890 | | Cash | | 120 |
| | Bank (dishonoured cheque) | | 80 | | Bank | | 3 892 |
| | | | | | Discount allowed | | 8 |
| | Cash (refunds) | | 19 | | Irrecoverable debts | | 94 |
| | | | | | Balance | c/d | 1 825 |
| | | | 6 189 | | | | 6 189 |
| 20–8 | | | | | | | |
| Apr 1 | Balance | b/d | 1 825 | | | | |

| Nominal ledger | | | | | | | |
|---|---|---|---|---|---|---|---|
| Purchases ledger control account | | | | | | | |
| Date | Details | Folio | $ | Date | Details | Folio | $ |
| | Purchases returns | | | | Balance | b/d | |
| | Cash | | | | Purchases | | |
| | Bank | | | | Interest charged | | |
| | Discount received | | | | Bank/Cash (refunds) | | |
| | Balance | c/d | | | | | |
| | | | | | Balance | b/d | |

**The information to prepare a purchases ledger control account is obtained from the books of prime entry. The sources of information are summarised as follows:**

| Item | Source of information |
|---|---|
| Purchases | Purchases journal |
| Purchases returns | Purchases returns journal |
| Payments to credit suppliers | Cash book |
| Discounts received from credit suppliers | Cash book |
| Refunds from credit suppliers | Cash book |
| Interest charged on overdue accounts | Journal |

### Walkthrough 16.2

Shweta maintains a full set of accounting records and prepares control accounts at the end of each month.

She provided the following information:

| | | | $ |
|---|---|---|---|
| 20–8 | March 1 | Purchases ledger control account balance | 1 880 credit |
| | March 31 | Totals for the month: | |
| | | Purchases journal | 4 230 |
| | | Purchases returns journal | 180 |
| | | Cheques and bank transfers paid to credit suppliers | 3 900 |
| | | Discount received from credit suppliers | 104 |
| | | Cheque refunds from credit suppliers | 100 |
| | | Interest charged on overdue account | 12 |

Prepare Shweta's purchases ledger control account for the month of March 20–8.

| Shweta | | | | | | | |
|---|---|---|---|---|---|---|---|
| Nominal ledger | | | | | | | |
| Purchases ledger control account | | | | | | | |
| Date | Details | Folio | $ | Date | Details | Folio | $ |
| 20–8 | | | | 20–8 | | | |
| Mar 31 | Purchases returns | | 180 | Mar 1 | Balance | | 1 880 |
| | Bank | | 3 900 | 31 | Purchases | | 4 230 |
| | Discount received | | 104 | | Bank (refunds) | | 100 |
| | Balance | c/d | 2 038 | | Interest charged | | 12 |
| | | | 6 222 | | | | 6 222 |
| | | | | 20–8 | | | |
| | | | | Apr 1 | Balance | b/d | 2 038 |

## 16.5 Balances on both sides of a control account

Occasionally a credit customer's account may show a credit balance. This may occur due to:

• an overpayment by the customer

• the customer returning goods after paying the account

• the customer paying in advance for the goods

• cash discount not being deducted before payment was made.

**Walkthrough 16.3**

Shweta maintains a full set of accounting records and prepares control accounts at the end of each month.

She provided the following information:

| | | | $ |
|---|---|---|---|
| 20–8 | April 1 | Sales ledger control account balance | 1 825 debit |
| | April 30 | Totals for the month: | |
| | | Sales journal | 4 910 |
| | | Sales returns journal | 210 |
| | | Cheques and bank transfers received from credit customers | 4 788 |
| | | Discount allowed to credit customers | 12 |
| | | Interest charged on overdue account | 10 |
| | May 1 | Sales ledger credit balances | 115 |

Prepare Shweta's sales ledger control account for the month of April 20–8.

Shweta
Nominal ledger
Sales ledger control account

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–8 | | | | 20–8 | | | |
| Apl 1 | Balance | b/d | 1 825 | Apl 30 | Sales returns | | 210 |
| 30 | Sales | | 4 910 | | Bank | | 4 788 |
| | Interest charged | | 10 | | Discount allowed | | 12 |
| | Balance | c/d | 115 | | Balance | c/d | 1 850 |
| | | | 6 860 | | | | 6 860 |
| 20–8 | | | | 20–8 | | | |
| May 1 | Balance | b/d | 1 850 | May 1 | Balance | b/d | 115 |

In a similar way, a credit supplier's account can show a debit balance. This may occur due to:

• an overpayment to the supplier

• returning goods to the supplier aft er paying the account

• paying the supplier in advance for the goods

• cash discount not being deducted before payment was made

## 16.6 Contra entries in control accounts

**Contra entries** are also known as inter-ledger transfers **or set-off s.** It may happen that a business sells goods to another business and also buys different goods from that business.

**Walkthrough 16.4**

Shweta provided the following information:

20–8

| | | |
|---|---|---|
| May | 15 | Sold goods, $190, on credit to Mansingh Road Stores |
| | 22 | Bought goods, $320, on credit from Mansingh Road Stores |
| | 30 | The balances of the two accounts for Mansingh Road Stores were set-off and Shweta sent a cheque for the remaining balance. |

Record these transactions in the account for Mansingh Road Stores in the sales ledger and the account for Mansingh Road Stores in the purchases ledger.

Shweta
Sales ledger
Mansingh Road Stores account

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–8 | | | | 20–8 | | | |
| May 15 | Sales | | 190 | May 30 | Purchases ledger | | 190 |
| | | | 190 | | | | 190 |

Purchases ledger
Mansingh Road Stores account

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–8 | | | | 20–8 | | | |
| May 30 | Sales ledger | | 190 | May 22 | Purchases | | 320 |
| | Bank | | 130 | | | | |
| | | | 320 | | | | 320 |

- A journal entry would be made for the transfer of $190 on 30 May as it is a non-regular transaction.
- As the transfer of $190 on 30 May affected both the accounts in sales ledger and purchases ledger, it would affect both the sales ledger control account and the purchases ledger control account. See Walkthrough 16.5.

# Chapter 17 Incomplete records

## 17.1 Introduction

Sometimes businesses, small businesses in particular, do not maintain a full set of accounting records.

## 17.2 Advantages of maintaining double entry records

Maintaining a full set of double entry record is important and provides many benefits. These include the following:

1 Full details are available about the assets, liabilities, revenues and expenses of the business.

2 The preparation of financial statements is relatively straightforward.

3 The calculation of the profit or loss for the year is likely to be reliable and accurate.

4 More informed decision-making is possible.

5 A greater degree of control over business activities can be exercised.

6 The possibility of fraud is reduced.

7 Comparisons with the results of previous years and with other businesses are possible.

8 Detailed records are available for reference purposes.

9 Information required by a bank or other lender is readily available.

## 17.3 Statement of affairs

If the only records available are those relating to the assets and liabilities of the business it is not possible to prepare an income statement. **These assets and liabilities are listed in a statement of affairs which is similar to a statement of financial position.**

The basic formula for calculating profit is:

Closing capital – Opening capital = Profit

Part of the difference between the two capital figures may be caused by drawings made by the owner. If drawings have taken place during the period, the formula must be modified to:

Closing capital – Opening capital + Drawings = Profit

If additional capital has been introduced during the period, this will also account for some of the diff erence between the two capital figures. The formula must be modified to:

Closing capital – Opening capital + Drawings – Capital introduced = Profit

## 17.5 Mark-up, margin and inventory turnover

When dealing with incomplete records, it is sometimes necessary to use percentages to calculate missing information.

### Mark-up and margin

These both measure the gross profit as a percentage. The mark-up is the gross profit measured as a percentage of the cost price. The margin is the gross profit measured as a percentage of selling price.

**Walkthrough 17.5**

A trader's turnover for the year were $20 000 and the cost of goods sold was $15 000.

Calculate:

**a** the margin

**b** the mark-up.

**a** The margin $\frac{\text{Gross profit}}{\text{Sales}} \times \frac{100}{1} = \frac{\$5000}{\$20\,000} \times \frac{100}{1} = 25\%$

**b** The mark-up $\frac{\text{Gross profit}}{\text{Cost of sales}} \times \frac{100}{1} = \frac{\$5000}{\$15\,000} \times \frac{100}{1} = 33.33\%$

Applying either margin or mark-up, it is possible to calculate any one unknown figure in the trading account section of an income statement.

**Walkthrough 17.6**

The financial year of North West Traders ends on 30 November. The following information is provided:

| | $ |
|---|---|
| Inventory 1 December 20–3 | 4 600 |
| Inventory 30 November 20–4 | 5 200 |
| Revenue | 72 000 |

The mark-up is at a standard rate of 25%.

Calculate, by means of a trading account section of an income statement, the purchases for the year ended 30 November 20–4.

**North West Traders**
**Income statement for the year ended 30 November 20–4**

| | $ | | $ | |
|---|---|---|---|---|
| Revenue | | | 72 000 | |
| Less Cost of sales | | | | |
| Opening inventory | 4 600 | | | |
| Purchases | 58 200 | **d** | | |
| | 62 800 | **c** | | |
| Less Closing inventory | 5 200 | | 57 600 | **b** |
| Gross profit | | | 14 400 | **a** |

- An outline statement was prepared and the figures for revenue, opening inventory and closing inventory were inserted, with gaps left for purchases, cost of sales and gross profit.
- The gross profit was calculated. The mark-up is 25% so the gross profit is 25% of the cost of sales, so the selling price equals 125%. The gross profit is $\frac{25}{125}$ of the revenue which is $\frac{1}{5}$ or 20% of $72 000. The gross profit is, therefore, $14 400, **a**.
- The cost of sales was inserted as the difference between the revenue and the gross profit. Alternatively, it can be calculated at $\frac{100}{125}$ of the revenue which is $\frac{4}{5}$ or 80% of $72 000. The cost of sales is, therefore, $57 600, **b**.
- The purchases figure was calculated by working 'backwards' from the cost of sales. The cost of sales plus the opening inventory amounted to $62 800, **c**. This figure less the opening inventory equals the purchases of $58 200, **d**.

## Rate of inventory turnover

It is sometimes necessary to use calculations relating to the rate of inventory turnover in order to calculate an unknown figure in the trading account section of an income statement. The **rate of inventory** turnover is the number of times a business replaces its inventory in a given period of time.

The formula for calculating the rate of inventory turnover is:

$$\frac{\text{Cost of sales}}{\text{Average inventory}}$$

**Walkthrough 17.7**

M Parmar is a trader. The financial year ends on 31 October. The following information is provided:

Inventory 1 November 20–1 12 000

Inventory 31 October 20–2 8 000

The margin is at a standard rate of 20%.

The rate of inventory turnover is 15 times a year.

Calculate, by means of the trading account section of an income statement, the purchases for the year ended 31 October 20–2.

| M Parmar<br>Income statement for the year ended 31 October 20–2 | | | | |
|---|---|---|---|---|
| | $ | | $ | |
| Revenue | | | 187 500 | **e** |
| Less Cost of sales | | | | |
| Opening inventory | 12 000 | | | |
| Purchases | 146 000 | **c** | | |
| | 158 000 | **b** | | |
| Less Closing inventory | 8 000 | | 150 000 | **a** |
| Gross profit | | | 37 500 | **d** |

- An outline of the statement was prepared and the figures of opening inventory and closing inventory were inserted, with gaps left for revenue, purchases, cost of sales and gross profit.
- The average inventory was calculated.

$$\text{Average inventory} = \frac{\text{Opening inventory} + \text{Closing inventory}}{2}$$

$$= \frac{12\,000 + 8\,000}{2} = \$10\,000$$

- The cost of sales was calculated:

$$\text{Rate of inventory turnover} = \frac{\text{Cost of sales}}{\text{Average inventory}}$$

$$= \frac{\text{Cost of sales}}{10\,000} = 15$$

The cost of sales is, therefore $150 000.

- The cost of sales was inserted in the statement, **a**.
- The purchases figure was calculated by working 'backwards' from the cost of sales, **b** and **c**.

- The gross profit was calculated. The margin is 20% so the gross profit is 20% of the revenue (sales). The selling price equals 100%, the gross profit equals 20%, so the cost of sales equals 80%. The gross profit is $\frac{20}{80}$ of the cost of sales which is $\frac{1}{4}$ or 25% of $150 000. The gross profit is $37 500, **d**.
- The revenue figure was calculated by working 'backwards'. The gross profit plus the cost of sales equals the sales (revenue), **e**.

# Chapter 18-Accounts of clubs and societies

## 18.1 Introduction

This chapter concentrates on the accounts of **non-trading organisations** such as clubs and societies.

The main source of income of a society is **subscriptions**. These are the amounts members pay, usually annually, to use the facilities provided by the club or society.

These financial statements may consist of a **receipts and payments account,** possibly **a trading account section of an income statement, an income and expenditure account and a statement of financial position**

## 18.2 Preparation of a receipts and payments account

A **receipts and payments account** is regarded as a **summary of the cash book** for the financial year. All money received is debited and all money paid is credited.

A receipts and payments account, just like a cash book, records all money received and paid. It is important to remember that:

• no adjustments are made for accruals and prepayments

• no distinction is made between capital receipts and revenue receipts

• no distinction is made between capital expenditure and revenue expenditure

• non-monetary items such as depreciation are not included.

## 18.3 Preparation of an income statement of a club or society

Although buying and selling is not the main purpose of a club or society, many do carry out a trading activity. Many clubs operate a shop or a café where goods are bought and sold. At the end of the financial year **an income statement (trading section only)** should be prepared for each separate trading activity to show the profit earned on that activity.

**Walkthrough 18.2**

The Apollo Athletics Club was formed some years ago to provide various sporting facilities for its members. The club also has a shop where members can purchase sportswear.

The treasurer provided the following information for the year ended 31 July 20–8:

| | $ |
|---|---|
| Receipts from shop sales | 3 960 |
| Purchases of goods for resale | 2 130 |
| Shop inventory 1 August 20–7 | 240 |
| Shop inventory 31 July 20–8 | 310 |
| Wages of shop assistant | 1 300 |

Prepare the shop income statement of the Apollo Athletics Club for the year ended 31 July 20–8.

**Apollo Athletics Club**
**Shop income statement for the year ended 31 July 20–8**

| | $ | $ |
|---|---|---|
| Revenue | | 3 960 |
| Less Cost of sales | | |
| Opening inventory | 240 | |
| Purchases | 2 130 | |
| | 2 370 | |
| Less Closing inventory | 310 | |
| Cost of goods sold | 2 060 | |
| Wages of shop assistant | 1 300 | 3 360 |
| Profit on shop (transferred to income and expenditure account) | | 600 |

## 18.4 Preparation of an income and expenditure account

An **income and expenditure account** compares the gains of the club with the expenses of running the club. If the gains are more than the expenses the difference is referred to as a **surplus** or **excess of income over expenditure** (this is known as the profit for the year in a business). If the gains are less than the expenses the difference is referred to as a **deficit** or **excess of expenditure over income** (this is known as the loss for the year in a business).

## 18.5 Preparation of a statement of financial position of a club or society

The main difference is that there is **no capital in the statement of financial position of a club or society** whereas a business is usually financed by an investment of capital from the owner(s).

This means that these surpluses will **accumulate** within the organisation to form a capital fund known as the accumulated fund. If the club makes a deficit then the **accumulated fund** will decrease. This **accumulated fund replaces capital in the statement of financial position of a club or society.**

**Walkthrough 18.4**

The Apollo Athletics Club was formed some years ago to provide various sporting facilities for its members. The club also has a shop where members can purchase sportswear.

On 1 August 20–7 the following balances appeared in the books of the club:

| | $ |
|---|---|
| Premises at cost | 20 000 |
| Equipment at cost | 14 200 |
| Provision for depreciation of equipment | 5 680 |
| Balance at bank | 2 200 |
| Shop inventory | 240 |
| Accumulated fund | 30 960 |

The income and expenditure account for the year ended 31 July 20–8 showed a surplus of $793.

During the year ended 31 July 20–8 new equipment costing $2 950 was purchased. The depreciation on equipment for the year amounted to $1 715.

On 31 July 20–8:

| | $ |
|---|---|
| Balance at bank | 1 932 |
| Shop inventory | 310 |
| Insurance prepaid | 16 |
| Wages of athletics coach outstanding | 400 |
| Subscriptions owing by members | 300 |
| Subscriptions paid in advance by members | 160 |

Prepare the statement of financial position of the Apollo Athletics Club at 31 July 20–8.

**Apollo Athletics Club**
**Statement of financial position at 31 July 20–8**

| | $ Cost | $ Accumulated depreciation | $ Net book value |
|---|---|---|---|
| **Non-current assets** | | | |
| Premises | 20 000 | – | 20 000 |
| Equipment | 17 150 | 7 395 | 9 755 |
| | 37 150 | 7 395 | 29 755 |
| **Current assets** | | | |
| Shop inventory | | 310 | |
| Subscriptions accrued | | 300 | |
| Other receivables | | 16 | |
| Bank | | 1 932 | |
| | | | 2 558 |
| **Total assets** | | | 32 313 |
| **Accumulated fund and liabilities** | | | |
| **Accumulated fund** | | | |
| Opening balance | | | 30 960 |
| Plus Surplus for the year | | | 793 |
| | | | 31 753 |
| **Current liabilities** | | | |
| Other payables | | | 400 |
| Subscriptions prepaid | | | 160 |
| | | | 560 |
| **Total liabilities** | | | 32 313 |

- The subscriptions owing could have been included under other receivables and the subscriptions prepaid could have been included under the other payables. In this case a note to the statement of financial position would show the breakdown of these figures.

# 18.6 Comparison of accounting terms used by a business and those used by a club or society

| Business | Club or society |
|---|---|
| – | Receipts and payments account |
| Profit and loss account section of income statement | Income and expenditure account |
| Profit for the year | Surplus |
| Loss for the year | Deficit |
| Capital | Accumulated fund |

## 18.7 Subscriptions

The receipts and payments account shows the amount of subscriptions **received** during the financial year, but the income and expenditure account shows the amount of subscriptions **relating** to the financial year.

The calculation of the amount relating to the financial year may be shown in the form of a ledger account known as a **subscriptions account**.

### Walkthrough 18.5

The Apollo Athletics Club was formed some years ago to provide various sporting facilities for its members.

On 1 August 20–7 there were no subscriptions owing by members and no members had paid their subscriptions in advance.

During the year ended 31 July 20–8 the club received subscriptions totalling $5 860 from members. This included subscriptions of $20 each from eight members for the following financial year. On 31 July 20–8 subscriptions of $20 each for the current financial year were still outstanding from 15 members.

During the year ended 31 July 20–9 the club received subscriptions from members totalling $6 020. On 31 July 20–9 there were subscriptions outstanding of $120.

Prepare the subscriptions account in the books of the Apollo Athletics Club for **each** of the **two** years ended 31 July 20–8 and 31 July 20–9.

Apollo Athletics Club
Subscriptions account

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–8 | | | | 20–8 | | | |
| July 31 | Balance | c/d | 160 | July 31 | Bank/cash | | 5 860 |
| | Income & expenditure | | 6 000 | | Balance | c/d | 300 |
| | | | 6 160 | | | | 6 160 |
| 20–8 | | | | 20–8 | | | |
| Aug 1 | Balance | b/d | 300 | Aug 1 | Balance | b/d | 160 |
| 20–9 | | | | 20–9 | | | |
| July 31 | Income & expenditure | | 6 000 | July 31 | Bank/cash | | 6 020 |
| | | | | | Balance | c/d | 120 |
| | | | 6 300 | | | | 6 300 |
| 20–9 | | | | | | | |
| Aug 1 | Balance | b/d | 120 | | | | |

A club may have a policy that subscriptions which remain unpaid after a certain period of time are written off. The entries a similar to those made when a business write off an irrecoverable debt. The subscriptions account is credited with the amount written off before the subscriptions for the year are transferred to the income and expenditure account. These irrecoverable debts will be included in the expenses in the income and expenditure account.

## 18.8 Calculation of sales and purchases

As the accounts of a club or society are often incomplete it is often necessary to calculate credit purchases (and sometimes credit sales if goods are sold on credit) before the preparation of the income statement.

### Walkthrough 18.6

The Apollo Athletics Club has a shop where members can purchase sportswear. All the sales are made for cash and all purchases are made on credit terms.

The treasurer provided the following information:

| | $ |
|---|---|
| Trade payables 1 August 20–5 | 155 |
| Trade payables 31 July 20–6 | 215 |
| Amount paid to credit suppliers during the year ended 31 July 20–6 | 2 980 |

Calculate the purchases for the year ended 31 July 20–6.

Apollo Athletics Club
Total trade payables account

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–6 | | | | 20–5 | | | |
| July 31 | Bank | | 2 980 | Aug 1 | Balance | b/d | 155 |
| | Balance | c/d | 215 | 20–6 | | | |
| | | | | July 31 | Purchases | | 3 040* |
| | | | 3 195 | | | | 3 195 |
| | | | | 20–6 | | | |
| | | | | Aug 1 | Balance | b/d | 215 |

* This represents the purchases for the year and will appear in the shop income statement.

## 18.9 Calculation of accumulated fund

It is sometimes necessary to calculate the accumulated fund of a club or society. This can be calculated by applying the same formula used to calculate the capital of a business.

| | | | | | | |
|---|---|---|---|---|---|---|
| In a business | Assets | = | Capital | + | Liabilities |
| In a club or society | Assets | = | Accumulated fund | + | Liabilities |

**Walkthrough 18.7**

On 1 August 20–6 the assets and liabilities of the Apollo Athletics Club were as follows:

| | $ |
|---|---|
| Premises at cost | 20 000 |
| Equipment at cost | 14 200 |
| Provision for depreciation of equipment | 4 260 |
| Balance at bank | 1 700 |
| Shop inventory | 285 |
| Trade payables for shop supplies | 215 |

Calculate the accumulated fund on 1 August 20–7.

**Calculation of accumulated fund on 1 August 20–6**

| | | $ | $ |
|---|---|---|---|
| Assets | Premises at cost | | 20 000 |
| | Equipment at cost | 14 200 | |
| | Less Provision for depreciation | 4 260 | 9 940 |
| | Balance at bank | | 1 700 |
| | Shop inventory | | 285 |
| | | | 31 925 |
| Liabilities | Trade payables | | 215 |
| Accumulated fund | | | 31 710 |

# Chapter 19 Partnerships

## 19.1 Introduction

The earlier chapters (except Chapter 18) related to businesses which were owned by only one person (a sole trader). Another very common form of business is a **partnership**. A **partnership is a business in which two or more people work together as owners with a view to making profits.**

However, a partnership will prepare an extra account aft er the income statement. This is known as a **profit and loss appropriation account.**

### 19.2 The advantages and disadvantages of partnership businesses

Before agreeing to enter into a partnership business a person must consider the likely advantages and disadvantages of such an arrangement. The advantages and disadvantages are summarised as follows:

| Advantages | Disadvantages |
|---|---|
| Additional finance is available. | Profits have to be shared among the partners. |
| Additional knowledge, experience and skills are available. | Decisions have to be recognised by all partners. |
| The responsibilities are shared. | Decisions may take longer to put into effect. |
| The risks are shared. | One partner's actions on behalf of the business are binding on all the partners. |
| Discussions can take place before decisions are taken. | Disagreements can occur. |
| | All partners are responsible for the debts of the business. |

## 19.3 Partnership agreement

Although it is not legally necessary to draw up a **partnership agreement** when forming a partnership, it is advisable to do so.

Those relating to the accounting usually include the following:

## 19.4 Loans from partners

A partnership may borrow money from one of the partners if extra finance is required (particularly if it is needed for a fixed period of time). Loans from partners are **not** part of the capital of the business and are treated in the same way as any other loan.

| | |
|---|---|
| Amount of capital invested by each partner | Partners do not need to invest equal amounts. |
| How profits and losses are to be shared | Profits and losses may be shared equally, in proportion to capital invested or in some other ratio. |
| If interest on partners' capital is to be paid, and if so, at what rate | This interest is a reward for investing in the business rather than elsewhere. If all partners invest the same amount it may not be necessary to pay interest. Where partners invest different amounts, interest can be a form of compensation to the person who has invested most capital. |
| If partners' salaries are to be paid, and if so, what amount | If all partners share the work and responsibilities equally it may be not necessary to pay salaries. A salary can be a form of compensation where one partner has a greater share of the work and responsibilities. |
| If an upper limit is to be placed on partners' drawings, and if so, what amount | The business will benefit if partners keep drawings as low as possible. |
| If interest on partners' drawings is to be charged, and if so, at what rate | This is a method of discouraging partners from making drawings from the business (especially early in the financial year). Interest on the amount withdrawn is calculated from the date of withdrawal until the end of the financial year. |
| If interest on partners' loans is to be paid, and if so, at what rate | If extra finance is required a partner may make a loan to the business. To compensate for the loss of interest they could otherwise earn, interest on the loan may be paid. |

When a loan is obtained from a partner

Debit bank account — Credit loan from partner X account

When a loan is repaid to a partner

Debit loan from partner X account — Credit bank account

The loan account appears as a non-current liability in the statement of financial position

Interest on loan paid

Debit interest on loan account — Credit bank account

Interest on loan due but not paid

Debit interest on loan account — Credit partner X current account*

# 19.5 Preparation of a profit and loss appropriation account of a partnership business

The profit and loss **appropriation account** for the financial year is prepared aft er the income statement and shows how the profit for the year is shared between the partners

The **appropriations** (profit shares) detailed in the partnership agreement for interest on capital and partners' salaries are deducted. The remaining figure is known as the **residual profit** and is shared between the partners in the agreed profit-sharing ratio.

**Walkthrough 19.1**

Sumit and Padma are in partnership. Their financial year ends on 31 May. They provide the following information:

| | | $ |
|---|---|---|
| Capital on 1 June 20–8 | Sumit | 40 000 |
| | Padma | 20 000 |
| Drawings for the year ended 31 May 20–9 | Sumit | 11 000 |
| | Padma | 8 000 |
| Profit for the year ended 31 May 20–9 | | 24 680 |

The partnership agreement includes the following terms:

- Interest on capital is allowed at 5% per annum
- Interest on drawings is charged at 3% per annum
- Padma is entitled to a partnership salary of $9 500 per annum
- Residual profits are shared in proportion to capital invested

Prepare the profit and loss appropriation account for the year ended 31 May 20–9.

**Sumit and Padma**
**Profit and loss appropriation account for the year ended 31 May 20–9**

| | | $ | $ | $ |
|---|---|---|---|---|
| Profit for the year | | | | 24 680 |
| Add Interest on drawings | Sumit | | 330 | |
| | Padma | | 240 | 570 |
| | | | | 25 250 |
| Less Interest on capital | Sumit | 2 000 | | |
| | Padma | 1 000 | 3 000 | |
| Partner's salary | Padma | | 9 500 | 12 500 |
| | | | | 12 750 |
| Profit shares* | Sumit | | 8 500 | |
| | Padma | | 4 250 | 12 750 |

*The profit shares are calculated.

Sumit $\frac{40\,000}{60\,000} \times \frac{12\,750}{1}$ Padma $\frac{20\,000}{60\,000} \times \frac{12\,750}{1}$

## 19.6 Partners' ledger accounts

### Capital accounts

These usually record permanent increases or decreases in the capital invested by the individual partner. Capital accounts prepared in this way are referred to as **fixed capital accounts.**

### Current accounts

Each member of a partnership business also has a current account. Anything which the partner becomes entitled to such as interest on capital, interest on loan, partner's salary and profit share is credited to this account

### Drawings accounts

A drawings account is maintained for each partner. The total of this account is transferred to the partner's current account at the end of the financial year.

**Walkthrough 19.2**

Sumit and Padma are in partnership. Their financial year ends on 31 May. They provide the following information:

| | Sumit $ | Padma $ |
|---|---|---|
| On 1 June 20–8: | | |
| Capital account | 40 000 | 20 000 |
| Current account | 130 cr | 910 dr |
| For the year ended 31 May 20–9: | | |
| Drawings | 11 000 | 8 000 |
| Interest on drawings | 330 | 240 |
| Interest on capital | 2 000 | 1 000 |
| Partner's salary | | 9 500 |
| Profit share | 8 500 | 4 250 |

Prepare the capital account and the current account of Sumit for the year ended 31 May 20–9.

**Sumit and Padma**

**Sumit capital account**

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| | | | | 20–8 | | | |
| | | | | Jun 1 | Balance | b/d | 40 000 |

**Sumit current account**

| Date | Details | Folio | $ | Date | Details | Folio | $ |
|---|---|---|---|---|---|---|---|
| 20–9 | | | | 20–8 | | | |
| May 31 | Drawings | | 11 000 | Jun 1 | Balance | b/d | 130 |
| | Interest on drawings | | 330 | 20–9 | | | |
| | | | | May 31 | Interest on capital | | 2 000 |
| | | | | | Profit share | | 8 500 |
| | | | | | Balance | c/d | 700 |
| | | | 11 330 | | | | 11 330 |
| 20–9 | | | | | | | |
| Jun 1 | Balance | b/d | 700 | | | | |

It saves time to show partners' capital accounts and current accounts side-by-side using a column for each partner.

## 19.7 Preparation of a statement of financial position of a partnership business

A statement of financial position of a partnership is same as that of a sole trader with the exception of the capital section.

**Walkthrough 19.4**

Sumit and Padma are in partnership. Their financial year ends on 31 May. Their current accounts are shown in **Walkthrough 19.3**.

Prepare a relevant extract from the statement of financial position of Sumit and Padma at 31 May 20–9.

| Sumit and Padma<br>Extract from statement of financial position at 31 May 20–9 | | | |
|---|---|---|---|
| | Sumit | Padma | Total |
| | $ | $ | $ |
| Capital accounts | 40 000 | 20 000 | 60 000 |
| Current accounts | (700)* | 5 600 | 4 900 |
| | 39 300 | 25 600 | 64 900 |

* The debit balance on Sumit's current account is shown as a minus, which reduces the amount owed by the business to Sumit.

# Chapter 20-Manufacturing accounts

## 20.1 Introduction

At the end of the financial year, in addition to an income statement (and possibly an appropriation account) and statement of financial position, a manufacturing business will also prepare a **manufacturing account.**

## 20.2 The elements of cost

**Direct material**

The first thing a manufacturer needs is raw material to make the finished goods. This raw material takes many forms depending on the type of business – a baker will need flour, a furniture maker will need wood, a car maker will need steel and so on.

**Direct labour**

The next essential cost for a manufacturer is the cost of the wages of the people who are employed in the factory making the goods. Depending on the type of business, these may be bakers, carpenters, machine operators and so on. This cost is sometimes referred to as direct wages.

**Direct expenses**

These are any expenses which a manufacturer can directly link with the product being manufactured. It may be that for every item produced, a manufacturer has to pay a fee (known as a royalty) to the person who originally invented the product.

**Factory overheads**

These are sometimes referred to as **indirect factory expenses**. They include all the costs involved in operating the factory which cannot be directly linked with the product being manufactured.

## 20.3 Preparation of a manufacturing account

The first item in a manufacturing account is **direct material**. The cost of the raw material used during the year is calculated in a similar way to that in which a retailer calculates the cost of goods sold.

The cost of the direct labour is then added to the direct material. Any direct expenses are then added.

The total of these three elements of cost is known as the **prime cost.**

Direct material + Direct labour + Direct expenses = Prime cost

The total **cost of production** is found by adding the factory overheads to the prime cost.

Prime cost + Factory overheads = Cost of production

### Walkthrough 20.1

The following information was provided by the Kapoor Manufacturing Company on 30 April 20–6:

| | | $ |
|---|---|---|
| Raw materials – | Inventory 1 May 20–5 | 14 900 |
| | Inventory 30 April 20–6 | 15 300 |
| | Purchases | 181 200 |
| | Carriage on purchases | 3 300 |
| Factory wages – | Direct | 166 100 |
| | Indirect | 93 800 |
| Royalties | | 10 000 |
| Factory insurance | | 2 070 |
| Factory rent and rates | | 2 930 |
| Factory general expenses | | 6 350 |
| Depreciation of factory machinery | | 9 500 |

Prepare the manufacturing account of the Kapoor Manufacturing Company for the year ended 30 April 20–6.

**Kapoor Manufacturing Company**

**Manufacturing account for the year ended 30 April 20–6**

| | $ | $ |
|---|---|---|
| Cost of material consumed | | |
| Opening inventory of raw material | 14 900 | |
| Purchases of raw material | 181 200 | |
| Carriage on purchases | 3 300 | |
| | 199 400 | |
| Less Closing inventory of raw material | 15 300 | 184 100 |
| Direct wages | | 166 100 |
| Direct expenses | | |
| Royalties | | 10 000 |
| Prime cost | | 360 200 |
| Factory overheads | | |
| Indirect wages | 93 800 | |
| Insurance | 2 070 | |
| Rent and rates | 2 930 | |
| General expenses | 6 350 | |
| Depreciation of machinery | 9 500 | 114 650 |
| Cost of production | | 474 850 |

# 20.4 Work in progress

Goods which are partly completed at the end of the financial year are known as **work in progress.**

The partly-made goods at the end of the financial year are known as **closing work in progress**. These goods will, of course, become the **opening work in progress** at the start of the following financial year.

**Walkthrough 20.2**

The following information was provided by the Kapoor Manufacturing Company on 30 April 20–6.

| | $ |
|---|---|
| Prime cost | 360 200 |
| Factory overheads | 114 650 |
| Work in progress – Inventory 1 May 20–5 | 8 790 |
| Inventory 30 April 20–6 | 8 640 |

Prepare the manufacturing account of the Kapoor Manufacturing Company for the year ended 30 April 20–6.

Kapoor Manufacturing Company

Manufacturing account for the year ended 30 April 20–6

| | $ | $ |
|---|---|---|
| Prime cost* | | 360 200 |
| Factory overheads* | | 114 650 |
| | | 474 850 |
| Add Opening work in progress | | 8 790 |
| | | 483 640 |
| Less Closing work in progress | | 8 640 |
| Cost of production | | 475 000 |

* Full details would be shown as in **Walkthrough 20.1**.

## 20.5 Calculation of unit cost

Where a manufacturer makes only one type of identical product, the cost of making one article can be found by dividing the cost of goods completed by the number of articles manufactured.

**Walkthrough 20.3**

The Kapoor Manufacturing Company makes one type of identical product. The cost of production during the year ended 30 April 20–6 was $475 000, and a total of 20 000 articles were completed.

Calculate the unit cost.

$$\text{Unit cost } \frac{\text{Cost of production}}{\text{Number of units produced}} = \frac{\$475\,000}{20\,000} = \$23.75$$

## 20.6 Preparation of a trading section of an income statement of a manufacturing business

Sometimes, however, a manufacturing business may purchase some finished goods which it does not manufacture itself. This may occur:

- when production does not meet demand

• when it is cheaper to buy the goods rather than make them

• when those particular items cannot be made by the business.

**Walkthrough 20.4**

The following information was provided by the Kapoor Manufacturing Company on 30 April 20–6:

| | | $ |
|---|---|---|
| Cost of production* | | 475 000 |
| Revenue | | 661 500 |
| Finished goods – | Inventory 1 May 20–5 | 31 000 |
| | Inventory 30 April 20–6 | 23 250 |
| | Purchases | 15 500 |

*Calculated in the manufacturing account.

Prepare the trading section of the income statement of the Kapoor Manufacturing Company for the year ended 30 April 20–6.

**Kapoor Manufacturing Company**
**Income statement for the year ended 30 April 20–6**

| | $ | $ |
|---|---|---|
| Revenue | | 661 500 |
| Less Cost of sales | | |
| Opening inventory of finished goods | 31 000 | |
| Cost of production | 475 000 | |
| Purchases of finished goods | 15 500 | |
| | 521 500 | |
| Less Closing inventory of finished goods | 23 250 | 498 250 |
| Gross profit | | 163 250 |

## 20.7 Preparation of a profit and loss section of an income statement of a manufacturing business

The profit for the year of a manufacturing business is calculated in the profit and loss section of the income statement. This is very similar to that prepared by a wholesale or retail business. Expenses relating to the manufacturing process have already been entered in the manufacturing account, so only administration expenses, selling and distribution expenses, and financial expenses will appear in the profit and loss section of the income statement.

## 20.8 Preparation of a statement of financial position of a manufacturing business

The statement of financial position of a manufacturing business is similar to that prepared by a wholesale or retail business. There is only one main difference which is that a manufacturer may have three different inventories – raw material, work in progress and finished goods

**Walkthrough 20.5**

On 30 April 20–6 the Kapoor Manufacturing Company had inventories valued as follows:

| | $ |
|---|---|
| Raw material | 15 300 |
| Work in progress | 8 640 |
| Finished goods | 23 250 |

Prepare a relevant extract from the statement of financial position of the Kapoor Manufacturing Company at 30 April 20–6.

Kapoor Manufacturing Company

Extract from statement of financial position at 30 April 20–6

| | $ | $ |
|---|---|---|
| Current assets | | |
| Inventories – Raw materials | 15 300 | |
| Work in progress | 8 640 | |
| Finished goods | 23 250 | 47 190 |

## 20.9 Year-end adjustments

This chapter has concentrated on the diff erence between the financial statements of a manufacturing business and those of a trading business. In order to emphasise these diff erences none of the examples included year-end adjustments.

# Chapter 21- Limited companies

## 21.1 Introduction

A **limited company** is a legal entity which has a separate identity from its shareholders, whose liability for the company's debts is limited.

## 21.2 The nature of a limited company

One person acting alone can form a limited company and there is no maximum number of members. **The capital of a company is divided into units known as shares which can be of any monetary amount. The members (shareholders) of the company are only liable for the debts of the company up to the amount they agree to pay for their shares.**

**Profits are distributed among the members** in the form of dividends which are oft en stated in terms of a percentage of the face value of the shares.

**Walkthrough 21.1**

Dass Limited has a total capital of 200 000 shares of $2 each and decides to pay the shareholders a dividend of 10%.

**a** What is the total amount payable?

**b** What is the amount payable per share?

**a** Total amount payable is $40 000 ($400 000 × 10%).

**b** Amount payable per share is $0.20 (10% of $2).

There are two types of limited company – a **public limited company** which may off er its shares to the public and a **private limited company** which is usually a smaller company and is not allowed to off er its shares to the public.

## 21.3 Share capital

When a limited company is formed the amount of share capital required will be issued to the shareholders (members) and this is known as the **issued share capital**. If more capital is required at a later date, further shares can be issued.

The total amount a company has requested from the shareholders is known as the called **up capital.**

The term **paid up capital** refers to that part of the called up capital for which a company has actually received cash from its shareholders.

**Walkthrough 21.2**

Mishra Limited was formed on 1 January 20–8. A total of 300 000 $1 shares were issued immediately and shareholders were asked to pay 50% of the sum due immediately and the other 50% in January 20–9.

By 1 May 20–8 holders of 290 000 shares had paid the amount due.

State:

**a** The issued capital of Mishra Limited on 1 May 20–8.
**b** The called up capital of Mishra Limited on 1 May 20–8.
**c** The paid up capital of Mishra Limited on 1 May 20–8.

**a** The issued capital is $300 000 consisting of 300 000 shares of $1 each.
**b** The called up capital is $150 000 consisting of $0.50 called up on 300 000 shares.
**c** The paid up capital is $145 000 consisting of $0.50 paid up on 290 000 shares.

## 21.4 Types of shares

The share capital of a limited company may be divided into diff erent types of shares. The most common ones are preference shares and ordinary shares.

### Preference shares

As the name implies, these get preference over the ordinary shares. They receive a fixed rate of dividend (based on the face value of the shares) which is payable before any dividend is payable to the ordinary shareholders.

There are several types of preference shares, and most of these are outside the scope of this book. However, it is necessary to understand the difference between redeemable and non-**redeemable preference shares** as this affects the treatment of dividend and how the shares appear in the statement of financial position.

### Ordinary shares

These are also known as **equity** shares. The dividend on ordinary shares is only payable aft er that on the preference shares has been accounted for. The dividend is not a fixed amount, but can vary according to the profits of the company.

## 21.5 Debentures (Loan notes)

In addition to the funds provided by the owners (shareholders), a company may also obtain funds from **debentures**, which are long-term loans. Like most loans, debentures carry a fixed rate of interest, which is payable whether or not the company makes a profit

## 21.6 Income statement of a limited company

An annual income statement is prepared for a limited company in exactly the same way as it is prepared for a sole trader or a partnership business. The only different is that in the finance costs there may be debenture interest and dividend on redeemable preference shares.

## 21.7 Statement of changes in equity

In a similar way, a limited company must prepare a statement showing how the profit for the year is used. This statement is known as a **statement of changes in equity.**

Any profit that is not appropriated for dividends is carried forward to the following year. This is known as **retained earnings** and will appear in the equity and reserves section of the statement of financial position.

In addition to leaving a balance of retained earnings, many companies will transfer an amount from the profit for the year to a general reserve. This is another means of **ploughing back profits** into the company to help it grow.

### Walkthrough 21.3

Anand Limited was formed on 1 July 20–3. By 30 June 20–6 a total of 200 000 5% redeemable preference shares of $1 each and 600 000 ordinary shares of $0.50 each had been issued and were fully paid.

The following information is provided:

1 The profit for the year ended 30 June 20–6 **before** the preference share dividend was $58 000.
2 On 1 July 20–5 the retained earnings brought forward amounted to $41 000 and the general reserve amounted to $45 000.
3 Half of the preference share dividend was paid on 31 December 20–5. On 30 June 20–6 the remaining preference share dividend was outstanding.
4 The proposed final ordinary share dividend of $30 000 for the year ended 30 June 20–5 was paid on 30 September 20–5.
5 An interim dividend of $24 000 was paid on 31 March 20-6.
6 On 30 June 20–6 the directors recommended a transfer of $8 000 to the general reserve and the payment of an ordinary share dividend of 8%.

Prepare a statement of changes in equity of Anand Limited for the year ended 30 June 20–6.

Anand Limited
Statement of changes in equity for the year ended 30 June 20–6

| | Ordinary share capital $ | General reserve $ | Retained earnings $ | Total $ |
|---|---|---|---|---|
| Balance at 1 July 20–5 | 300 000 | 45 000 | 41 000 | 386 000 |
| Profit for the year | | | 48 000 | 48 000 |
| Divided paid (final) | | | (30 000) | (30 000) |
| Dividend paid (interim) | | | (24 000) | (24 000) |
| Transfer to general reserve | | 8 000 | (8 000) | |
| Balance at 30 June 20–6 | 300 000 | 53 000 | 27 000 | 380 000 |

- After entering the opening balances, each item is entered in the appropriate column and also in the total column.
- The profit for the year of $58 0000 was reduced by the preference share dividend for the year of $10 000.
- The final dividend paid relates to the previous year but is entered in the statement as the dividend was paid during the current year.
- The interim dividend is entered on the statement as it was paid in the year.
- The dividend proposed at the end of the current year does not appear as it has not yet been paid.
- A figure in brackets indicates that it is reducing the amount in that column.
- The totals should be added vertically and then cross-checked horizontally.

## 21.8 Statement of financial position of a limited company

In the statement of financial position of a limited company the assets section and the current liabilities section are presented in exactly the same way as for a sole trader or a partnership.

**Walkthrough 21.4**

Using the information and the statement of changes in equity provided in **Walkthrough 21.3**, prepare an appropriate extract from the statement of financial position of Anand Limited at 30 June showing the capital and reserves.

Anand Limited
Extract from statement of financial position at 30 June 20–6

| | $ |
|---|---|
| Equity and liabilities | |
| Equity | |
| Ordinary share capital | 300 000 |
| General reserve | 53 000 |
| Retained earnings | 27 000 |
| | 380 000 |

- The amounts for share capital, general reserve and retained earnings are obtained from the statement of changes in equity (see **Walkthrough 21.3**).
- The preference shares are redeemable so would appear in the non-current liabilities section.

# Chapter 22-Analysis and interpretation

## 22.1 Introduction

**Analysis** consists of a detailed examination of the information in a set of financial statements of a business.

**Interpretation** can include comparing to the results of other similar businesses and also comparing within the business (with the results for previous years and with targets and budgets).

**Working capital** is the difference between the current assets and the current liabilities and is the amount available for the day-to-day running of the business (it is also known as **net current assets). Capital owned** is the amount owed by a business to the owner(s) of the business on a certain date. **Capital employed** is the total funds which are being used by a business.

**Walkthrough 22.1**

Arun is a trader who has been in business for several years. His financial year ends on 31 December.

The following financial statements will be used in **Walkthrough 22.2** to **Walkthrough 22.10**.

Arun
Income statement for the year ended 31 December 20–7

| | | $ | $ |
|---|---|---|---|
| Revenue – | Cash sales | 10 000 | |
| | Credit sales | 110 000 | 120 000 |
| Less | Cost of sales | | |
| | Opening inventory | 7 500 | |
| | Purchases (all on credit) | 97 000 | |
| | | 104 500 | |
| | Less Closing inventory | 8 500 | 96 000 |
| Gross profit | | | 24 000 |
| Less Administration and selling expenses | | | 8 000 |
| Profit from operations | | | 16 000 |
| Less Loan interest | | | 1 000 |
| Profit for the year | | | 15 000 |

| Arun<br>Statement of financial position at 31 December 20–7 | | |
| --- | --- | --- |
| | $ | $ |
| **Non-current assets** (at book value) | | 124 250 |
| **Current assets** | | |
| Inventory | | 8 500 |
| Trade receivables | | 10 500 |
| Bank | | 12 250 |
| | | 31 250 |
| **Total assets** | | 155 500 |
| **Capital and liabilities** | | |
| **Capital** | | |
| Opening balance | | 130 000 |
| Plus Profit for the year | | 15 000 |
| | | 145 000 |
| Less Drawings | | 22 000 |
| | | 123 000 |
| **Non-current liabilities** | | |
| Loan – AB Finance Ltd | | 20 000 |
| **Current liabilities** | | |
| Trade payables | | 12 500 |
| **Total liabilities** | | 155 500 |

## 22.2 Profitability ratios

**Profitability ratios** are used to relate the profit figures to other figures within the same set of financial statements.

### Return on Capital Employed (ROCE)

This is calculated using the following formula:

$$\frac{\text{Profit for the year before interest}}{\text{Capital employed}} \times \frac{100}{1}$$

### Walkthrough 22.2

Using the financial statements shown in **Walkthrough 22.1** calculate Arun's return on capital employed.

Assume that capital employed equals the total of capital owned and non-current liabilities on 31 December 20–7.

$$\frac{\$16\,000}{\$143\,000} \times \frac{100}{1} = 11.19\%$$

This is a very important ratio as it shows the profit earned for every $100 used in the business in order to earn that profit. The total funds used in the business are the capital of the owner(s) plus the non-current liabilities. The higher the return, the more efficiently the capital is being employed within the business.

### Gross margin

This is calculated using the following formula:

$$\frac{\text{Gross profit}}{\text{Revenue}} \times \frac{100}{1}$$

### Walkthrough 22.3

Using the financial statements shown in **Walkthrough 22.1** calculate Arun's **gross margin**.

$$\frac{\$24\,000}{\$120\,000} \times \frac{100}{1} = 20\%$$

This is also called gross profit as a percentage of turnover (turnover equals net sales less sales returns). This ratio shows the gross profit earned for every $100 of sales. Different types of industries and trades tend to have different gross profit percentages. The same business may have a similar gross margin from year-to-year. The higher the return, the more profitable is the business. However, by reducing selling prices slightly (and so reducing the gross margin), a business may achieve a higher monetary gross profit.

### Profit margin

This is calculated using the following formula:

$$\frac{\text{Profit for the year}}{\text{Revenue}} \times \frac{100}{1}$$

**Walkthrough 22.4**

Using the financial statements shown in **Walkthrough 22.1** calculate Arun's profit margin.

$$\frac{\$15\,000}{\$120\,000} \times \frac{100}{1} = 12.50\%$$

This ratio shows the profit earned for every $100 of revenue. The higher the return, the more profitable is the business. This ratio acts as an indicator of how well a business is able to control its expenses. If the profit margin of a business increases, it indicates that the operating expenses are being controlled. This ratio will be influenced by the different types of expense: some expenses increase in proportion to the sales (e.g. commission paid on sales made) but other expenses remain the same whatever the sales are (e.g. insurance of buildings). Any change in the gross margin will also affect the profit margin.

## 22.3 Liquidity ratios

In business, the term 'liquidity' relates to money and **liquidity ratios** measure the ease and speed with which assets can be turned into cash.

### Current ratio

This is calculated using the following formula:

Current assets : Current liabilities

**Walkthrough 22.5**

Using the financial statements shown in **Walkthrough 22.1** calculate Arun's **current ratio**.

$31 250 : $12 500 = 2.50 : 1

This is also referred to as the **working capital ratio**. It compares the assets which are in the form of cash, or which can be turned into cash relatively easily within the next 12 months, with the liabilities which are due for repayment within that period of time.

### Liquid (acid test) ratio

This is calculated using the following formula:

Current assets – Inventory : Current liabilities

**Walkthrough 22.6**

Using the financial statements shown in **Walkthrough 22.1** calculate Arun's liquid (acid test) ratio.

($31 250 – $8 500) : $12 500 = 1.82 : 1

The liquid (acid test) ratio compares the assets which are in the form of money, or which will convert into money quickly, with the liabilities which are due for repayment in the near future. This is a similar calculation to the current ratio, but the liquid (acid test) ratio excludes inventory as this is not regarded as a liquid asset.

### Rate of inventory turnover

This is calculated using the following formula:

$$\frac{\text{Cost of sales}}{\text{Average inventory}}$$

This gives the number of times inventory is sold and replaced in the period.

An alternative calculation uses the following formula:

$$\frac{\text{Average inventory}}{\text{Cost of sales}} \times \frac{365}{1}$$

This gives the number of days on average the inventory is held before being sold.

**Walkthrough 22.7**

Using the financial statements shown in **Walkthrough 22.1**, calculate Arun's rate of inventory turnover to show the following:

**a** the number of times in the year inventory is replaced

**b** the number of days inventory is held before being sold.

**a** $\frac{\$96\,000}{(\$7\,500 + \$8\,500) \div 2} = 12 \text{ times}$

**b** $\frac{\$8\,000}{\$96\,000} \times \frac{365}{1} = 30.42 \text{ days} = 31 \text{ days}$

The rate of inventory turnover is sometimes referred to as **inventory turnover**. This ratio calculates the number of times a business sells and replaces its inventory in a given period of time.

### Trade receivables turnover

This is calculated using the following formula:

$$\frac{\text{Trade receivables}}{\text{Credit sales}} \times \frac{365}{1} \quad \text{to give an answer in days}$$

Using alternative formulae, an answer can be obtained in weeks or months:

$$\frac{\text{Trade receivables}}{\text{Credit sales}} \times \frac{52}{1} \quad \text{to give an answer in weeks}$$

$$\frac{\text{Trade receivables}}{\text{Credit sales}} \times \frac{12}{1} \quad \text{to give an answer in months}$$

**Walkthrough 22.8**

Using the financial statements shown in **Walkthrough 22.1**, calculate (to the nearest whole day) Arun's trade receivables turnover.

$$\frac{\$10\,500}{\$110\,000} \times \frac{365}{1} = 34.84 \text{ days} = 35 \text{ days}$$

This may also be referred to as the **trade receivables/sales ratio**. It measures the average time the credit customers take to pay their accounts. The answer to this calculation – the length of time credit customers actually take to pay their accounts – should be compared with the term of credit allowed to them

### Trade payables turnover

This is calculated using the following formula:

$$\frac{\text{Trade payables}}{\text{Credit purchases}} \times \frac{365}{1} \quad \text{to give an answer in days}$$

Using alternative formulae, an answer can be obtained in weeks or months:

$$\frac{\text{Trade payables}}{\text{Credit purchases}} \times \frac{52}{1} \quad \text{to give an answer in weeks}$$

$$\frac{\text{Trade payables}}{\text{Credit purchases}} \times \frac{12}{1} \quad \text{to give an answer in months}$$

**Walkthrough 22.9**

Using the financial statements shown in **Walkthrough 22.1**, calculate (to the nearest whole day) Arun's trade payables turnover.

$$\frac{\$12\,500}{\$97\,000} \times \frac{365}{1} = 47.04 \text{ days} = 48 \text{ days}$$

This may also be referred to as the **trade payables/purchases ratio**. It measures the average time taken to pay the accounts of credit suppliers. The answer to this calculation should be compared with the term of credit allowed by the suppliers.

## 22.4 Inter-firm comparison

Comparing the ratios calculated for the current financial year with those of previous years can measure the progress and performance of a business and indicate the trends in profitability, liquidity and so on.

## 22.5 Problems of inter-firm comparison

A business can often obtain valuable information by comparing their accounting ratios with those of another business, but the business must be aware of the limitations of such a comparison.

The problems of comparison include the following:

• The businesses may apply different accounting policies,

• The businesses may apply different operating policies such as renting premises or purchasing premises, obtaining long-term finance from capital only or using capital and long-term loans.

• Non-monetary items such as the skill of the workforce, the goodwill of the business and so on do not appear in the accounting records, but are very important in the success of the business.

• It is not always possible to obtain all the information about another business which is needed to make a true comparison.

• The information relating to other businesses may be for one financial year only, so it is not possible to calculate business trends. That particular year may also not be a 'typical' year.

• The financial years may end on different dates which can make comparison difficult.

• The accounts are based on historic cost and do not show the effects of inflation.

## 22.6 Users of accounting statements

It is not only the owner who is interested in analysing and interpreting the financial statements of an organization.

### Internal users

**1 Owner(s)**

The owners of a business such as a sole trader or partners will be interested in all aspects of the business, both profitability and liquidity, in order to assess the business's performance and progress. Any potential partners are interested in the profitability of the business.

**2 Manager(s)**

In many small businesses, the owners manage the business. In some cases, management may be carried out by an employee. Like the owners, managers are interested in all aspects of the business

### External users

**1 Bank manager**

If a business requests a bank loan or an overdraft facility the bank manager will require the financial statements of the business.

**2 Other lenders**

Anyone who has made a loan to a business (and any potential lenders) will be interested in the security available, the repayment of the loan when due and the payment of interest when due.

**3 Trade payables**

Anyone who has supplied a business with goods on credit terms (and any potential credit supplier) is interested in the liquidity position and the trade payables turnover. These factors may be considered when determining the credit limit and the length of credit allowed.

**4 Potential buyers of the business**

Anyone with an interest in purchasing the business or making a takeover bid will be interested in the profitability of the business and the market value of the assets of the business

**5 Customers**

Customers of the business are interested in ensuring the continuity of supplies.

**6 Employees and trade unions**

Employees and trade unions want to know that the company is able to continue operating, and so maintain jobs and continue to pay adequate wages (and, in some cases, contribute to pension schemes).

**7 Government departments**

Government department may want information for purposes such as compiling business statistics and checking that the correct amount of tax is being paid.

**8 Club members**

The members of a club or society want to know that the club is being well-managed financially so that it will be able to continue in existence and provide the facilities to members.

## 22.7 Limitations of accounting statements

Accounting statements and the ratios calculated from them provide valuable information about a business. They do, however, have limitations and are not able to provide a complete picture of the performance and position of a business. Their limitations include the following.

**Time factor**

The accounting statements are a record of what has happened in the past, not a guide to the future. Additionally, there is a gap between the end of the financial year and the preparation of the accounting statements. In that time significant events such as changes in inventory levels and purchasing of non-current assets may have taken place.

**Historic cost**

The only way to record financial transactions is to use the actual cost price. However, comparing transactions taking place at different times can be difficult because of the effect of inflation.

**Accounting policies**

All businesses should apply the accounting principles of prudence and consistency which should help in making comparisons. However, there are several acceptable accounting policies which may be applied,

**Different definitions**

Where a business has borrowed money, for example in the form of loans or debentures, the income statement may show the profit from operations and then deduct the finance costs to give the profit for the year. Another business may not show this distinction.

**Money measurement**

Accounts only record information which can be expressed in monetary terms. This means that there are many important factors which influence the performance of a business which will not appear in the accounting statements.

## Revision questions