

**CA**  
**PAKISTAN**



The Institute of  
Chartered Accountants  
of Pakistan

**2015**

# **FINANCIAL ACCOUNTING AND REPORTING II**

**STUDY TEXT**

**CAF-07**





# Financial accounting and reporting II



The Institute of  
Chartered Accountants  
of Pakistan

CA  
PAKISTAN

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## Syllabus objectives and learning outcomes

### CERTIFICATE IN ACCOUNTING AND FINANCE

### FINANCIAL ACCOUNTING AND REPORTING II

#### Objective

To broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

#### Learning Outcome

On the successful completion of this paper candidates will be able to:

1	prepare financial statements in accordance with the relevant law of the country and in compliance with the reporting requirement of the international pronouncements.
2	account for transactions relating to tangible and intangible assets including transactions relating to their common financing matters.
3	understand the implication of contingencies; changes in accounting policies and estimates; errors and events occurring after reporting period.
4	account for transactions relating to taxation.
5	demonstrate knowledge of basic ethical issues in preparation and reporting of financial information.
6	apply financial analysis on given financial and non-financial information.

Grid	Weighting
Final Accounts	8-12
Consolidation of single subsidiary	10-20
Accounting for tangible and intangible assets, leases and borrowing cost	25-35
Provisions and contingencies; changes in accounting policies and estimates; errors and events occurring after reporting period; and taxation	25-35
Ethics	5-10
Financial analysis	5-10
<b>Total</b>	<b>100</b>

Contents	Level	Learning Outcome
<b>Preparation of financial statements – Final accounts</b>		
Preparation of financial statements of limited companies in line with the requirement of the Companies Ordinance, 1984 and International Financial Reporting Standards (IAS 1 and 7 and others included in the syllabus) excluding liquidations reconstructions and mergers	2	<p><b>LO1.1.1:</b> Prepare statements of financial position in accordance with the guidance in IAS 1 from data and information provided</p> <p><b>LO1.1.2:</b> Identify the laws, regulations, reporting standards and other requirements applicable to statutory financial statements of a limited company</p> <p><b>LO1.1.3:</b> Prepare and present the following in accordance with the disclosure requirements of IAS1, Companies ordinance, fourth schedule / fifth schedule.</p> <ul style="list-style-type: none"> <li>• Statement of financial position</li> <li>• Statement of comprehensive income.</li> <li>• Statement of changes in equity</li> <li>• Notes to the financial statements</li> </ul> <p><b>LO1.1.4:</b> Prepare statement of cash flows in accordance with the requirements of IAS 7.</p>
<b>Preparation of financial statements – Consolidation of a single subsidiary</b>		
Elimination of investment in subsidiary and parent's equity	1	<p><b>LO1.2.1:</b> Describe the concept of a group as a single economic unit.</p> <p><b>LO1.2.2:</b> Define using simple examples subsidiary, parent and control</p> <p><b>LO1.2.3:</b> Describe situations when control is presumed to exist.</p>

Contents	Level	Learning Outcome
		<p><b>LO1.2.4:</b> Identify and describe the circumstances in which an entity is required to prepare and present consolidated financial statements</p> <p><b>LO1.2.5:</b> Eliminate (by posting journal entries) the carrying amount of the parent's investment in subsidiary against the parent's portion of equity of subsidiary and recognize the difference between the two balances as either</p> <ul style="list-style-type: none"> <li>• goodwill; or</li> <li>• gain from bargain purchase</li> </ul>
<b>Preparation of financial statements – Consolidation of a single subsidiary (continued)</b>		
Identification of non-controlling interest	1	<p><b>LO1.3.1:</b> Define and describe non- controlling interest in the case of a partially owned subsidiary.</p> <p><b>LO1.3.2:</b> Identify the non-controlling interest in the following.</p> <ul style="list-style-type: none"> <li>• net assets of a consolidated subsidiary; and</li> <li>• profit or loss of the consolidated subsidiary for the reporting period</li> </ul>
Profit and loss from intra-company transactions relating to assets and inventories without tax implications	1	<b>LO1.4.1:</b> Post adjusting entries to eliminate the effects of intergroup sale of inventory and depreciable assets.
Preparation of consolidated statements of financial position	1	<b>LO1.5.1:</b> Prepare and present simple consolidated statements of financial position involving a single subsidiary in accordance with IFRS 10.
Preparation of consolidated statements of comprehensive income	1	<b>LO1.6.1:</b> Prepare and present a simple consolidated statement of comprehensive income involving a single subsidiary in accordance with IFRS 10.
<b>Accounting for tangible and intangible assets, leases and borrowing costs</b>		
Recognition, de-recognition, measurement, depreciation / amortization and measurement after recognition of non-current assets (IAS 16 and IAS 38)	2	<p><b>LO2.1.1:</b> Explain and apply the accounting treatment of property, plant and equipment and intangible assets.</p> <p><b>LO2.1.2:</b> Formulate accounting policies in respect of property, plant and equipment and intangible assets.</p>

Contents	Level	Learning Outcome
Leases (IAS 17)	2	<p><b>LO2.2.1:</b> Describe the method of determining a lease type i.e. an operating or finance lease.</p> <p><b>LO2.2.2:</b> Prepare journal entries and present extracts of financial statements in respect of lessee accounting, lessor accounting, and sale and lease back arrangements after making necessary calculations.</p>
		<p><b>LO2.2.3:</b> Formulate accounting policies in respect of different lease transactions.</p> <p><b>LO2.2.4:</b> Analyse the effect of different leasing transactions on the presentation of financial statements.</p>
Recognition of borrowing costs (IAS 23)	2	<p><b>LO2.3.1:</b> Describe borrowing cost and qualifying assets using examples.</p> <p><b>LO2.3.2:</b> Identify and account for borrowing costs in accordance with IAS 23.</p> <p><b>LO2.3.3:</b> Disclose borrowing costs in financial statements.</p> <p><b>LO2.3.4:</b> Formulate accounting policies in respect of borrowing cost.</p>
<b>Provisions and contingencies; changes in accounting policies and estimates; errors and events occurring after reporting period</b>		
Provisions, contingent liabilities and contingent assets (IAS-37)	2	<p><b>LO3.1.1:</b> Define liability, provision, contingent liability and contingent asset describe their accounting treatment.</p> <p><b>LO3.1.2:</b> Distinguish between provisions, contingent liabilities or contingent assets.</p> <p><b>LO3.1.3:</b> Understand and apply the recognition and de-recognition criteria for provisions</p> <p><b>LO3.1.4:</b> Calculate/ measure provisions such as warranties/guarantees, restructuring, onerous contracts, environmental and similar provisions, provisions for future repairs or refurbishments.</p> <p><b>LO3.1.5:</b> Account for changes in provisions</p> <p><b>LO3.1.6:</b> Disclosure requirements for provisions</p>
Accounting policies, changes in accounting estimates; and errors (IAS-8)	2	<p><b>LO3.2.1:</b> Define accounting policies, accounting estimates and prior period errors.</p> <p><b>LO3.2.2:</b> Account for the effect of change in accounting estimates and policies in the</p>

Contents	Level	Learning Outcome
		<p>financial statements.</p> <p><b>LO3.2.3:</b> Understand and analyze using examples, IFRS guidance on accounting policies, change in accounting policies and disclosure.</p> <p><b>LO3.2.4:</b> Understand and analyze using examples, IFRS guidance on accounting estimates, changes in accounting estimates and disclosure.</p> <p><b>LO3.2.5:</b> Understand and analyze using examples, IFRS guidance on errors, correction of errors and disclosure.</p>
Events occurring after the reporting period (IAS-10)	2	<p><b>LO3.3.1:</b> Explain using examples events after the reporting period, adjusting events, and non-adjusting events.</p> <p><b>LO3.3.2:</b> Understand and analyze using examples IFRS guidance on the recognition, measurement and disclosure of adjusting events and non-adjusting events.</p> <p><b>LO3.3.3:</b> Understand and analyze using examples, going concern issues arising after the end of the reporting period.</p>
<b>Accounting for taxation</b>		
<p>Taxation: Current year, prior years and deferred (IAS-12)</p> <p>Note that the deferred consequences of the following transactions are not examinable:</p> <ul style="list-style-type: none"> <li>• Business combination (including goodwill)</li> <li>• Assets carried at fair value</li> <li>• Un-used tax losses and credits</li> <li>• Re-assessment of un-recognized deferred tax assets</li> <li>• Investments in subsidiaries, branches, associates and interest in joint venture</li> <li>• Items recognized outside profit and loss account</li> <li>• Share based payment</li> </ul>	2	<p><b>LO4.1.1:</b> Define temporary differences and identify temporary differences that cause deferred tax liabilities and deferred tax assets</p> <p><b>LO4.1.2:</b> Determine amounts to be recognised in respect of temporary differences</p> <p><b>LO4.1.3:</b> Prepare and present deferred tax calculations using the balance sheet approach.</p> <p><b>LO4.1.4:</b> Account for the major components of tax expense/income and its relationship with accounting profit.</p> <p><b>LO4.1.5:</b> Formulate accounting policies in respect of deferred tax</p> <p><b>LO4.1.6:</b> Apply disclosure requirements of IAS12 to scenarios of a moderate level of complexity</p>

Contents	Level	Learning Outcome
<b>Ethics</b>		
Fundamental principles (sections 100 to 150 of the Code of Ethics for Chartered Accountants)	2	<p><b>LO5.1.1:</b> Describe with examples the fundamental principles of professional ethics of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour</p> <p><b>LO5.1.2:</b> Apply the conceptual framework to identify, evaluate and address threats to compliance with fundamental principles</p>
An understanding of ethics relating to preparation and reporting of financial information (Section 320 of Code of Ethics for Chartered Accountants)	2	<b>LO5.2.1:</b> Explain using simple examples the ethical responsibilities of a chartered accountant in preparation and reporting of financial information
<b>Financial analysis</b>		
Compute various ratios from data and information provided.	1	<p><b>LO6.1.1:</b> Following ratios:</p> <ul style="list-style-type: none"> <li>• Current ratio</li> <li>• Acid-test ratio/quick ratio</li> <li>• Gross profit</li> <li>• Return on equity</li> <li>• Return on assets</li> <li>• Return on capital employed</li> <li>• Debt-equity ratio</li> <li>• Inventory turnover</li> <li>• Debtor turnover</li> <li>• Creditor turnover</li> </ul>

# Legal background to the preparation of financial statements

## Contents

- 1 Regulatory framework for accounting in Pakistan
- 2 Companies' Ordinance 1984: Fourth Schedule
- 3 Companies' Ordinance 1984: Fifth Schedule

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

- LO 1            Prepare financial statements in accordance with the relevant law of the country and in compliance with the reporting requirement of the international pronouncements.**
- LO1.1.2        Identify the laws, regulations, reporting standards and other requirements applicable to statutory financial statements of a limited company
- LO1.1.3        Prepare and present the following in accordance with the disclosure requirements of IAS1, Companies ordinance, fourth schedule / fifth schedule: Statement of financial position; Statement of comprehensive income; AND Statement of changes in equity.

# 1 REGULATORY FRAMEWORK FOR ACCOUNTING IN PAKISTAN

## Section overview

- Accounting regulation in Pakistan
- Companies' Ordinance 1984: Introduction to accounting requirements
- Companies' Ordinance 1984: Introduction to the fourth and fifth schedules
- Accounting standards: Three tier approach
- Summary: Which schedules and standards?
- International Financial Reporting Standards

### 1.1 Accounting regulation in Pakistan

The objective of financial statements is to provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions.

#### The Securities and Exchange Commission of Pakistan

The Securities and Exchange Commission of Pakistan (SECP) was established by the Securities and Exchange Commission of Pakistan Act, 1997 and became operational in 1999.

It is the corporate and capital market regulatory authority in Pakistan. Its stated mission is "To develop a fair, efficient and transparent regulatory framework, based on international legal standards and best practices, for the protection of investors and mitigation of systemic risk aimed at fostering growth of a robust corporate sector and broad based capital market in Pakistan" (*SECP website*).

One of the roles of the SECP is to decide on accounting rules that must be applied by companies in Pakistan.

Companies must prepare financial statements in accordance with accounting standards approved as applicable and notified in the official gazette by the Securities and Exchange Commission of Pakistan (SECP) and in accordance with rules in the Companies' Ordinance 1984.

#### The Institute of Chartered Accountants in Pakistan (ICAP)

ICAP regulates the Chartered Accountancy profession. It is the body responsible for recommending accounting standards for notification by the Securities and Exchange Commission of Pakistan. The process is explained later.

### 1.2 Companies' Ordinance 1984: Introduction to accounting requirements

The Companies Ordinance 1984 is the primary source of company law in Pakistan. Amongst other things it establishes the requirements for financial reporting by all companies in Pakistan.

#### General requirements

Every company must prepare annual accounts (financial statements) that provide a true and fair view on the performance and activities of the company during the year.

The financial statements comprise:

- ❑ a balance sheet (statement of financial position): a structured representation of the financial position of an entity;
- ❑ an income statement (statement of comprehensive income): a structured representation of the financial position of an entity.
- ❑ a statement of changes in equity;
- ❑ a cash flow statement;
- ❑ notes to the accounts which contain a summary of significant accounting policies and other information that sets out explanations of figures in the main statements and provides supplementary information.

### **Section 234**

Section 234 requires that every balance sheet (statement of financial position) must give a true and fair view of the state of affairs of the company as at the end of its financial year, and every profit and loss account or income and expenditure account of a company must give a true and fair view of the profit and loss of the company for the financial year.

All items of expenditure must be recognised in the profit or loss account unless it may be fairly charged over several years. In such cases the whole amount must be stated with the reasons why only part is charged against the income of the financial year.

#### **Other requirements**

Assets and liabilities must be classified under headings appropriate to the company's business.

The period reported on in the accounts is called the financial year.

## **1.3 Companies' Ordinance 1984: Introduction to the fourth and fifth schedules**

The Companies Ordinance 1984 contains a series of appendices called **schedules** which set out detailed requirements in certain areas.

### **The fourth schedule to the Companies Ordinance 1984**

This schedule sets out the detailed requirements that must be complied with in respect of the balance sheet and profit and loss account of a listed company. It also applies to private and non-listed public companies that are a subsidiary of a listed company.

The schedule specifies that listed companies must follow International Financial Reporting Standards as notified for this purpose in the Official Gazette.

### **The fifth schedule to the Companies Ordinance 1984**

This schedule applies to the balance sheets and profit and loss accounts of all other companies.

This schedule defines and applies to economically significant companies, medium sized companies and small sized companies. These categories determine which accounting standards are followed. The three categories are defined in the next section.

## 1.4 Accounting standards: Three tier approach

The regulatory framework in Pakistan uses a three tier approach to specify which accounting standards must be followed by an organisation.

### Tier 1: Publicly accountable entities

This includes:

- Any entity that has filed, or is in the process of filing, its financial statements with the Securities and Exchange Commission of Pakistan.
- Any entity that holds assets in a fiduciary capacity for a broad group of outsiders. This group includes banks, insurance companies, securities brokers, pension funds, mutual funds and investment banking entities.
- Any entity that is a public utility or a similar entity that provides an essential public service.
- Any entity that is economically significant meaning, that it has:
  - turnover (revenue) in excess of Rs. 1 billion, excluding other income;
  - in excess of 750 employees; or
  - total borrowings (excluding normal trade credit and accrued liabilities) in excess of Rs, 500 million.

Any entity in this category must apply IFRS as approved as applicable and notified in the official gazette by the Securities and Exchange Commission of Pakistan.

For clarity:

- A listed company must follow the fourth schedule and apply IFRS (as specified and notified by the SECP).
- An unlisted economically significant entity must follow the fifth schedule and apply IFRS (as specified and notified by the SECP).

If there is a conflict between IFRS and any SECP guidance or decision the SECP view must be applied.

### Tier 2: Medium Sized Entities (MSEs)–

An entity falls into this category if:

- It is not a listed company or a subsidiary of a listed company; and
- It has not filed, or is not in the process of filing, its financial statements with the Securities and Exchange Commission of Pakistan (SECP); and
- It does not hold assets in a fiduciary capacity for a broad group of outsiders, such as a bank, insurance company, securities broker/dealer, pension fund, mutual fund or investment banking entity; and
- It is not a public utility or similar entity that provides an essential public service; and
- it is not economically significant (see the above criteria); and
- not a Small-Sized Entity (SSE) as defined below.

Any entity in this category must apply **Accounting and Financial Reporting Standards for Medium-Sized Entities** (a single document drafted and issued by ICAP). This standard is not examinable.

### Tier 3: Small Sized Entities (SSEs)

An entity falls into this category if:

- ❑ its paid up capital plus undistributed reserves (total equity after taking into account any dividend proposed for the year) does not exceed Rs. 25 million; and
- ❑ its annual turnover (revenue) excluding other income does not exceed Rs. 250 million.

All of the above-mentioned conditions must be satisfied in order to qualify as a Small-Sized Company.

Any entity in this category must apply **Accounting and Financial Reporting Standards for Small-Sized Entities** (a single document drafted and issued by ICAP). This standard is not examinable.

### 1.5 Summary: Which schedules and standards?

Entity	Which standards?	Which schedule?
Listed entities	Full IFRS as approved and notified by SECP	Fifth schedule
Public utility	Full IFRS as approved and notified by SECP	Fourth schedule
Unlisted economically significant entities	Full IFRS as approved and notified by SECP	Fifth schedule
Medium sized entity	Accounting and Financial Reporting Standards for Medium-Sized Entities	Fourth schedule
Small sized entity	Accounting and Financial Reporting Standards for Small-Sized Entities	Fourth schedule

### 1.6 International Financial Reporting Standards

The International Accounting Standards Committee (IASC) was established in 1973 to develop international accounting standards with the aim of harmonising accounting procedures throughout the world.

The first *International Accounting Standards* (IASs) were issued in 1975. The work of the IASC was supported by another body called the Standing Interpretation Committee. This body issued interpretations of rules in standards when there was divergence in practice. These interpretations were called Standing Interpretation Committee Pronouncements or SICs.

In 2001 the constitution of the IASC was changed leading to the replacement of the IASC and the SIC by new bodies called the International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC).

The IASB adopted all IASs and SICs that were extant at the time but said that standards written from that time were to be called *International Financial Reporting Standards* (IFRS). Interpretations are known as IFRICs.

The term IFRS is also used to refer to the whole body of rules (i.e., IAS and IFRS in total).

Thus IFRS is made up as follows:

	Published by the IASC (up to 2001)	Published by the IASB (from 2001)
Accounting standards	IASs	IFRSs
Interpretations	SICs	IFRICs

Note that many IASs and SICs have been replaced or amended by the IASB since 2001.

International accounting standards cannot be applied in any country without the approval of the national regulators in that country. All jurisdictions have some kind of formal approval process which is followed before IFRS can be applied in that jurisdiction.

Note that interpretations are not examinable at this level.

### Adoption process for IFRS in Pakistan

The previous sections refer to the approval of IFRS by the SECP and notification of that approval in the Official Gazette

Adoption of an IFRS involves the following steps:

- ❑ As a first step the IFRS/IAS is considered by ICAP's Accounting Standards Committee (ASC), which identifies any issues that may arise on adoption.
- ❑ The ASC refers the matter to the Professional Standards and Technical Advisory Committee (PSTAC) of ICAP. This committee determines how the adoption and implementation of the standard can be facilitated. It considers issues like how long any transition period should be and whether adoption of the standard would require changes in regulations.
- ❑ If the PSTAC identifies the need for changes to regulations it refers the matter to the Securities and Exchange Commission of Pakistan (SECP) (and/or the State Bank of Pakistan (SBP) for matters affecting banks and other financial institutions). This process is managed by the Coordination Committees of ICAP and SECP (SBP).
- ❑ After the satisfactory resolution of issues the PSTAC and the Council reconsider the matter of adoption.
- ❑ ICAP recommends the adoption to the SECP (SBP) by decision of the Council. The decision to adopt the standard rests with the SECP and SBP.
- ❑ IFRSs are adopted by the Securities and Exchange Commission of Pakistan by notification in the Official Gazette. When notified, the standards have the authority of the law.

There follows a table which lists all IFRSs and indicates whether each has been approved for use in Pakistan and whether it is examinable at this level.

Standard	Applicable in Pakistan?	Examinable at this level?
IAS 1 – Presentation of Financial Statements	Yes	Yes
IAS 2 – Inventories	Yes	Covered earlier
IAS 7 – Cash Flow Statements	Yes	Yes
IAS 8 – Accounting Policies, Changes in Accounting Estimates and Errors	Yes	Yes
IAS 10 – Events occurring after the reporting period	Yes	Yes
IAS 11 – Construction Contracts	Yes	
IAS 12 – Income Taxes	Yes	Yes (in part)
IAS 14 – Segment Reporting	Yes	
IAS 16 – Property, Plant and Equipment	Yes	Yes
IAS 17 – Leases	Yes	Yes
IAS 18 – Revenue	Yes	Covered earlier
IAS 19 – Employee Benefits	Yes	
IAS 20 – Accounting for Government Grants and Disclosure of Government Assistance	Yes	
IAS 21 – The Effects of Changes in Foreign Exchange Rates	Yes	
IAS 23 – Borrowing Costs	Yes	Yes
IAS 24 – Related Party Disclosures	Yes	
IAS 26 – Accounting and Reporting by Retirement Benefit Plans	Yes	
IAS 27 – Consolidated and Separate Financial Statements	Yes	
IAS 28 – Accounting for Investments in Associates	Yes	
IAS 29 – Financial Reporting in Hyperinflationary Economies	Not relevant in Pakistan	
IAS 31 – Financial Reporting of Interests in Joint Ventures	Yes	
IAS 32 – Financial Instruments: Presentation	Yes	
IAS 33 – Earnings Per Share	Yes	
IAS 34 – Interim Financial Reporting	Yes	
IAS 36 – Impairment of Assets	Yes	
IAS 37 – Provisions, Contingent Liabilities and Contingent Assets	Yes	Yes
IAS 38 – Intangible Assets	Yes	Yes
IAS 39 – Financial Instruments: Recognition and Measurement	Yes (but deferred for banks)	
IAS 40 – Investment Property	Yes (but deferred for banks)	
IAS 41 – Agriculture	Yes	

Standard	Applicable in Pakistan?	Examinable at this level?
IFRS 1 – First time adoption of IFRS	No (under consideration)	
IFRS 2 – Share-based payment	Yes	
IFRS 3 – Business combinations	Yes	Yes (in part)
IFRS 4 – Insurance contracts	Yes	
IFRS 5 – Non-current assets held for sale and discontinued operations	Yes	
IFRS 6 – Exploration for and evaluation of mineral resources	Yes	
IFRS 7 – Financial Instruments: Disclosures	Yes (but deferred for banks)	
IFRS 8 – Operating segments	Yes	
IFRS 9 – Financial Instruments	No (under consideration)	
IFRS 10 – Consolidated financial statements	No (under consideration)	Yes (in part)
IFRS 11 – Joint arrangements	No (under consideration)	
IFRS 12 – Disclosure of interests in other entities	No (under consideration)	
IFRS 13 – Fair value measurement	No (under consideration)	

## 2 COMPANIES' ORDINANCE 1984: FOURTH SCHEDULE

### Section overview

- Fixed assets (non-current assets)
- Long term investments
- Long term loans and advances
- Long term deposits and prepayments
- Current assets
- Share capital and reserves
- Non-current liabilities
- Current liabilities
- Contingencies and commitments
- Profit and loss account
- Other disclosures

These requirements must be followed in addition to those in IFRS.

### 2.1 Fixed assets (non-current assets)

Fixed assets (other than investments) must be classified as follows:

- property, plant and equipment:
  - land (distinguishing between freehold and leasehold);
  - buildings (distinguishing between building on freehold land and those on leasehold land);
  - plant and machinery;
  - furniture and fittings;
  - vehicles;
  - office equipment;
  - capital work in progress;
  - development property; and
  - others (to be specified)
- intangible:
  - goodwill;
  - brand names;
  - computer software;
  - licences and franchises;
  - patents, copyright, trademarks and designs;
  - intangible assets under development; and
  - others (to be specified).

## 2.2 Long term investments

The aggregate amount (under separate sub-headings) in respect of the following:

- investments in related parties; and
- other investments.

The investments must be shown under the heading **long term investments**, indicating separately:

- at cost;
- using the equity method;
- held to maturity investments, which are not due to mature within next twelve months; and
- available for sale investments which are not intended to be sold within the next 12 months.

This section introduces several terms which require further explanation. They are covered in more detail in certain international accounting standards which are not in your syllabus. However, the Companies' Ordinance 1984 is in your syllabus and refers to these. Therefore, they will be explained briefly.

### Related parties

A related party is an entity or person with the ability to control the company or exercise significant influence over the company in making financial and operating decisions or an entity over which the company has ability to control or exercise significant influence.

IAS 24 *Related Party Disclosures* includes a list of related parties and specifies disclosures. This standard is not in this syllabus.

### The equity method

The equity method is a method of accounting where an investment is initially recognised at cost and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition.

IAS 28: *Investments in Associates and Joint Ventures* specifies the use of the equity method in accounting for associates and joint ventures.

IAS 28 is not in your syllabus.

### Held to maturity investments

This is a type of asset defined in IAS 39: *Financial Instruments: Recognition and Measurement*.

Held to maturity investments are financial assets with fixed or determinable payments and fixed maturity that an entity has the positive intention and ability to hold to maturity.

They are measured at amortised cost. The amortised cost of a financial asset is the amount invested initially plus interest recognised at the effective rate less any cash received in respect of the asset.

IAS 39 is not in your syllabus.

### Available for sale investment

This is also a type of asset defined in IAS 39: *Financial Instruments: Recognition and Measurement*.

An available for sale investment is one that is not a loan or receivable, nor held to maturity nor held for trading purposes.

IAS 39 requires that available for sale investments are remeasured to fair value at each reporting date. Any difference is recognised as other comprehensive income (see chapter 2) and accumulated as a separate reserve in equity.

IAS 39 is not in your syllabus.

## 2.3 Long term loans and advances

The following must be shown (under separate sub-headings) distinguishing between considered good and considered bad or doubtful.

- ❑ Loans and advances to related parties and disclosing:
  - Details of each borrower (name, amount, terms and details of security held if any);
  - Maximum amount outstanding since the later of the date of incorporation or the date of the previous balance sheet.
- ❑ Other loans and advances disclosing in respect of amounts to those other than suppliers the name of the borrower and the terms of repayment if the amount is material with particulars of security.



### Illustration: Long term loans and advances

A disclosure note might look like this.

<b>Statement of financial position (extract)</b>	<b>2013</b>	<b>2012</b>
	<b>Rs.</b>	<b>Rs.</b>
Non-current assets		
Loans and advances	237,900	158,750
	<hr/>	<hr/>
<b>Note to the accounts:</b>	<b>2013</b>	<b>2012</b>
	<b>Rs.</b>	<b>Rs.</b>
To employees – secured, considered good	197,026	167,952
To supplier – unsecured, considered good	98,736	28,734
	<hr/>	<hr/>
	295,762	196,686
Less current portion shown under current assets	(57,862)	(37,936)
	<hr/>	<hr/>
	237,900	158,750
	<hr/>	<hr/>

Loans to employees are interest free loans for the purpose of cars. They are repayable within 3 years and are secured on the vehicles. The maximum amount of the loans during the year was Rs. 201,345 (2012: 174,321).

The loan to supplier is an unsecured loan given to the TZ Electric Company to fund the development of electrical supply infrastructure at our Lahore depot. The loan is repayable in equal instalments over. Mark-up is charged at 2% per annum.

## 2.4 Long term deposits and prepayments

Long-term deposits and long-term prepayments must be stated separately.

Any material item must be disclosed separately.

## 2.5 Current assets

Current assets must be classified in a way appropriate to the company's affairs, including the following:

- stores, spare parts and loose tools distinguishing each from the other where practicable;
- stock-in-trade, distinguishing between appropriate classifications (for example, raw materials and components, work in progress, finished products etc.).
- trade debts (other than loans and advances) showing separately:
  - debts considered good and debts considered doubtful or bad must be separately stated;
  - debts considered good must be distinguished between secured and unsecured;
  - the aggregate amount due from directors, chief executive and executives; and
  - the aggregate amount due from related parties with the names of those related parties.
- loans and advances due for repayment within a period of twelve months from the reporting date showing separately:
  - loans and advances considered good and those considered doubtful or bad;
  - the aggregate amount due from directors, chief executive and executives;
  - the aggregate amount due from related parties with the names of those related parties;
- trade deposits and short term prepayments and current account balances with statutory authorities;
- interest accrued;
- other receivables specifying separately the materials items;
- financial assets other than any included above showing separately:
  - the aggregate amount due from directors, chief executive and executives;
  - the aggregate amount due from related parties with the names of those related parties;
- tax refunds due from the Government, showing separately different types of tax;
- cash and bank balances, distinguishing between current and deposit accounts.

Any provision made for a fall in value of any current asset is shown as a deduction from the gross amount of that asset.

**Definition**

**Executive:** An employee, other than the chief executive and directors, whose basic salary exceeds five hundred thousand rupees in a financial year.

**Illustration: Stock in trade**

A disclosure note might look like this.

<b>Statement of financial position (extract)</b>	<b>2013</b>	<b>2012</b>
Current assets	<b>Rs.</b>	<b>Rs.</b>
Stock in trade	547,132	523,890
<hr/>		
<b>Note to the accounts:</b>	<b>2013</b>	<b>2012</b>
	<b>Rs.</b>	<b>Rs.</b>
Raw materials	139,950	153,856
Work in progress	178,434	163,433
Finished goods	179,100	162,121
Goods purchased for sale	51,962	48,261
	549,446	527,671
Less: Provision for slow moving items	(2,314)	(3,781)
	547,132	523,890

**Illustration: Trade debts**

A disclosure note might look like this.

<b>Statement of financial position (extract)</b>	<b>2013</b>	<b>2012</b>
Current assets	<b>Rs.</b>	<b>Rs.</b>
Trade debts	493,657	472,010
<hr/>		
<b>Note to the accounts:</b>	<b>2013</b>	<b>2012</b>
	<b>Rs.</b>	<b>Rs.</b>
Considered good – secured	19,247	15,652
Considered good – unsecured	474,410	456,358
Considered doubtful – unsecured	10,192	8,763
	503,849	480,773
Less: Provision for doubtful debts	(10,192)	(8,763)
	493,657	472,010

The considered good – unsecured trade debts include Rs. 47, 438 (2012 Rs. 26,342) from X Limited, a related party.

## 2.6 Share capital and reserves

Share capital and reserve must be classified under the following sub-heads:

- ❑ issued, subscribed and paid up capital, distinguishing in respect of each class between:
  - shares allotted for consideration paid in cash;
  - shares allotted for consideration other than cash; and
  - shares allotted as bonus shares; and
- ❑ reserves (distinguishing between capital reserves and revenue reserves).

**Definition**

**Capital reserve:** A reserve not regarded free for distribution by way of dividend. (Includes capital redemption reserve, capital repurchase reserve account, share premium account, profit prior to incorporation).

**Revenue reserve:** A reserve that is normally regarded as available for distribution.

**Illustration: Share capital**

A disclosure note might look like this.

<b>Statement of financial position (extract)</b>		<b>2013</b>	<b>2012</b>
		<b>Rs. 000</b>	<b>Rs. 000</b>
Issued subscribed and paid-up capital (Ordinary shares of Rs. 10 each)		41,800	38,000
<b>Note to the accounts:</b>			
	<b>2013</b>	<b>2012</b>	
	<b>Rs. 000</b>	<b>Rs. 000</b>	
		<b>2013</b>	<b>2012</b>
		<b>Number</b>	<b>Number</b>
		<b>of shares</b>	<b>of shares</b>
Authorised share capital (Ordinary shares of Rs. 10 each)	50,000	50,000	5,000,000
Issued subscribed and paid-up capital (Ordinary shares of Rs. 10 each)			
Fully paid in cash	35,000	35,000	3,500,000
Fully paid for consideration other than cash	3,000	3,000	300,000
Bonus issue	3,800	nil	nil
	<b>41,800</b>	<b>38,000</b>	<b>4,800,000</b>
			<b>3,800,000</b>

## 2.7 Non-current liabilities

Non-current liabilities must be classified under the following sub-headings:

- long term financing;
- debentures;
- liabilities against assets subject to finance lease;
- long term murabaha;
- long term deposits; and
- deferred liabilities.

Long term loans must be classified as secured and unsecured, and the following must be shown separately under each class:

- loans from banking companies and other financial institutions, other than those as specified below;
- loans from related parties; and
- other loans.

Long-term deposits must be classified according to their nature.

## 2.8 Current liabilities

Current liabilities and provisions must be classified under the following sub-headings:

- trade and other payables, which shall be classified as:
  - creditors;
  - murabaha;
  - accrued liabilities;
  - advance payments;
  - payable to employee retirement benefit funds;
  - unpaid and unclaimed dividend; and
  - others ( to be specified, if material);
- interest, profit, return or mark-up accrued on loans and other payables;
- short term borrowings which shall be classified as:
  - short-term borrowings, distinguishing between secured and unsecured and between loans taken from:
    - banking companies and other financial institutions other than related parties;
    - related parties; and
    - others;
  - short-term running finance, distinguishing between secured and unsecured;
- current portion of long term borrowings;
- current portion of long term murabaha; and
- provision for taxation, showing separately income tax and other taxes.



### Illustration: Trade and other payables

A disclosure note might look like this.

<b>Statement of financial position (extract)</b>	<b>2013</b>	<b>2012</b>
	<b>Rs.</b>	<b>Rs.</b>
Current liabilities		
Trade and other payables	316,715	268,803
<b>Note to the accounts:</b>	<b>2013</b>	<b>2012</b>
	<b>Rs.</b>	<b>Rs.</b>
Trade creditors	275,102	228,869
Accrued liabilities	13,610	14,599
Advance payments	23,457	22,222
Others	4,546	3,113
	<b>316,715</b>	<b>268,803</b>

## 2.9 Contingencies and commitments

The following must be shown separately as a footnote to the balance-sheet:

- the aggregate amount of any guarantees given by the company on behalf of any related party and where practicable, the general nature of the guarantee;
- where practicable the aggregate amount or estimated amount, if it is material, of contracts for capital expenditure, so far as not provided for or a statement that such an estimate cannot be made; and
- any other commitment, if the amount is material, indicating the general nature of the commitment.

## 2.10 Profit and loss account

The profit and loss account must disclose separately the manufacturing, trading and operating results.

A manufacturing concern must show the cost of goods manufactured.

The profit and loss account must disclose all material items of income and expenses including the following:

- The turnover (sales) showing the gross sales figure with trade discount and sales tax as a deduction.
- Expenses, classified according to their function under the following sub-heads (along with additional information on their nature):
  - cost of sales;
  - distribution cost;
  - administrative expenses;
  - other operating expenses; and
  - finance cost.
- Other operating income:

- income from financial assets;
  - income from investments in and debts, loans, advances and receivables to each related party; and
  - income from assets other than financial assets.
- ❑ Finance cost must show separately the amount of interest on borrowings from related parties (if any).
- ❑ Other information:
- debts written off as irrecoverable distinguishing between trade debts, loans, advances and other receivables; and
  - provisions for doubtful or bad debts distinguishing between trade debts, loans, advances and other receivables.
  - In each case the company must disclose:
    - debts due by directors, chief executive, and executives of the company and any of them severally or jointly with any other person; and
    - debts due by other related parties.
- ❑ The aggregate amount of auditors' remuneration, showing separately fees, expenses and other remuneration for services rendered as auditors and for services rendered in any other capacity and stating the nature of such other services. (Amounts must be shown separately for joint auditors).
- ❑ If a donation is made and any director or his spouse has interest in the donee, the company must disclose the names of such directors, their interest in the donee and the names and address of all donees.



#### Illustration: Turnover

A disclosure note might look like this.

<b>Profit and loss account (extract)</b>	<b>2013</b>	<b>2012</b>
	<b>Rs.</b>	<b>Rs.</b>
Turnover	578,554	533,991
	<hr/>	
<b>Note to the accounts:</b>	<b>2013</b>	<b>2012</b>
	<b>Rs.</b>	<b>Rs.</b>
Gross sales	673,669	611,670
<b>Less:</b>		
Sales tax	(83,839)	(74,566)
Trade discounts	(11,276)	(3,113)
	<hr/>	<hr/>
	578,554	533,991
	<hr/>	

### Payments to senior management

A company must disclose the aggregate amount charged in the financial statements in respect of the directors, chief executive and executives by the company as fees, remuneration, allowances, commission, perquisites or benefits or in any other form or manner and for any services rendered.

The company must give full particulars of the aggregate amounts separately for the directors, chief executive and executives together with the number of such directors and executives, under appropriate headings such as:

- fees;
- managerial remuneration;
- commission or bonus, indicating their nature;
- reimbursable expenses which are in the nature of a perquisite or benefit;
- pension, gratuities, company's contribution to provident, superannuation and other staff funds, compensation for loss of office and in connection with retirement from office;
- other perquisites and benefits in cash or in kind stating their nature and, where practicable, their approximate money values; and
- the amounts, if material, by which any items shown above are affected by any change in an accounting policy.



#### Illustration: Remuneration of chief executive, directors and executives

Note to the accounts	Chief executive Rs.000	Executive directors Rs.000	Executives Rs.000
Fees	1,650	5,478	–
Managerial remuneration	11,225	33,675	323,280
Bonus	2,000	6,000	12,000
Retirement benefits	2,000	4,800	37,900
Housing	8,666	–	–
Transport	2,345	6,734	26,778
	27,886	56,687	399,958
Number of persons	1	4	48

### Sale of fixed assets

For sale of fixed assets where the book value of the asset or assets exceeds in aggregate fifty thousand rupees, a company must disclose particulars of the assets and in aggregate:

- cost or valuation, as the case may be;
- the book value;
- the sale price and the mode of disposal (e.g. by tender or negotiation); and
- particulars of the purchaser.

### 2.11 Other disclosures

A company must disclose the following:

- The general nature of any credit facilities available to the company under any contract (other than trade credit) and not used as at the date of the balance sheet.
- Any penalty imposed under any law by any authority.
- The fact of any reduction, enhancement or waiver of a penalty.

Where any property or asset, acquired with the funds of the company, is not held in the name of the company, or is not in the possession and control of the company, this fact must be disclosed together with a description and value of the property or asset and the person in whose name and possession or control it is.

### 3 COMPANIES' ORDINANCE 1984: FIFTH SCHEDULE

#### Section overview

- Sundry requirements
- Fixed assets (non-current assets)
- Long term investments
- Long term loans and advances
- Long term deposits and prepayments
- Current assets
- Share capital and reserves
- Non-current liabilities
- Current liabilities
- Contingencies and commitments
- Profit and loss account
- Other disclosures

#### 3.1 Sundry requirements

The figures in the financial statements may be rounded to the thousands of rupees.

Financial statements must disclose:

- all material information necessary to make the financial years statements clear and understandable;
- any change in an accounting policy that has a material effect in the current year or may have a material effect in the subsequent year together with reasons for the change and the financial effect of the change, if material.

#### 3.2 Fixed assets (non-current assets)

Fixed assets (other than investments) must be classified as follows:

- property, plant and equipment:
  - land (distinguishing between free-hold and leasehold);
  - buildings (distinguishing between building on free-hold land and those on leasehold land);
  - plant and machinery;
  - furniture and fittings;
  - vehicles;
  - office equipment
  - capital work in progress:
  - development property; and
  - others (to be specified)

- intangible:
  - goodwill;
  - brand names;
  - computer software;
  - licences and franchises;
  - patents, copyright, trademarks and designs; and
  - others (to be specified).

### 3.3 Long term investments

The aggregate amount (under separate sub-headings) in respect of the following:

- investments in related parties; and
- other investments.

A company that is not a small sized company must also disclose investments under the heading **long term investments**, indicating separately:

- held to maturity investments, which are not due to mature within next twelve months; and
- available for sale investments which are not intended to be sold within the next 12 months.
- market value of listed securities and book value of unlisted securities as per their latest available financial statements.

### 3.4 Long term loans and advances

The following must be shown (under separate sub-headings) distinguishing between considered good and considered bad or doubtful.

- Loans and advances to related parties and disclosing:
- Other loans and advances.

Any provision made for bad or doubtful loans and advances is shown as a deduction under each sub-heading above.

Information on terms and conditions, securities obtained and any other material information must be disclosed.

### 3.5 Long term deposits and prepayments

Long-term deposits and long-term prepayments must be stated separately.

### 3.6 Current assets

Current assets must be classified in a way appropriate to the company's affairs, including the following:

- stores, spare parts and loose tools distinguishing each from the other where practicable;
- stock-in-trade, distinguishing between appropriate classifications (for example, raw materials and components, work in progress, finished products etc.).
- trade debts (other than loans and advances) showing separately:

- debts considered good and debts considered doubtful or bad must be separately stated;
  - debts considered good must be distinguished between secured and unsecured;
  - the aggregate amount due from directors, chief executive and executives (does not apply to small sized companies); and
  - the aggregate amount due from related parties with the names of those related parties (does not apply to small sized companies).
- loans and advances due for repayment within a period of twelve months from the reporting date showing separately:
- loans and advances considered good and those considered doubtful or bad;
  - the aggregate amount due from directors, chief executive and executives (does not apply to small sized companies);
  - the aggregate amount due from related parties with the names of those related parties (does not apply to small sized companies);
- trade deposits and short term prepayments and current account balances with statutory authorities;
- interest accrued;
- other receivables specifying separately the materials items;
- financial assets other than any included above showing separately:
- the aggregate amount due from directors, chief executive and executives (does not apply to small sized companies);
  - the aggregate amount due from related parties with the names of those related parties (does not apply to small sized companies);
- tax refunds due from the Government, showing separately different types of tax;
- cash and bank balances, distinguishing between current and deposit accounts.

Any provision made for a fall in value of any current asset is shown as a deduction from the gross amount of that asset.

### 3.7 Share capital and reserves

Share capital and reserve must be classified under the following sub-heads:

- issued, subscribed and paid up capital, distinguishing in respect of each class between:
- shares allotted for consideration paid in cash;
  - shares allotted for consideration other than cash; and
  - shares allotted as bonus shares; and
- reserves by distinguishing between capital reserves and revenue reserves.

### 3.8 Non-current liabilities

A company which is not a small company must classify non-current liabilities under the following sub-headings:

- long term financing;
- debentures;
- liabilities against assets subject to finance lease;
- long term murabaha;
- long term deposits; and
- deferred liabilities.

Long term loans must be classified as secured and unsecured, and the following must be shown separately under each class:

- loans from banking companies and other financial institutions, other than those as specified below;
- loans from related parties; and
- other loans.

Long-term deposits must be classified according to their nature.

### 3.9 Current liabilities

Current liabilities and provisions must be classified under the following sub-headings:

- trade and other payables, which shall be classified as:
  - creditors;
  - murabaha;
  - accrued liabilities;
  - advance payments;
  - payable to employee retirement benefit funds;
  - unpaid and unclaimed dividend; and
  - others ( to be specified, if material);
- interest, profit, return or mark-up accrued on loans and other payables;
- short term borrowings which shall be classified as:
  - short-term borrowings, distinguishing between secured and unsecured and between loans taken from:
    - banking companies and other financial institutions other than related parties;
    - related parties; and
    - others;
  - short-term running finance, distinguishing between secured and unsecured;
- current portion of long term borrowings;
- current portion of long term murabaha; and
- provision for taxation, showing separately income tax and other taxes.

### 3.10 Contingencies and commitments

The following must be shown separately as a footnote to the balance-sheet:

- ❑ the aggregate amount of any guarantees given by the company on behalf of any related party and where practicable, the general nature of the guarantee;
- ❑ where practicable the aggregate amount or estimated amount, if it is material, of contracts for capital expenditure, so far as not provided for or a statement that such an estimate cannot be made; and
- ❑ any other commitment, if the amount is material, indicating the general nature of the commitment.

### 3.11 Profit and loss account

The profit and loss account must disclose separately the manufacturing, trading and operating results.

A manufacturing concern must show the cost of goods manufactured.

The profit and loss account must disclose all material items of income and expenses including the following:

- ❑ The turnover (sales) showing the gross sales figure with trade discount and sales tax as a deduction.
- ❑ Expenses, classified according to their function under the following sub-heads (along with additional information on their nature):
  - cost of sales;
  - distribution cost;
  - administrative expenses;
  - other operating expenses; and
  - finance cost.
- ❑ Other operating income:
  - income from financial assets;
  - income from investments in and debts, loans, advances and receivables to each related party; and
  - income from assets other than financial assets.
- ❑ Finance cost must show separately the amount of interest on borrowings from related parties (if any). This does not apply to a small sized company.
- ❑ Other information:
  - debts written off as irrecoverable distinguishing between trade debts, loans, advances and other receivables; and
  - provisions for doubtful or bad debts distinguishing between trade debts, loans, advances and other receivables.
  - In each case the company must disclose:
    - debts due by directors, chief executive, and executives of the company and any of them severally or jointly with any other person; and
    - debts due by other related parties.

### **Payments to senior management**

This does not apply to a small sized company.

A company must disclose the aggregate amount charged in the financial statements in respect of the directors, chief executive and executives by the company as fees, remuneration, allowances, commission, perquisites or benefits or in any other form or manner and for any services rendered.

The company must give full particulars of the aggregate amounts separately for the directors, chief executive and executives together with the number of such directors and executives, under appropriate headings such as:

- fees;
- managerial remuneration;
- commission or bonus, indicating their nature;
- reimbursable expenses which are in the nature of a perquisite or benefit;
- pension, gratuities, company's contribution to provident, superannuation and other staff funds, compensation for loss of office and in connection with retirement from office;
- other perquisites and benefits in cash or in kind stating their nature and, where practicable, their approximate money values; and
- the amounts, if material, by which any items shown above are affected by any change in an accounting policy.

### **3.12 Other disclosures**

A company must disclose the following:

- The general nature of any credit facilities available to the company under any contract (other than trade credit) and not used as at the date of the balance sheet.
- Any penalty imposed under any law by any authority.
- The fact of any reduction, enhancement or waiver of a penalty.

Where any property or asset, acquired with the funds of the company, is not held in the name of the company, or is not in the possession and control of the company, this fact must be disclosed together with a description and value of the property or asset and the person in whose name and possession or control it is.

If any loan or advance has been granted on terms softer than those generally prevalent in trade or any relief allowed in matters of interest, repayment, security or documentation, details with reasons for this must be disclosed along with the nature of interest of the company or its directors or other officers.

# IAS 1: Presentation of financial statements

## Contents

- 1 The components of financial statements
- 2 General features of financial statements
- 3 Structure and content of the statement of financial position
- 4 Structure and content of the statement of comprehensive income
- 5 Statement of changes in equity (SOCIE)
- 6 Notes to the financial statements
- 7 Accounting for share issues
- 8 Financial statements – Specimen formats

## INTRODUCTION

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

- LO 1            Prepare financial statements in accordance with the relevant law of the country and in compliance with the reporting requirement of the international pronouncements.**
- LO1.1.1        Prepare statements of financial position in accordance with the guidance in IAS 1 from data and information provided
- LO1.1.2        Identify the laws, regulations, reporting standards and other requirements applicable to statutory financial statements of a limited company
- LO1.1.3        Prepare and present the following in accordance with the disclosure requirements of IAS1, Companies ordinance, fourth schedule / fifth schedule: statement of financial position, statement of comprehensive income, statement of changes in equity, and notes to the financial statements.

# 1 THE COMPONENTS OF FINANCIAL STATEMENTS

## Section overview

- Preparing financial statements
- General purpose financial statements
- Complete set of financial statements
- Comparative information
- Identification of financial statements
- Reporting period
- Elements of financial statement

### 1.1 Preparing financial statements

You should already have studied the basic rules of financial accounting, so you ought to be reasonably familiar with how a statement of financial position and a statement of comprehensive income are prepared. The basic rules can be summarised as follows.

- The balances on all the accounts in the general ledger (nominal ledger or main) are extracted. These are a list of balances on all ledger accounts for assets, liabilities, capital, income and expenses.
- Adjustments are made for 'year-end' items, such as:
  - depreciation charges for non-current assets;
  - accruals and prepayments for expense items;
  - adjusting the allowance for bad (irrecoverable) debts;
  - closing inventory; and
- Adjustments are made for any items that have not been accounted for or have been incorrectly accounted for. (Questions at this level might include lease accounting, deferred taxation, provisions etc.).
- The adjusted income and expense balances are entered into a statement of comprehensive income to establish the profit or loss for the period.
- The adjusted asset, liability and capital balances, together with the retained profit for the year, are entered into a statement of financial position as at the end of the reporting period.

This process can be used to prepare the statement of comprehensive income and statement of financial position of a sole proprietor, a partnership or a company.

Some entities must publish financial statements in accordance with international financial reporting standards (international accounting standards). *IAS 1 Presentation of Financial Statements*, sets out the rules on the form and content of financial statements which such entities must comply with. The rules contained in international standards are known collectively as **IFRS** or **IAS**.

The following sections explain and summarise the IAS 1 requirements. This exam will ask you to prepare financial statements in accordance with IAS 1 and the Companies Ordinance 1984 so remember that the more specific guidance in the fourth schedule will need to be followed in addition to what is explained in this chapter.

## 1.2 General purpose financial statements



### Definition

General purpose financial statements (referred to as ‘financial statements’) are those intended to meet the needs of users who are not in a position to require an entity to prepare reports tailored to their particular information needs.

The financial statements published by large companies as part of their annual reports are general purpose financial statements.

### Objective

The objective of general purpose financial statements is to provide information about the financial position, financial performance and cash flows of a company that is useful to a wide range of users in making economic decisions.

Financial statements also show the results of the management’s stewardship of the resources entrusted to it.

To meet this objective, financial statements provide information about an entity’s:

- assets;
- liabilities;
- equity;
- income and expenses, including gains and losses;
- contributions by and distributions to owners in their capacity as owners; and
- cash flows.

This information, along with other information in the notes, assists users of financial statements in predicting the entity’s future cash flows and, in particular, their timing and certainty.

## 1.3 Complete set of financial statements

IAS 1 **Presentation of Financial Statements** specifies what published ‘general-purpose’ financial statements should include, and provides a format for a statement of financial position, statement of comprehensive income, and statement of changes in equity.

A complete set of financial statements consists of:

- a statement of financial position as at the end of the period;
- a statement of comprehensive income for the period;
- a statement of changes in equity for the period;
- a statement of cash flows (covered in chapter 3); and
- notes to these statements, consisting of a summary of significant accounting policies used by the entity and other explanatory information; and
- comparative information.

A company can use other use titles for the above statements.

## 1.4 Comparative information

A company must disclose comparative information in respect of the previous period for all amounts reported in the current period's financial statements.

A company must present (as a minimum) statements of financial position, comprehensive income cash flows and changes in equity for the previous accounting period in addition to those for the current period.

Furthermore, when a company applies a new accounting policy retrospectively or retrospectively restates or reclassifies items in its financial statements, the financial statements must also include a statement of financial position as at the beginning of the earliest comparative period. This means that when one of the above circumstances occurs, the entity must present statements of financial position, as at:

- the end of the current period;
- the end of the previous period; and
- the beginning of the earliest comparative period.

## 1.5 Identification of financial statements

Listed companies usually publish financial statements as part of an annual report.

The financial statements must be clearly identified and distinguished from other information in the same published document. This is very important as the financial statements are audited whereas other information in the annual report is not. Users must be able to identify the information that has been audited.

Each component of the financial statements must be properly identified with the following information displayed prominently:

- the name of the reporting entity;
- whether the financial statements cover an individual entity or a group (consolidated accounts for groups are described in later chapters);
- the date of the end of the reporting period or the period covered by the statement, whichever is appropriate;
- the currency in which the figures are reported;
- the level of rounding used in the figures (for example, whether the figures thousands of rupees or millions of rupees).

## 1.6 Reporting period

Financial statements should be presented at least annually. If an entity changes the date of the end of its reporting period, and a reporting period longer or shorter than one year is used, its financial statements should disclose:

- the period covered by the financial statements
- the reason why the period is not one year, and
- the fact that the comparative figures for the previous year are not comparable.

## 1.7 Elements of financial statements

The objective of financial reporting is to provide useful information. In order to be useful information must be understandable. A large company enters into thousands of transactions so in order for users to be able to understand the impact of these they must be summarised in some way.

Financial statements group transactions into broad classes according to their economic characteristics. These broad classes are called the elements of financial statements.

- ❑ The elements directly related to the measurement of financial position in the statement of financial position are assets, liabilities and equity.
- ❑ The elements directly related to the measurement of performance in the statement of comprehensive income are income and expenses.

### Assets



#### **Definition: Asset**

**A resource controlled by the entity, as a result of past events, and from which future economic benefits are expected to flow to the entity.**

Control is the ability to obtain economic benefits from the asset, and to restrict the ability of others to obtain the same benefits from the same item.

An entity usually uses assets to produce goods or services to meet the needs of its customers, and because customers are willing to pay for the goods and services, this contributes to the cash flow of the entity. Cash itself is an asset because of its command over other resources.

Many assets have a physical form, but this is not an essential requirement for the existence of an asset.

Assets result from past transactions or other past events. An asset is not created by any transaction that is expected to occur in the future but has not yet happened.

An asset should be expected to provide future economic benefits to the entity. Providing future economic benefits can be defined as contributing, directly or indirectly, to the flow of cash (and cash equivalents) into the entity.

### Liabilities



#### **Definition: Liability**

**A present obligation of an entity, arising from past events, the settlement of which is expected to result in an outflow of resources that embody economic benefits.**

A liability is an obligation that already exists. An obligation may be legally enforceable as a result of a binding contract or a statutory requirement, such as a legal obligation to pay a supplier for goods purchased.

Obligations may also arise from normal business practice, or a desire to maintain good customer relations or the desire to act in a fair way. For example, an entity might undertake to rectify faulty goods for customers, even if these are now outside their warranty period. This undertaking creates an obligation, even though it is not legally enforceable by the customers of the entity.

A liability arises out of a past transaction or event. For example, a trade payable arises out of the past purchase of goods or services, and an obligation to repay a bank loan arises out of past borrowing.

The settlement of a liability should result in an outflow of resources that embody economic benefits. This usually involves the payment of cash or transfer of other assets. A liability is measured by the value of these resources that will be paid or transferred.

### Equity



#### Definition: Equity

The residual interest in the assets of the entity after deducting all its liabilities.

Equity of companies may be sub-classified into share capital, retained profits and other reserves.

### Income

Financial performance is measured by profit or loss. Profit is measured as income less expenses.



#### Definition: Income

Increase in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants.

Income includes both revenue and gains.

- ❑ **Revenue** is income arising in the course of the ordinary activities of the entity. It includes sales revenue, fee income, royalties' income, rental income and income from investments (interest and dividends).
- ❑ **Gains** include gains on the disposal of non-current assets. Realised gains are often reported in the financial statements net of related expenses. They might arise in the normal course of business activities. Gains might also be unrealised. Unrealised gains occur whenever an asset is revalued upwards, but is not disposed of. For example, an unrealised gain occurs when marketable securities owned by the entity are revalued upwards.

## Expenses



### Definition: Expenses

Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

Expenses include:

- ❑ **Expenses** arising in the normal course of activities, such as the cost of sales and other operating costs, including depreciation of non-current assets. Expenses result in the outflow of assets (such as cash or finished goods inventory) or the depletion of assets (for example, the depreciation of non-current assets).
- ❑ **Losses** include for example, the loss on disposal of a non-current asset, and losses arising from damage due to fire or flooding. Losses are usually reported as net of related income. Losses might also be unrealised. Unrealised losses occur when an asset is revalued downwards, but is not disposed of. For example, and unrealised loss occurs when marketable securities owned by the entity are revalued downwards

## 2 GENERAL FEATURES OF FINANCIAL STATEMENTS

### Section overview

- Introduction
- Fair presentation and compliance with IFRSs
- Going concern
- Accrual basis of accounting
- Materiality and aggregation
- Offsetting
- Frequency of reporting
- Comparative information
- Consistency of presentation

### 2.1 Introduction

IAS 1 describes and provides guidance on the following general features of financial statements:

- Fair presentation and compliance with IFRSs
- Going concern
- Accrual basis of accounting
- Materiality and aggregation
- Offsetting
- Frequency of reporting
- Comparative information
- Consistency of presentation

### 2.2 Fair presentation and compliance with IFRSs

#### Disclosure of compliance

An entity whose financial statements comply with IFRSs must disclose that fact.

Financial statements shall not be described as complying with IFRS unless they comply with all the requirements of each applicable Standard and Interpretation.

#### Fair presentation

Financial statements must present fairly the financial position, financial performance and cash flows of an entity.

This means that they must be a faithful representation of the effects of transactions and other events in accordance with the definitions and recognition criteria for assets, liabilities, income and expenses set out in IFRS.

The application of IFRSs, with additional disclosure when necessary, is presumed to result in financial statements that achieve a fair presentation.

Fair presentation requires:

- ❑ the selection and application of accounting policies in accordance with **IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors**;
- ❑ the presentation of information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information; and,
- ❑ the provision of additional disclosures when the particular requirements in IFRSs are insufficient to enable users to understand the impact of particular transactions or other events on the entity's financial position and financial performance.

### True and fair override

In extremely rare circumstances, management might conclude that compliance with a requirement in IFRS would be so misleading that it would conflict with the objective of financial statements set out in IFRS.

In these cases the requirement should not be followed as long as the relevant regulatory framework requires or otherwise does not prohibit this.

When an entity departs from a requirement in IFRS it must disclose:

- ❑ that management has concluded that the financial statements present fairly the entity's financial position, financial performance and cash flows;
- ❑ that it has complied with applicable IFRS except that it has departed from a particular requirement to achieve a fair presentation; and
  - details of the departure:
  - the Standard (or Interpretation) from which the entity has departed and:
  - the nature of the departure (including the treatment that is required by IFRS);
  - the reason why that treatment would be so misleading in the circumstances that it would conflict with the objective of financial statements set out in the "Framework";
  - the treatment adopted; and,
  - for each period presented, the financial impact of the departure on each item in the financial statements that would have been reported in complying with the requirement.

If the relevant regulatory framework prohibits departure from a requirement the entity must make the following disclosures to reduce the misleading aspects of compliance "to the maximum extent possible":

- ❑ the Standard (or Interpretation) requiring the entity to report information concluded to be misleading and:
- ❑ the nature of the requirement;
- ❑ the reason why management has concluded that complying with that requirement is so misleading in the circumstances that it conflicts with the objective of financial statements; and,
- ❑ for each period presented, the adjustments to each item in the financial statements that management has concluded would be necessary to achieve a fair presentation.

### 2.3 Going concern

Financial statements must be prepared on a going concern basis unless management either;

- intends to liquidate the entity; or,
- to cease trading; or
- has no realistic alternative but to do so.

Management must assess an entity's ability to continue as a going concern when preparing financial statements.

In making this assessment management must take into account all available information about the future. (This is for at least twelve months from the reporting date).

#### Disclosures

If management is aware, in making its assessment, of material uncertainties related to events or conditions that may cast significant doubt upon the entity's ability to continue as a going concern, those uncertainties must be disclosed.

If the financial statements are not prepared on a going concern basis, that fact must be disclosed, together with:

- the basis on which the financial statements are prepared; and,
- the reason why the entity is not regarded as a going concern.

### 2.4 Accrual basis of accounting

Financial statements (except for cash flow information) must be prepared under the accrual basis of accounting.

Under the accrual basis of accounting, items are recognised as assets, liabilities, equity, income and expenses (the elements of financial statements) when they satisfy the definitions and recognition criteria for those elements set out in the "Framework".

### 2.5 Materiality and aggregation

Each material class of similar items must be presented separately in the financial statements.

Items of a dissimilar nature or function must be presented separately unless they are immaterial.

An item that is not sufficiently material to warrant separate presentation on the face of the financial statements may nevertheless be sufficiently material for it to be presented separately in the notes.

Information is material if its non-disclosure could influence the economic decisions of users taken on the basis of the financial statements.

Materiality depends on the size and nature of the item or aggregation of items judged in the particular circumstances of its omission.

## 2.6 Offsetting

Assets and liabilities must not be offset except when offsetting is required by another Standard.

The reporting of assets net of valuation allowances—for example, obsolescence allowances on inventories and doubtful debts allowances on receivables—is not offsetting.

Items of income and expense must be offset when, and only when IFRS requires or permits it. For example:

- gains and losses on the disposal of non-current assets are reported by deducting from the proceeds on disposal the carrying amount of the asset and related selling expenses; and,
- expenditure that is reimbursed under a contractual arrangement with a third party (for example, a subletting agreement) is netted against the related reimbursement.

Also gains and losses arising from a group of similar transactions are reported on a net basis (for example, foreign exchange gains and losses or gains and losses arising on financial instruments held for trading purposes).

Such gains and losses must be reported separately if their size, nature or incidence is such that separate disclosure is necessary for an understanding of financial performance.

## 2.7 Frequency of reporting

Financial statements must be presented at least annually.

When an entity's reporting date changes its financial statements are presented for a period longer or shorter than one year. In such cases an entity must disclose, in addition to the period covered by the financial statements:

- the reason for using a period other than one year; and,
- the fact that amounts presented in the financial statements are not comparable.

## 2.8 Comparative information

Comparative information must be disclosed in respect of the previous period for all amounts reported in the financial statements unless IFRS permits or requires otherwise.

Comparative information must be included for narrative and descriptive information when it is relevant to an understanding of the current period's financial statements.

When the presentation or classification of items in the financial statements is amended, comparative amounts must be reclassified (unless the reclassification is impracticable). When comparative amounts are reclassified, an entity must disclose:

- the nature of the reclassification;
- the amount of each item or class of items that is reclassified; and,
- the reason for the reclassification.

The following must be disclosed when reclassification of comparative amounts is impracticable:

- the reason for not reclassifying the amounts; and,
- the nature of the adjustments that would have been made if the amounts were reclassified.

## 2.9 Consistency of presentation

The presentation and classification of items in the financial statements must be retained from one period to the next unless:

- a significant change in the nature of the operations of the entity or a review of its financial statement presentation demonstrates that a change in presentation results in a more appropriate presentation of transactions or other events; or
- a change in presentation is required by an IFRS.

### 3 STRUCTURE AND CONTENT OF THE STATEMENT OF FINANCIAL POSITION

#### Section overview

- Introduction
- Current and non-current assets and liabilities
- Current assets
- Current liabilities
- Information to be presented on the face of the statement of financial position
- Equity capital and reserves

#### 3.1 Introduction

IFRS uses terms which are incorporated into this study text. However, it does not forbid the use of other terms and you might see other terms used in practice.

IAS 1 sets out the requirements for information that must be presented in the statement of financial position or in notes to the financial statements, and it also provides implementation guidance. This guidance includes an illustrative format for a statement of financial position. This format is not mandatory but you should learn it and use it wherever possible.

#### 3.2 Current and non-current assets and liabilities

Current and non-current items should normally be presented separately in the statement of financial position, so that:

- current and non-current assets are divided into separate classifications; and
- current and non-current liabilities are also classified separately.

Chapter 12 explains the concept of deferred taxation and how to account for it. Deferred tax balances must not be classified as current assets or current liabilities.

##### Alternative

A company is allowed to use a presentation based on liquidity instead of current/non-current if this provides information that is reliable and more relevant. Financial institutions often use this approach.

Whichever method of presentation is used, a company must disclose the amount expected to be recovered or settled after more than twelve months for each asset and liability that combines amounts expected to be recovered or settled:

- no more than twelve months after the reporting period, and
- more than twelve months after the reporting period.

### 3.3 Current assets

IAS 1 states that an asset should be classified as a current asset if it satisfies **any** of the following criteria:

- ❑ The entity expects to realise the asset, or sell or consume it, its normal operating cycle.
- ❑ The asset is held for trading purposes.
- ❑ The entity expects to realise the asset within 12 months after the reporting period.
- ❑ It is cash or a cash equivalent. (Note: An example of 'cash' is money in a current bank account. An example of a 'cash equivalent' is money held in a term deposit account with a bank.)

All other assets should be classified as non-current assets.

#### Operating cycle

The operating cycle is the time between the acquisition of assets for processing and their realisation in cash or cash equivalents. When the entity's normal operating cycle is not clearly identifiable, it is assumed to be twelve months.

Current assets include assets (such as inventories and trade receivables) that are sold, consumed or realised as part of the normal operating cycle even when they are not expected to be realised within twelve months after the reporting period.



#### Illustration:

**X Limited uses small amounts of platinum in its production process.**

**Platinum price has fallen recently so just before its year-end X Limited bought an amount of platinum sufficient to cover its production needs for the next two years.**

**This would be a current asset. The amount expected to be used after more than 12 months should be disclosed.**

Current assets also include assets held primarily for the purpose of trading and the current portion of non-current financial assets.

#### Non-current assets

These are tangible, intangible and financial assets of a long-term nature.

### 3.4 Current liabilities

IAS 1 also states that a liability should be classified as a current liability if it satisfies **any** of the following criteria:

- The entity expects to settle the liability in its normal operating cycle.
- The liability is held primarily for the purpose of trading. This means that all trade payables are current liabilities, even if settlement is not due for over 12 months after the end of the reporting period.
- It is due to be settled within 12 months after the end of the reporting period.
- The entity does **not** have the unconditional **right** to defer settlement of the liability for at least 12 months after the end of the reporting period.

All other liabilities should be classified as non-current liabilities.

#### Changing from non-current liability to current liability

Liabilities that were originally non-current may become current in a subsequent year, when they become repayable within 12 months.



#### Example:

A company has a financial year end of 31 December. On 31 October Year 1, it took out a bank loan of Rs > 50,000. The loan principal is repayable as follows:

1. Rs. 20,000 on 31 October Year 3
2. Rs. 30,000 on 31 October Year 4

The loan would be presented as follows:

#### As at 31 December Year 1

The full bank loan of Rs. 50,000 will be a non-current liability

#### As at 31 December Year 2

A current liability of Rs. 20,000 repayable on 31 October Year 3 and a non-current liability of Rs. 30,000 repayable on 31 October Year 4.

#### As at 31 December Year 3

Current liability of Rs. 30,000

There is an exception to this rule. A liability can continue to be shown as a long-term liability, even if it is repayable within 12 months, if the entity has the 'discretion' or right to refinance (or 'roll over') the loan at maturity.

### 3.5 Information to be presented on the face of the statement of financial position

IAS 1 provides a list of items that, **as a minimum**, must be shown on the face of the statement of financial position as a 'line item' (in other words, on a separate line in the statement).

Note that companies in Pakistan are also subject to the requirements of the fourth and fifth schedules to the Companies' Ordinance 1984.

The following table shows the IAS 1 requirements with the Companies' Ordinance equivalent requirements alongside.

Elements	IAS 1 line items (minimum)	Companies Ordinance 1984
Assets	Property, plant and equipment	Plant and equipment
	Investment property	
	Intangible assets	Intangible assets
	Financial assets	Long term investments Long term loans and advances Long term deposits and prepayments
	Investments accounted for using the equity method	
	Biological assets	
	Inventories	Store, spare parts, loose tools Stock-in-trade
	Trade and other receivables	Trade debts Loans and advances Deposits and prepayments Interest accrued Other receivables Financial assets Tax refunds due
	Cash and cash equivalents.	Cash and bank balances
	Liabilities	Trade and other payables
Provisions		
Financial liabilities		Borrowings Deposits Murabaha
Current tax liabilities and assets		Provision for taxation
Deferred tax liabilities and assets		
Equity	Issued capital and reserves attributable to the owners of the entity.	Issued, subscribed and paid up capital, distinguishing in respect of each class between: Reserves by distinguishing between capital reserves and revenue reserves.

Note that there is no conflict between IAS 1 and the Companies' Ordinance in this respect. IAS 1 specifies a minimum requirement and the Companies' Ordinance simply sets a more detailed standard. All companies following these requirements from the Companies' Ordinance would automatically comply with IAS 1.

Separate line items are also required in the statement of financial position in accordance with the requirements of **IFRS5: Non-current assets held for sale and discontinued operations**.

An entity must include additional line items if these are relevant to an understanding of the entity's financial position.

#### **Information to be shown on the face of the statement of financial position or in notes**

Some of the line items in the statement of financial position should be sub-classified into different categories, giving details of how the total figure is made up. This sub-classification may be presented either:

- as additional lines on the face of the statement of financial position (adding up to the total amount for the item as a whole) or
- in notes to the financial statements.

For example:

- Tangible non-current assets should be divided into sub-categories, as required by **IAS 16 Property, Plant and Equipment**.
- Inventories are sub-classified in accordance with **IAS 2 Inventories** into categories such as merchandise, materials, work-in-progress and finished goods.
- Equity capital and reserves must also be sub-categorised, into categories such as paid-up share capital, share premium and reserves.

IAS 1 does not specify a format for a statement of financial position that must be used. However, the implementation guidance includes an illustrative statement of financial position. The example below is based on that example.



**Illustration: Statement of financial position of an individual entity**

**Statement of financial position of ABCD Entity as at 31 December 20XX**

	Rs. m	Rs. m
<b>Assets</b>		
<b>Non-current assets</b>		
Property, plant and equipment	205.1	
Intangible assets	10.7	
Investments ('available for sale financial assets')	6.8	
	-----	222.6
<b>Current assets</b>		
Inventories	17.8	
Trade and other receivables	15.3	
Cash and cash equivalents	0.7	
	-----	33.8
<b>Total assets</b>		----- 256.4 -----

**Statement of financial position of ABCD Entity as at 31 December 20XX**

	Rs. m	Rs. m
Share capital	50.0	
Other reserves	31.9	
Retained earnings (accumulated profits)	60.6	
	-----	142.5
<b>Total equity</b>		
<b>Non-current liabilities</b>		
Long-term borrowings	30.0	
Deferred tax	4.5	
<b>Total non-current liabilities</b>	34.5	
	-----	
<b>Current liabilities</b>		
Trade and other payables	67.1	
Short-term borrowings (bank overdraft)	3.2	
Current portion of long-term borrowing	5.0	
Current tax payable	4.1	
	-----	
<b>Total current liabilities</b>	79.4	
	-----	113.9
<b>Total liabilities</b>		
<b>Total equity and liabilities</b>		----- 256.4 -----

A specimen format to incorporate the requirements of the fourth schedule to the Companies' Ordinance 1984 is given at section 8 of this chapter.

### 3.6 Equity capital and reserves

Certain information about equity capital and reserves must be shown either on the face of the statement of financial position or in the statement of changes in equity or in the notes to the financial statements.

This information includes:

- the number of shares authorised;
- the number of shares issued and fully paid, and issued but not fully paid;
- the par value of each share;
- a reconciliation between the number of shares 'outstanding' (shares in issue) at the beginning and at the end of the year;
- the rights and restrictions attached to each class of shares (if any);
- a description of the nature and purpose of each reserve.

#### Note on the presentation of dividends

Dividends paid during the financial year appear in:

- the statement of changes in equity, and
- the statement of cash flows.

Dividends declared before the year end but not approved by the year end must not be recognised as a liability. They would be shown, together with the amount per share, in a note to the financial statements.

## 4 STRUCTURE AND CONTENT OF THE STATEMENT OF COMPREHENSIVE INCOME

### Section overview

- A single statement or two statements
- Information to be presented on the face of the statement of comprehensive income
- Analysis of expenses
- Material items
- Preparing a statement of financial position or statement of comprehensive income

### 4.1 A single statement or two statements

Total comprehensive income during a period is the sum of:

- the profit or loss for the period; and
- other comprehensive income.

IAS 1 requires an entity to present all items of income and expense during a period in a statement of comprehensive income. (now known as a statement of profit or loss and other comprehensive income).

This may be presented as a single statement with two parts:

- a statement of profit or loss which shows the components of profit or loss (beginning with *Revenue* and ending with *Profit (or Loss)* for the year; and
- a statement of other comprehensive income.

Alternatively these two parts can be presented as two separate statements.

Whichever approach is used the following must be shown:

- profit or loss;
- total other comprehensive income;
- comprehensive income for the period (the total of profit or loss and other comprehensive income).

#### Other comprehensive income

IFRS specifies what must be included as other comprehensive income. Such items include:

- amounts recognised on revaluation of a non-current assets in accordance with **IAS 16 Property, plant and equipment** and **IAS 38 Intangible assets**.
- The tax consequences of any such revaluation.

IAS 1 does not specify an exact format for the statement of comprehensive income but the example below is based on a suggested presentation included in the implementation guidance. (In this example, expenses are classified by function – See paragraph 4.3 of this section).



**Example: statement of comprehensive income of an individual entity**

**XYZ Entity: Statement of comprehensive income for the year ended 31 December 20XX**

	<b>Rs. 000</b>
<b>Revenue</b>	678
<b>Cost of sales</b>	250
	<hr/>
<b>Gross profit</b>	428
<b>Other income</b>	12
<b>Distribution costs</b>	(98)
<b>Administrative expenses</b>	(61)
<b>Other expenses</b>	(18)
<b>Finance costs</b>	(24)
<b>Share of profit of associate</b>	32
	<hr/>
<b>Profit before tax</b>	271
<b>Taxation</b>	(50)
	<hr/>
<b>Profit for the year from continuing operations</b>	221
<b>Loss for the year from discontinued operations</b>	(15)
	<hr/>
<b>PROFIT FOR THE YEAR</b>	206
	<hr/>
<b>Other comprehensive income</b>	
<b>Gains on property revaluation</b>	24
<b>Share of other comprehensive income of associate</b>	5
<b>Available for sale financial assets</b>	17
	<hr/>
<b>Other comprehensive income for the year (net of tax)</b>	46
	<hr/>
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>	252
	<hr/>

## 4.2 Information to be presented on the face of the statement of comprehensive income

As a **minimum**, IAS 1 requires that the statement of comprehensive income should include line items showing the following amounts for the financial period:

### Line items

Revenue

Finance costs (for example, interest costs)

Share of the profit or loss of entities accounted for by the 'equity method'

Tax expense

A single amount for the total of discontinued operations

Each component of 'other comprehensive income'

Share of the other comprehensive income of entities accounted for by the 'equity method'

Total comprehensive income

Groups of companies must consolidate their financial statements. A consolidation is the representation of the financial position and financial performance of a series of separate entities as if they are a single entity. This is explained in chapters 4 to 6).

For a **consolidated** statement of comprehensive income the following items should also be shown on the face of the statement as allocations of profit or income in the period:

### Line items

Profit or loss for the period attributable to non-controlling interests (also called minority interests)

Profit or loss attributable to the owners (equity holders) of the parent entity

Total comprehensive income attributable to non-controlling interests

Total comprehensive income attributable to the owners of the parent entity

Additional line items should be presented on the face of the statement of comprehensive income when it is relevant to an understanding of the entity's financial performance.

### Recognition in profit or loss

With the introduction of a requirement to present a statement of comprehensive income, it is important to distinguish between:

- items that should be included in the section of the statement between 'revenue' and 'profit'; and
- other comprehensive income.

A useful way of making this distinction is that if an item is included in the statement of comprehensive income, between 'revenue' and 'profit', the item is

**‘recognised within profit or loss’**. This term is now used in accounting standards.

### Reclassification adjustments

A reclassification adjustment occurs when an item that has been recognised as ‘other comprehensive income’ in the statement of comprehensive income is subsequently re-classified as profit or loss.

### Information to be shown on the face of the statement of comprehensive income or in the notes

The following information may be shown either on the face of the statement of comprehensive income or in a note to the financial statements:

- material items of income and expense
- an analysis of expenses.

## 4.3 Analysis of expenses

Expenses should be analysed. Either of two methods of analysis may be used:

- according to the **function** of the expense.
- according to the **nature** of expenses; or

IAS 1 states that entities should choose the method that provides the more relevant or reliable information. However, the fourth and fifth schedules to the Companies’ Ordinance 1984 require classification by function with additional information on nature.

IAS 1 encourages entities to show this analysis of expenses on the face of the statement of comprehensive income rather than in a note to the accounts.

### Analysis of expenses by their function

When expenses are analysed according to their function, the functions are commonly ‘cost of sales’, ‘distribution costs’, ‘administrative expenses’ and ‘other expenses’. This method of analysis is also called the ‘cost of sales method’.



#### Illustration: Statement of comprehensive income – Expenses analysed by function

	<b>Rs. m</b>
Revenue	7,200
Cost of sales	(2,700)
Gross profit	<u>4,500</u>
Other income	300
Distribution costs	(2,100)
Administrative expenses	(1,400)
Other expenses	(390)
Finance costs	(60)
Profit before tax	850
Income tax expense	(250)
Profit for the period	<u><u>600</u></u>

IAS 1 also requires that if the analysis by function method is used, additional information about expenses must be disclosed including:

- ❑ depreciation and amortisation expense; and
- ❑ employee benefits expense (staff costs).

### Analysis of expenses by their nature

When expenses are analysed according to their nature, the categories of expenses will vary according to the nature of the business.

In a manufacturing business, expenses would probably be classified as:

- ❑ raw materials and consumables used;
- ❑ staff costs ('employee benefits costs');
- ❑ depreciation.

Items of expense that on their own are immaterial are presented as 'other expenses'.

There will also be an adjustment for the increase or decrease in inventories of finished goods and work-in-progress during the period.

Other entities (non-manufacturing entities) may present other expenses that are material to their business.

An example of a statement of comprehensive income, showing expenses by their nature is shown below for completeness, with illustrative figures included.



#### Illustration: Statement of comprehensive income – Expenses analysed by nature

	Rs. m	Rs. m
Revenue		7,200
Other income		300
		<u>7,500</u>
Changes in inventories of finished goods and work-in-progress (reduction = expense, increase = negative expense)	90	
Raw materials and consumables used	1,200	
Staff costs (employee benefits expense)	2,000	
Depreciation and amortisation expense	1,000	
Other expenses	2,300	
Finance costs (interest cost)	60	
		<u>6,650</u>
Profit before tax		850
Income tax expense		250
Profit for the period		<u><u>600</u></u>

#### 4.4 Material items

Material items that might be disclosed separately include:

- a write-down of inventories from cost to net realisable value, or a write-down of items of property, plant and equipment to recoverable amount;
- the cost of a restructuring of activities;
- disposals of items of property, plant and equipment;
- discontinued operations;
- litigation settlements;
- a reversal of a provision.

#### 4.5 Preparing a statement of financial position or statement of comprehensive income

If you are required to prepare a statement of financial position, a statement of comprehensive income in a format suitable for publication in accordance with IAS 1, you need to know the appropriate format.

If you are preparing a statement of comprehensive income in the 'cost of sales' or 'expenses by function' method, you might need to separate total costs for items such as employee benefits costs and depreciation charges into cost of sales, distribution costs and administrative charges. The basis for separating these costs between the functions would be given in the question.

## 5 STATEMENT OF CHANGES IN EQUITY (SOCIE)

### Section overview

- The contents of a statement of changes in equity
- Retrospective adjustments

### 5.1 The contents of a statement of changes in equity

A set of financial statements must include a statement of changes in equity (SOCIE).

A SOCIE shows for each component of equity the amount at the beginning of the period, changes during the period, and its amount at the end of the period.

Components of equity include:

- share capital;
- share premium;
- retained earnings;
- revaluation surplus.

Note that according to s235 of the Companies' Ordinance 1984 the revaluation surplus is shown in the balance sheet (statement of financial position) after capital and reserves. This implies that the surplus is not viewed as a part of equity. This is a conflict with IFRS but companies in Pakistan would follow the Companies Ordinance in this circumstance.

In a SOCIE for a group of companies, the amounts attributable to owners of the parent entity and the amounts attributable to the non-controlling interest should be shown separately. (Non-controlling interest is a concept used in group accounts. This is covered in chapter 4)

For each component of equity, the SOCIE should show changes resulting from:

- profit or loss for the period;
- each item of other comprehensive income;
- transactions with owners in their capacity as owners.

#### Transactions with owners in their capacity as owners

These include:

- new issues of shares;
- payments of dividends;
- repurchases and cancellation of its own shares by the company.

These transactions are not gains or losses so are not shown in the statement so comprehensive income but they do affect equity. The SOCIE highlights such transactions.

## 5.2 Retrospective adjustments

### **IAS8 Accounting policies, changes in accounting estimates and errors**

requires that when an entity changes an accounting policy or restates amounts in the financial statements to correct errors, the adjustments should be made retrospectively (to the extent that this is practicable).

Retrospective adjustments result in changes in the reported amount of an equity component, usually retained earnings. Retrospective adjustments and re-statements are not changes in equity, but they are adjustments to the opening balance of retained earnings (or other component of equity).

Where retrospective adjustments are made, the SOCIE must show for each component of equity (usually retained earnings) the effect of the retrospective adjustment. This is shown first, as an adjustment to the opening balance, before the changes in equity are reported. (This is covered in more detail in chapter 11)



#### **Illustration: statement of changes in equity**

##### **PQR Entity:**

##### **Statement of changes in equity for the year ended 31 December 20X9**

	Share capital	Share premium	General reserve	Accumulated profits	Total
	Rs.m	Rs.m	Rs.m	Rs.m	Rs.m
Balance at 31 December 20X8	200	70	80	510	860
Change in accounting policy	-	-	-	(60)	(60)
Restated balance	200	70	80	450	800
<b>Changes in equity for 20X9</b>					
Issue of share capital	80	100			180
Dividend payments				(90)	(90)
Profit for the year				155	155
Other comprehensive income for the year			12		12
Balance at 31 December 20X9	280	170	92	515	1,057

The statement reconciles the balance at the beginning of the period to that at the end of the period for each component of equity.

## 6 NOTES TO THE FINANCIAL STATEMENTS

### Section overview

- Introduction
- Structure
- Disclosure of accounting policies
- Other disclosures

### 6.1 Introduction

Notes contain information in addition to that presented in the statement of financial position, statement of comprehensive income, statement of changes in equity and statement of cash flows.

Notes provide narrative descriptions of items in those statements and information about items that do not qualify for recognition in those statements. They also explain how totals in those statements are formed.

### 6.2 Structure

The notes to the financial statements of an entity must:

- ❑ present information about the basis of preparation of the financial statements and the specific accounting policies selected and applied for significant transactions and other significant events;
- ❑ disclose the information required by IFRSs that is not presented elsewhere in the financial statements; and
- ❑ provide additional information that is not presented on the face of the financial statements but is relevant to an understanding of them.

Notes to the financial statements must be presented in a systematic manner. Each item on the face of the statement of financial position, statement of comprehensive income, statement of changes in equity and statement of cash flows must be cross-referenced to any related information in the notes.

Notes are normally presented in the following order:

- ❑ a statement of compliance with IFRS;
- ❑ a summary of significant accounting policies applied;
- ❑ supporting information for items presented on the face of each financial statement in the order in which each financial statement and each line item is presented; and
- ❑ other disclosures, including:
  - contingencies;
  - uncontracted commitments; and
  - non-financial disclosures.

### 6.3 Disclosure of accounting policies

An entity must disclose the following in the summary of significant accounting policies:

- ❑ the measurement basis (or bases) used in preparing the financial statements; and
- ❑ the other accounting policies used that are relevant to an understanding of the financial statements.
- ❑ the judgements (apart from those involving estimations) made by management in applying the accounting policies that have the most significant effect on the amounts of items recognised in the financial statements. For example:
  - whether financial assets are held-to-maturity investments;
  - when substantially all the significant risks and rewards of ownership of financial assets and lease assets are transferred to other entities;
  - whether, in substance, particular sales of goods are financing arrangements and therefore do not give rise to revenue; and
  - whether the substance of the relationship between the entity and a special purpose entity indicates that the entity controls the special purpose entity.

#### Which policies?

Management must disclose those policies that would assist users in understanding how transactions, other events and conditions are reflected in the reported financial performance and financial position.

If an IFRS allows a choice of policy, disclosure of the policy selected is especially useful.

Some standards specifically require disclosure of particular accounting policies. For example, IAS 16 requires disclosure of the measurement bases used for classes of property, plant and equipment.

It is also appropriate to disclose an accounting policy not specifically required by IFRSs, but selected and applied in accordance with IAS 8. (See chapter 11).

#### Key measurement assumptions

An entity must disclose information regarding key assumptions about the future, and other key sources of measurement uncertainty, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

In respect of those assets and liabilities, the notes must include details of:

- ❑ their nature; and
- ❑ their carrying amount as at the reporting date.

Examples of key assumptions disclosed are:

- ❑ future interest rates;
- ❑ future changes in salaries;
- ❑ future changes in prices affecting other costs; and,
- ❑ useful lives.

Examples of the types of disclosures made are:

- ❑ the nature of the assumption or other measurement uncertainty;
- ❑ the sensitivity of carrying amounts to the methods, assumptions and estimates underlying their calculation, including the reasons for the sensitivity;
- ❑ the expected resolution of an uncertainty and the range of reasonably possible outcomes within the next financial year in respect of the carrying amounts of the assets and liabilities affected; and
- ❑ an explanation of changes made to past assumptions concerning those assets and liabilities, if the uncertainty remains unresolved.

#### 6.4 Other disclosures

An entity must disclose in the notes:

- ❑ the amount of dividends proposed or declared before the financial statements were authorised for issue but not recognised as a distribution to owners during the period, and the related amount per share; and
- ❑ the amount of any cumulative preference dividends not recognised.
- ❑ An entity must disclose the following, if not disclosed elsewhere in information published with the financial statements:
  - ❑ the domicile and legal form of the entity;
  - ❑ a description of the nature of the entity's operations and its principal activities; and
  - ❑ the name of the parent and the ultimate parent of the group.

## 7 ACCOUNTING FOR SHARE ISSUES

### Section overview

- Issue of equity shares
- Bonus issues

### 7.1 Issue of equity shares

When an entity issues new ordinary shares:

- the issued shares become a part of equity, and
- the entity receives cash from the issue, or possibly assets other than cash (for which a carrying value is determined).

The issue price of new equity shares is usually higher than their face value or nominal value. The difference between the nominal value of the shares and their issue price is accounted for as share premium, and credited to a share premium reserve. (This reserve is a part of equity).



#### Illustration: Share issue double entry

	Debit	Credit
Bank (cash received)	X	
Share capital (nominal value of shares issued)	X	
Share premium (with the excess of the issue price of the shares over their nominal value)		X

Transaction costs of issuing new equity shares for cash should be debited directly to equity.

The costs of the issue, net of related tax benefit, are set against the share premium account. (If there is no share premium on the issue of the new shares, issue costs should be deducted from retained earnings).



#### Example:

A company issues 200,000 shares of Rs. 25 each at a price of Rs. 250 per share. Issue costs are Rs. 3,000,000.

The share issue would be accounted for as follows:

	Dr (Rs. 000)	Cr (Rs. 000)
Cash (200,000 × 250)	50,000	
Share capital (200,000 × 25)		5,000
Share premium (200,000 × 250 – 25)		45,000
Share premium		3,000
Cash	3,000	

## 7.2 Bonus issues

When an entity issues new ordinary shares:

A bonus issue of shares (also called a scrip issue or a capitalisation issue) is an issue of new shares to existing shareholders, in proportion to their existing shareholding, for no consideration. In other words, the new shares are issued 'free of charge' to existing shareholders.

The new shares are created by converting an equity balance from the statement of financial position into ordinary share capital.



### Illustration: Share issue double entry

	Debit	Credit
Equity reserve	X	
Share capital (nominal value of shares issued)		X

## 8 FINANCIAL STATEMENT – SPECIMEN FORMATS

### Section overview

- Statement of comprehensive income (analysis of expenses by function)
- Statement of financial position

IAS 1 does not specify formats for financial statements. However, it includes illustrative statements in an appendix to the Standard).

The illustrations below are based on the illustrative examples but have been modified to incorporate elements required by the fourth schedule to the Companies Ordinance 1984.

### 8.1 Statement of comprehensive income (analysis of expenses by function)



#### Illustration: Statement of comprehensive income (analysis of expenses by function)

Statement of comprehensive income for the year ended 31 December 2015

	Rs. m
<b>Revenue</b>	X
<b>Cost of sales</b>	(X)
<b>Gross profit</b>	X
<b>Other income</b>	X
<b>Distribution costs</b>	(X)
<b>Administrative expenses</b>	(X)
<b>Other expenses</b>	(X)
<b>Profit from operations</b>	X
<b>Other operating income</b>	
Income from financial assets	X
Income from debts loans and advances to related parties	X
	X
<b>Finance costs</b>	(X)
<b>Profit before tax</b>	X
<b>Taxation</b>	(X)
<b>PROFIT FOR THE YEAR</b>	X
<b>Other comprehensive income</b>	
Sundry gains and losses	X
<b>OTHER COMPREHENSIVE INCOME FOR THE YEAR</b>	X
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>	X

## 8.2 Statement of financial position

**Illustration: Statement of financial position format**

Statement of financial position as at 31 December 2015

	Rs. m	Rs. m
<b>Assets</b>		
<b>Non-current assets</b>		
Property, plant and equipment	X	
Intangible assets	X	
Goodwill	X	
Long term investments (CO)	X	
Long term loans and advances (CO)	X	
Long term deposits and prepayments (CO)	X	
<i>Total non-current assets</i>	<u>          </u>	X
<b>Current assets</b>		
Stores, spare parts and loose tools (CO)	X	
Stock-in-trade (CO)		
Trade debts (CO)	X	
Current portion of long term loans and advances (CO)	X	
Cash and bank balances (CO)	X	
<i>Total current assets</i>	<u>          </u>	X
<b>Total assets</b>		<u>          </u> <u>          </u>
<b>Equity and liabilities</b>		
<b>Capital and reserves</b>		
Share capital (Issued, subscribed and paid up capital)		X
Share premium		
Accumulated profits (Unappropriated profits)		X
Other reserves		X
<i>Total capital and reserves</i>		X
Revaluation surplus (CO)		X
<b>Non-current liabilities</b>		
Long-term financing	X	
Long term liabilities against assets subject to a finance lease	X	
Deferred tax	X	
<i>Total non-current liabilities</i>	X	
<b>Current liabilities</b>		
Trade and other payables	X	
Accrued interest / mark-up (CO)		
Short-term borrowings	X	
Current portion of long-term borrowing	X	
Current tax payable	X	
<i>Total current liabilities</i>	<u>          </u>	
<i>Total liabilities</i>		<u>          </u>
<b>Total equity and liabilities</b>		<u>          </u> <u>          </u>



## IAS 7: Statements of cash flows

### Contents

- 1 Statements of cash flows: Introduction
- 2 Statements of cash flows: Format
- 3 Cash flows from operating activities: The indirect method
- 4 Indirect method: Adjustments for working capital
- 5 Cash flows from operating activities: The direct method
- 6 Cash flows from investing activities
- 7 Cash flows from financing activities

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

**LO 1            Prepare financial statements in accordance with the relevant law of the country and in compliance with the reporting requirement of the international pronouncements.**

LO1.1.4        Prepare statement of cash flows in accordance with the requirements of IAS 7.

# 1 STATEMENTS OF CASH FLOWS: INTRODUCTION

## Section overview

- Purpose of statements of cash flows
- Statements of cash flows
- The sections of a statement of cash flows
- Cash flows from operating activities
- Cash flows from investing activities
- Cash flows from financing activities
- Gross or net

### 1.1 Purpose of statements of cash flows

IAS 1 states that a statement of cash flows is a part of a complete set of the financial statements of an entity. It provides information about:

- ❑ the cash flows of the entity during the reporting period, and
- ❑ the changes in cash and cash equivalents during the period.

*IAS 7: Statements of cash flows* sets out the benefits of cash flow information to users of financial statements.

- ❑ A statement of cash flows provides information that helps users to evaluate changes in the net assets of an entity and in its financial structure (including its liquidity and solvency).
- ❑ It provides information that helps users to assess the ability of the entity to affect the amount and timing of its cash flows in order to adapt to changing circumstances and unexpected opportunities.
- ❑ It is useful in assessing the ability of the entity to generate cash and cash equivalents.
- ❑ It helps users of accounts to compare the performance of different entities because unlike profits, comparisons of cash flows are not affected by the different accounting policies used by different entities.
- ❑ Historical cash flows are often a fairly reliable indicator of the amount, timing and certainty of **future** cash flows.

## 1.2 Statements of cash flows

A statement of cash flows provides information about where a business obtained its cash during the financial period, and how it made use of its cash.

A statement of cash flows groups inflows and outflows of cash under three broad headings:

- cash from operating activities
- cash used in (or obtained from) investing activities
- cash paid or received in financing activities.

It also shows whether there was an increase or a decrease in the amount of cash held by the entity between the beginning and the end of the period.



### Illustration:

Cash from operating activities	X/(X)
Cash used in (or obtained from) investing activities	X/(X)
Cash paid or received in financing activities.	<u>X/(X)</u>
Net cash inflow (or outflow) during the period	X/(X)
Cash and cash equivalents at the beginning of the period	<u>X/(X)</u>
Cash and cash equivalents at the end of the period	<u>X/(X)</u>

A statement of cash flows reports the change in the amount of cash and cash equivalents held by the entity during the financial period.

### Cash and cash equivalents



#### Definition: Cash, cash equivalents and cash flows

Cash comprises cash on hand and demand deposits.

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Cash flows are inflows and outflows of cash and cash equivalents.

For the purpose of a statement of cash flows, cash and cash equivalents are treated as being the same thing. This means that cash flows between cash and cash equivalent balances are not shown in the statement of cash flows. These components are part of the cash management of an entity rather than part of its operating, investing and financing activities.

Cash and cash equivalents are held in order to meet short-term cash commitments, rather than for investment purposes or other purposes.

Examples of cash equivalents are:

- a bank deposit where some notice of withdrawal is required
- short-term investments with a maturity of three months or less from the date of acquisition (e.g. government bills).

Bank borrowings are generally considered to be financing activities. In that case they would be held outside cash and cash equivalents and movements on the bank borrowings would be shown under financing activities as a cash inflow if borrowing increase or as a cash outflow if borrowings fell.

Sometimes, bank overdrafts which are repayable on demand form an integral part of an entity's cash management. In these circumstances, bank overdrafts are included as a component of cash and cash equivalents.

### Sundry disclosures

An entity must disclose the components of cash and cash equivalents and present a reconciliation of the amounts in its statement of cash flows with the equivalent items reported in the statement of financial position.

Any significant cash and cash equivalent balances held by the entity that are not available for use by the group must be disclosed together with a commentary by management. This might be the case when a group of companies has a subsidiary whose dividend payments are subject to a debt covenant or exchange control regulations which would prevent payment of a dividend to the parent company.

### Comment on technique

Theoretically this could be done by analysing every entry in and out of the cash account(s) over the course of a period. However, the cash account is often the busiest account in the general ledger with potentially many thousands of entries. Documents that summarise the transactions are needed.

These documents already exist! They are the other financial statements (statement of financial position and statement of profit or loss and other comprehensive income).



#### Illustration:

**A business might buy 100 new non-current assets over the year. There would be 100 different entries for these in the cash account.**

**However, it should be easy to estimate the additions figure from comparing the opening and closing balances for non-current assets and isolating any other causes of movement.**

**For example if we know that property plant and equipment has increased by Rs. 100,000 and that the only other cause of movement was depreciation of Rs. 15,000 then additions must have been Rs.115,000.**

A lot of the numbers in cash flow statements are derived from comparing opening and closing positions of line items in the statement of financial position. Other causes of movement can then be identified leaving the cash double entry as a balancing figure.

### 1.3 The sections of a statement of cash flows

The content and format of statements of cash flows are specified by IAS 7 **Statements of cash flows**. IAS 7 does not specify what the **exact** format of a statement of cash flows should be, but it provides suggested layouts in an appendix.

Entities are required by IAS 7 to report cash flows for the period under three headings:

- cash flows from operating activities
- cash flows from investing activities
- cash flows from financing activities.

All cash flows (except for changes from cash to cash equivalents or from cash equivalents to cash) can be included in one of these three categories.

Together, the cash flows arising from these three categories of activity explain the increase or decrease in cash and cash equivalents during the financial period.

The cash flows for each category might be positive or negative. The total of the cash flows for all three categories together explains the overall increase or decrease in cash and cash equivalents during the period.

A single transaction might include more than one type of cash flow. For example a cash repayment of a loan might include both interest and capital. In this case the interest element might be classified as an operating activity and the capital element as a financing activity.

### 1.4 Cash flows from operating activities

Operating activities are the normal trading activities of the entity. Cash flows from operating activities are the cash inflows or cash outflows arising in normal trading activities.

Operating activities normally provide an operating profit before tax. However, profit is not the same as cash flow, and the cash flows from operating activities are different from profit.

A statement of cash flows normally makes a distinction between:

- cash generated from operations**, which is the cash from sales less the cash payments for operating costs, and
- net cash from operating activities**, which is the cash generated from operations, less interest payments and tax paid on profits.

Cash flows from operating activities are primarily derived from the principal revenue-producing activities of the entity. Therefore, they generally result from the transactions and other events that enter into the determination of profit or loss.

Examples of cash flows from operating activities are:

- ❑ cash receipts from the sale of goods and the rendering of services;
- ❑ cash receipts from royalties, fees, commissions and other revenue;
- ❑ cash payments to suppliers for goods and services;
- ❑ cash payments to and on behalf of employees;
- ❑ cash receipts and cash payments of an insurance entity for premiums and claims, annuities and other policy benefits;
- ❑ cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities; and
- ❑ cash receipts and payments from contracts held for dealing or trading purposes.

Some transactions result in the recognition of a gain or loss profit or loss (e.g. sale of an item of plant). However, the cash flows relating to such transactions are cash flows from investing activities.

Cash payments to manufacture or acquire assets held for rental to others and subsequently held for sale are cash flows from operating activities. The cash receipts from rents and subsequent sales of such assets are also cash flows from operating activities.

The amount of cash flows arising from operating activities is a key indicator of the extent to which the operations of the entity have generated sufficient cash flows to function without recourse to external sources of financing. In addition, it forms a basis for forecasting future operating cash flows.

### 1.5 Cash flows from investing activities

The second section of a statement of cash flows shows cash flows from investing activities. Investing activities are defined by IAS 7 as ‘the acquisition and disposal of long-term assets and other investments not included in cash equivalents’.

Cash flows from investing activities might also include cash received from investments, such as interest or dividends received.

The separate disclosure of cash flows arising from investing activities is important because the cash flows represent the extent to which expenditures have been made for resources intended to generate future income and cash flows.

Examples of cash flows arising from investing activities are:

- ❑ cash payments to acquire property, plant and equipment, intangibles and other long-term assets (including those relating to capitalised development costs and self-constructed tangible assets);
- ❑ cash receipts from sales of property, plant and equipment, intangibles and other long-term assets;
- ❑ cash payments to acquire equity or debt instruments;
- ❑ cash receipts from sales of equity or debt instruments of other entities;
- ❑ cash advances and loans made to other parties (other than advances and loans made by a financial institution which would be an operating activity);
- ❑ cash receipts from the repayment of advances and loans made to other parties (other than advances and loans of a financial institution);

## 1.6 Cash flow from financing activities

The third section of the statement of cash flows shows the cash flows from financing activities. These activities are defined by IAS 7 as 'activities that result in changes in the size and composition of the contributed equity and borrowings of the entity.'

Examples of cash flows arising from financing activities are:

- cash proceeds from issuing shares or other equity instruments;
- cash payments to owners to acquire or redeem the entity's shares;
- cash proceeds from issuing debentures, loans, notes, bonds, mortgages and other short-term or long-term borrowings;
- cash repayments of amounts borrowed; and
- cash payments by a lessee for the reduction of the outstanding liability relating to a finance lease.

The separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of capital to the entity.

## 1.7 Gross or net

Generally, major classes of cash flows arising from investing and financing activities are reported gross. That is to say that cash receipts and cash payments are shown separately even if from and to the same party.

However, cash flows arising from the following activities may be reported on a net basis:

- cash receipts and payments on behalf of customers when the cash flows reflect the activities of the customer rather than those of the entity (for example if rent is collected on behalf of and paid on to owners of properties); and
- cash receipts and payments for items in which the turnover is quick, the amounts are large, and the maturities are short (e.g. payments made by credit card companies on behalf of their customers and receipts from those customers).

It is unlikely that you will see this in a question.

## 2 STATEMENT OF CASH FLOWS: FORMAT

### Section overview

- Format
- The indirect method
- The direct method

### 2.1 Format

IAS 7 does not include a format that must be followed. However it gives illustrative examples of formats that meet the requirements in the standard.

This section provides examples of these.



#### Illustration: Statement of cash flows

	Rs.	Rs.
<b>Net cash flow from operating activities</b>		<b>75,300</b>
<b>Cash flows from investing activities:</b>		
Acquisition of shares (debentures, etc.)	(5,000)	
Purchase of property, plant and machinery	(35,000)	
Proceeds from sale of non-current assets	6,000	
Interest received/dividends received	1,500	
Net cash used in investing activities		(32,500)
<b>Cash flows from financing activities:</b>		
Proceeds from issue of shares	30,000	
Proceeds from new loan	10,000	
Repayment of loan	(17,000)	
Dividends paid to shareholders	(25,000)	
Net cash used in financing activities		(2,000)
Net increase/decrease in cash/cash equivalents		40,800
Cash/cash equivalents at the beginning of the year		5,000
Cash/cash equivalents at the end of the year		45,800

#### Operating cash flows

IAS 7 permits two methods of presenting the cash flows from operating activities:

- the direct method, and
- the indirect method.

For clarity, what this means is that there are two approaches to arriving at the figure of **Rs. 75,300** in the above example.

IAS 7 allows entities to use either method of presentation. It encourages entities to use the direct method. However, the indirect method is used more in practice.

The two methods differ only in the way that they present the cash flows for cash generated from operations. In all other respects, the figures in the statement of cash flows using the direct method are identical to the figures in a statement using the indirect method – cash flows from investing activities and financing activities are presented in exactly the same way.

## 2.2 The indirect method

The indirect method identifies the cash flows from operating activities by adjusting the profit before tax figure. It arrives at the cash from operating activities figure indirectly by reconciling a profit figure to a cash figure.

The adjustments remove the impact of accruals and non-cash items and also relocate some figures to other positions in the statement of cash flows.

The following illustration shows how the net cash flow from operating activities figure seen in the previous example was arrived at using the indirect method.



### Illustration:

<b>Statement of cash flows: indirect method</b>	Rs.	Rs.
<b>Cash flows from operating activities</b>		
Profit before taxation	80,000	
Adjustments for:		
Depreciation and amortisation charges	20,000	
Interest charges in the statement of profit or loss	2,300	
Gains on disposal of non-current assets	(6,000)	
Losses on disposal of non-current assets	4,500	
	100,800	
Increase in trade and other receivables	(7,000)	
Decrease in inventories	2,000	
Increase in trade payables	3,000	
	98,800	
Cash generated from operations	98,800	
Taxation paid (tax on profits)	(21,000)	
Interest charges paid	(2,500)	
	75,300	
Net cash flow from operating activities		<b>75,300</b>

## 2.3 The direct method

The direct method calculates the cash flow from operating activities by calculating cash received from customers, cash paid to suppliers and so on.

The following illustration shows how the net cash flow from operating activities figure seen in the previous example was arrived at using the direct method.



### Illustration:

<b>Statement of cash flows: direct method</b>	<b>Rs.</b>
<b>Cash flows from operating activities</b>	
Cash receipts from customers	348,800
Cash payments to suppliers	(70,000)
Cash payments to employees	(150,000)
Cash paid for other operating expenses	(30,000)
Cash generated from operations	<u>98,800</u>
Taxation paid (tax on profits)	(21,000)
Interest charges paid	(2,500)
Net cash flow from operating activities	<u>75,300</u>

The figures in the two statements are identical from 'Cash generated from operations' down to the end. The only differences are in the presentation of the cash flows that produced the 'Cash generated from operations'.

### 3 CASH FLOWS FROM OPERATING ACTIVITIES: THE INDIRECT METHOD

#### Section overview

- Profit before taxation
- Non-cash items
- Accruals based figures - Interest
- Accruals based figures - Taxation
- Accruals based figures - Dividends
- Presentation of interest, taxation and dividends cash flows

#### 3.1 Profit before taxation

The starting point for the statement of cash flows for a company is the operating profit after deducting interest but before taxation.

This profit figure is adjusted to calculate the amount of cash received by the business or the amount of cash paid out as a consequence of its trading operations.

The adjustments are to remove the effect of:

- Non-cash items, for example:
  - Depreciation and amortisation (depreciation of intangible non-current assets);
  - Profit or loss on disposal of non-current assets; and
- Accruals based figures, for example:
  - Interest expense or income;
  - Movement on working capital items (receivables, payables and inventory).

#### 3.2 Non-cash items

##### Depreciation and amortisation

Depreciation charges and amortisation charges are not cash flows. They are expenses in the income statement, but do not represent payments of cash.

In order to obtain a figure for cash flow from the figure for profit, charges for depreciation and amortisation must therefore be added back to the profit figure.

##### Gains or losses on disposal of non-current assets

Gains or losses on the disposal of non-current assets are not cash flows. The gain or loss is calculated as the difference between:

- the net cash received from the disposal, and
- the carrying value (net book value) of the asset at the date of disposal.

The effect of the gain or loss on disposal (a non-cash item) from the operating profit is removed by:

- deducting gain on disposal; and
- adding back losses on disposal.

The relevant cash flow is the net cash received from the sale. This is included in cash flows from investing activities as the net cash flows received from the disposal of non-current assets.



**Example:**

A company disposed of an item of equipment for Rs.40,000. The equipment had originally cost Rs.60,000 and the accumulated depreciation charged up to the date of disposal was Rs.32,000.

	Rs.
Cost	60,000
Accumulated depreciation	32,000
Carrying value at date of disposal	28,000
Cash proceeds from sale	40,000
Gain on disposal	12,000

In the statement of cash flows, the gain on disposal of Rs.12,000 is deducted as an adjustment to the operating profit.

The cash proceeds of Rs.40,000 is included as a cash inflow under the heading: 'Cash flows from investing activities'.



**Practice question**

**1**

A company made a loss on the disposal of a company motor vehicle of Rs. 8,000.

The vehicle originally cost Rs. 50,000 and at the date of disposal, accumulated depreciation on the vehicle was Rs. 20,000.

What are the items that should be included for the disposal of the vehicle in the statement of cash flows for the year:

- a) in the adjustments to get from operating profit to cash flow from operations?
- b) under the heading: 'Cash flows from investing activities'?

### 3.3 Accruals based figures - Interest

The accruals concept is applied in accounting.

Interest charge in the income statement is an accrual based figure. It is added back to profit and the actual cash interest paid is deducted further down the cash flow statements.

The final items in the operating cash flows part of a statement of cash flows are the amount of interest paid and the amount of tax paid (see later).

This figure must be calculated as follows:



#### Illustration:

	Rs.
Interest liability at the beginning of the year	X
Interest charge for the year (income statement figure)	X
Total amount of interest payable in the year	<u>X</u>
Interest liability at the end of the year	<u>(X)</u>
Interest paid in the year (cash)	<u>X</u>

Take a few minutes to make sure that you are happy about this. The same approach is used to calculate other figures.

The interest liability at the start of the year and the interest charge during the year is the most the business would pay. If the business had paid nothing it would owe this figure. The difference between this amount and the liability at the end of the year must be the amount that the business has paid.



#### Example: Interest paid

A company had liabilities in its statement of financial position at the beginning and at the end of 2015, as follows:

	Interest (Rs.)
Beginning of 2015	4,000
End of 2015	22,000

During the year, interest charges in the income statement were Rs.22,000.

The interest payment for inclusion in the statement of cash flows can be calculated as follows:

	Rs.
Liability at the start of the year	4,000
Charge for the year	22,000
Total amount payable in the year	<u>26,000</u>
Liability at the end of the year	<u>(3,000)</u>
Cash paid	<u>23,000</u>

Note that this approach would work to find the cash paid in respect of any liability in respect of which expense was recognised in the statement of profit or loss.

It would not matter if you did not know anything about the type of liability as long as you are told that there is a movement and you are given the amount recognised in the statement of profit or loss. For example, instead of the above example being about interest it could be about warranty provision, gratuity, retirement benefit, health insurance, bonus pool, and so on.

### 3.4 Accruals based figures - Taxation

The tax paid is the last figure in the operating cash flow calculation.

There is no adjustment to profit in respect of tax. This is because the profit figure that we start with is profit before tax; therefore tax is not included in it to be adjusted!

However, there is a tax payment and this must be recognised as a cash flow. It is calculated in the same way as shown above.



#### Example: Taxation paid

A company had liabilities in its statement of financial position at the beginning and at the end of 2015, as follows:

	Taxation (Rs.)
Beginning of 2015	53,000
End of 2015	61,000

During the year, taxation on profits was Rs.77,000.

The tax payment (cash flows) for inclusion in the statement of cash flows can be calculated as follows:

	Rs.
Taxation liability at the start of the year	53,000
Charge for the year	77,000
Total amount payable	<u>130,000</u>
Taxation liability at the end of the year	<u>(61,000)</u>
Cash paid	<u>69,000</u>

#### Deferred taxation

A question might include deferred taxation. You have not covered this yet but it can still be dealt with here as its impact on a statement of cash flows at this level is quite straightforward.

A deferred tax balance might be an asset or a liability. Deferred tax liability is more common (in practice and in questions) so this discussion will be about liabilities.

A deferred tax liability is an amount that a company expects to pay in the future. Therefore it has had no cash effect to date.

Any movement on the deferred tax liability will be due to a double entry to tax expense in the profit or loss section of the statement of profit or loss and other comprehensive income. (There are double entries to other comprehensive income and directly to equity but these are outside the scope of your syllabus).

There are two possible courses of action in dealing with deferred tax. Either:

- ignore it entirely and work with numbers that exclude the deferred tax (in effect this was what happened in the example above where there was no information about deferred tax); or
- include it in every tax balance in the working.

The second approach is usually used.



### Example: Deferred tax

A company had liabilities in its statement of financial position at the beginning and at the end of 2015, as follows:

	Taxation (Rs.)	Deferred taxation (Rs.)
Beginning of 2015	53,000	20,000
End of 2015	61,000	30,000

The tax expense for the year in the statement of profit or loss was Rs. 87,000. This was made up of the current tax expense of Rs. 77,000 and the deferred tax of Rs. 10,000.

The tax payment (cash flows) for inclusion in the statement of cash flows can be calculated as follows:

		Rs.
Liability at the start of the year	(53,000 + 20,000)	73,000
Charge for the year	(77,000 + 10,000)	87,000
Total amount payable in the year		<u>160,000</u>
Liability at the end of the year	(61,000 + 30,000)	(91,000)
Cash paid		<u>69,000</u>

### 3.5 Accruals based figures – Dividends

A question might require the calculation of cash paid out as dividends in the year.

This is calculated in the usual way remembering that the dividend charge is a debit in the statement of changes in equity.



#### Illustration:

	<b>Rs.</b>
Dividend liability at the beginning of the year	X
Dividend charge for the year	X
Total amount of dividend payable in the year	<u>X</u>
Dividend liability at the end of the year	<u>(X)</u>
Dividend paid in the year (cash)	<u>X</u>

#### Pakistan

Typically, in Pakistan a company will pay a dividend once a year. Dividend payments in Pakistan must be approved by the members in a general meeting and this usually takes place after the year end. This means that the dividend expensed in any one year is the previous year's dividend (which could not be recognised last year as it had not yet been approved in the general meeting).

Listed companies often pay an interim dividend part way through a year and a final dividend after the year end. The actual dividend payment recognised in any one year would then be that year's interim dividend and the previous year's final dividend (which could not be recognised last year as it had not yet been approved in the general meeting).

A question may tell you that a dividend was declared at just before or just after the year end but the company is not allowed to recognise that dividend until it is approved. Last year's figure is needed.



### Example: Dividend paid

A company had liabilities in its statement of financial position at the beginning and at the end of 2015, as follows:

	Dividends (Rs.)
Beginning of 2015	65,000
End of 2015	71,000

The company had share capital of Rs. 1,000,000.

The directors recommended a dividend of 20% (2014: 18%) on 25<sup>th</sup> December 2015.

The company AGM is held in March each year.

The dividend payment (cash flows) for inclusion in the statement of cash flows can be calculated as follows:

	Rs.
Dividend liability at the start of the year	65,000
Dividend in the year (18% of 1,000,000)	180,000
Total amount payable	245,000
Dividend liability at the end of the year	(71,000)
Cash paid	171,000

### 3.6 Presentation of interest, taxation and dividends cash flows

IAS 7 allows some variations in the way that cash flows for interest and dividends are presented in a statement of cash flows, although the following should be shown separately:

- interest received
- dividends received
- interest paid
- dividends paid.

#### Interest payments

IAS 7 states that there is no consensus about how to treat interest payments by an entity, other than a financial institution such as a bank. Interest payments may be classified as either:

- an operating cash flow, because they are deducted when calculating operating profit before taxation, or
- a financing cash flow, because they are costs of obtaining finance.

In examples of statements of cash flows in the appendix to IAS 7, interest paid is shown as a separate line item within cash flows from operating activities. This approach is therefore used here.

**Interest and dividends received**

Interest received and dividends received may be classified as either:

- an operating cash flow, because they are added when calculating operating profit before taxation, or
- an investing cash flow, because they represent returns on investment.

In examples of statements of cash flows in the appendix to IAS 7, interest received and dividend received are shown as separate items within cash flows from investing activities. This approach is therefore used here.

**Dividends paid**

IAS 7 allows dividend payments to be treated as either:

- a financing cash flow because they are a cost of obtaining financial resources, or
- a component of the cash flows from operating activities, in order to assist users to determine the ability of the entity to pay dividends out of its operating cash flows.

In examples of statements of cash flows in the appendix to IAS 7, dividends paid are shown as a line item within cash flows from financing activities. This approach is therefore used here.

**Taxes on profits**

Cash flows arising from taxation on income should normally be classified as a cash flow from operating activities (unless the tax payments or refunds can be specifically associated with an investing or financing activity).

The examples of statements of cash flows in this chapter therefore show both interest paid and tax paid as cash flow items, to get from the figure for cash generated from operations to the figure for 'net cash from operating activities'.

## 4 INDIRECT METHOD: ADJUSTMENTS FOR WORKING CAPITAL

### Section overview

- Working capital adjustments: Introduction
- Working capital
- Changes in trade and other receivables
- Possible complication: Allowances for doubtful debts
- Changes in inventory
- Changes in trade payables
- Lack of detail

### 4.1 Working capital adjustments: Introduction



#### Definition

Working capital is current assets less current liabilities.

The previous section showed that taxation and interest cash flows can be calculated by using a figure from the statement of profit or loss and adjusting it by the movement on the equivalent balances in the statement of financial position.

This section shows how this approach is extended to identify the cash generated from operations by making adjustments for the movements between the start and end of the year for elements of working capital, namely:

- trade receivables and prepayments;
- inventories; and
- trade payables and accruals.

Assuming that the calculation of the cash flow from operating activities starts with a profit (rather than a loss) the adjustments are as follows:

Balance	Increase in balance from start to the end of the year	Decrease in balance from start to the end of the year
Receivables	Subtract from profit before tax	Add back to profit before tax
Inventory	Subtract from profit before tax	Add back to profit before tax
Payables	Add back to profit before tax	Subtract from profit before tax

These are known as the working capital adjustments and are explained in more detail in the rest of this section.

## 4.2 Working capital

Working capital is made up of the following balances:



### Illustration:

	<b>Rs.</b>
Inventory	X
Trade and other receivables	X
Cash	X
Trade payables	(X)
Working capital	<u>X</u>

Trade and other receivables include any prepayments.

Trade payables include accrued expenses, provided the accrued expenses do not relate to other items dealt with separately in the statement of cash flows, in particular:

- accrued interest charges; and
- taxation payable.

Interest charges and payments for interest are presented separately in the statement of cash flows, and so accrued interest charges should be excluded from the calculation of changes in trade payables and accruals.

Similarly, taxation payable is dealt with separately; therefore taxation payable is excluded from the calculation of working capital changes.

Accrued interest and accrued tax payable must therefore be deducted from the total amount for accruals, and the net accruals (after making these deductions) should be included with trade payables.

### Changes in working capital and the effect on cash flow

When working capital increases, the cash flows from operations are less than the operating profit, by the amount of the increase.

Similarly, when working capital is reduced, the cash flows from operations are more than the operating profit, by the amount of the reduction.

This important point will be explained with several simple examples.

### 4.3 Changes in trade and other receivables

Sales revenue in a period differs from the amount of cash received from sales by the amount of the increase or decrease in receivables during the period.

When trade and other receivables go up during the year, cash flows from operations are less than operating profit by the amount of the increase.

When trade and other receivables go down during the year, cash flows from operations are more than operating profit by the amount of the reduction.

In a statement of cash flows presented using the indirect method, the adjustment for receivables is therefore:

- subtract the increase in receivables during the period (the amount by which closing receivables exceed opening receivables); or
- add the reduction in receivables during the period (the amount by which opening receivables exceed closing receivables).

Prepayments in the opening and closing statement of financial position should be included in the total amount of receivables.



#### Example: trade and other receivables

A company had receivables at the beginning of the year of Rs. 6,000 and at the end of the year receivables were Rs. 9,000.

During the year, sales were Rs. 50,000 in total. Purchases were Rs. 30,000, all paid in cash.

The company holds no inventories. The profit before tax for the year was Rs. 20,000 (Rs. 50,000 – Rs. 30,000).

The cash flow from operations is calculated as follows:

	Rs.
Profit before tax	20,000
Adjustments for increase in receivables (9,000 – 6,000)	(3,000)
	17,000

#### Proof

Cash flow from operations can be calculated as follows:

	Rs.
Receivables at the beginning of the year	6,000
Sales in the year	50,000
	56,000
Receivables at end of the year	(9,000)
Cash received	47,000
Cash paid (purchases)	(30,000)
Cash flow from operations	17,000

#### 4.4 Possible complication: Allowances for doubtful debts

A question might provide information on the allowance for doubtful debts at the start and end of the year.

There are two ways of dealing with this:

- ❑ Adjust the profit for the movement on the allowance as a non-cash item and adjust the profit figure for the movement in receivables using the gross amounts (i.e. the balances before any deduction of the allowance for doubtful debts); or
- ❑ Make no adjustments for the movement on receivables as a non-cash item adjust the profit figure for the movement in receivables using the net amounts (i.e. the balances after the deduction of the allowance for doubtful debts).

##### Example: Allowance for doubtful debts

The following information is available:

	2014 (Rs. m)		2015 (Rs. m)
Receivables	5,000		7,100
Allowance for doubtful debts	(500)		(600)
Net-amount	<u>4,500</u>		<u>6,500</u>
	Rs. m	or	Rs. m
Profit before taxation	10,000		10,000
Adjustments for non- cash items:			
Increase in allowance for doubtful debts	100		–
	<u>10,100</u>		<u>10,000</u>
Increase in receivables:			
Gross amounts: (7,100 – 5,000)	(2,100)		
Net amounts: (6,500 – 4,500)			(2,000)
	<u>8,000</u>		<u>8,000</u>

## 4.5 Changes in inventory

Purchases in a period differ from the cost of sales by the amount of the increase or decrease in inventories during the period.

If all purchases were paid for in cash, this means that cash payments and the cost of sales (and profit) would differ by the amount of the increase or decrease in inventories.

When the value of inventory goes up between the beginning and end of the year, cash flows from operations are less than operating profit by the amount of the increase.

When the value of inventory goes down between the beginning and end of the year, cash flows from operations are more than operating profit by the amount of the reduction.

In a statement of cash flows presented using the indirect method, the adjustment for inventories is therefore:

- ❑ subtract the increase in inventories during the period (the amount by which closing inventory exceeds opening inventory); or
- ❑ add the reduction in inventories during the period (the amount by which opening inventory exceeds closing inventory).



### Example: inventory

A company had inventory at the beginning of the year of Rs. 5,000 and at the end of the year the inventory was valued at Rs. 3,000.

During the year, sales were Rs. 50,000 and there were no receivables at the beginning or end of the year.

Purchases were Rs. 28,000, all paid in cash.

The operating profit for the year was Rs. 20,000, calculated as follows:

	Rs.
Sales	50,000
Opening inventory	5,000
Purchases in the year (all paid in cash)	28,000
	33,000
Closing inventory	(3,000)
Cost of sales	(30,000)
Profit before tax	20,000

**Example (continued)**

	Rs.
Profit before tax	20,000
Adjustments for:	
decrease in inventory (5,000 – 3,000)	2,000
	22,000

**Proof: The cash flow from operations is calculated as follows:**

	Rs.
Cash from sales in the year	50,000
Purchases paid in cash	(28,000)
Cash flow from operations	22,000

#### 4.6 Changes in trade payables

Payments for purchases in a period differ from purchases by the amount of increase or decrease in trade payables during the period.

When trade payables go up between the beginning and end of the year, cash flows from operations are more than operating profit by the amount of the increase.

When trade payables go down between the beginning and end of the year, cash flows from operations are less than operating profit by the amount of the reduction.

In a statement of cash flows presented using the indirect method, the adjustment for trade payables is therefore:

- add the increase in trade payables during the period (the amount by which closing trade payables exceed opening trade payables); or
- subtract the reduction in trade payables during the period (the amount by which opening trade payables exceed closing trade payables).

Accruals in the opening and closing statement of financial position should be included in the total amount of trade payables.

However, deduct interest payable and tax payable from opening and closing payables, if the total for payables includes these items.

**Example: trade payables**

A company had no inventory and no receivables at the beginning and end of the year. All its sales are for cash, and sales in the year were Rs. 50,000.

Its purchases are all on credit. During the year, its purchases were Rs. 30,000.

Trade payables at the beginning of the year were Rs. 4,000 and trade payables at the end of the year were Rs. 6,500.

The operating profit for the year was Rs. 20,000 (Rs. 50,000 – Rs. 30,000)

	Rs.
Profit before tax	20,000
Adjustments for:	
Increase in payables (6,500 – 4,000)	2,500
	22,500

**Proof: The cash flow from operations is calculated as follows:**

	Rs.
Trade payables at the beginning of the year	4,000
Purchases in the year	30,000
	34,000
Trade payables at the end of the year	(6,500)
Cash paid to suppliers	27,500
Cash from sales	(50,000)
Cash flow from operations	22,500

The cash flow is Rs. 2,500 more than the operating profit, because trade payables were increased during the year by Rs. 2,500.

**Example:**

A company made an operating profit before tax of Rs. 16,000 in the year just ended.

Depreciation charges were Rs. 15,000.

There was a gain of Rs. 5,000 on disposals of non-current assets and there were no interest charges. Values of working capital items at the beginning and end of the year were:

	Receivables	Inventory	Trade payables
Beginning of the year	Rs. 9,000	Rs. 3,000	Rs. 4,000
End of the year	Rs. 6,000	Rs. 5,000	Rs. 6,500

Taxation paid was Rs. 4,800.

**Required**

Calculate the amount of cash generated from operations, as it would be shown in a statement of cash flows using the indirect method.

**Answer**

	Rs.	Rs.
<b>Cash flows from operating activities</b>		
Profit before taxation	16,000	
Adjustments for:		
Depreciation and amortisation charges	15,000	
Gains on disposal of non-current assets	(5,000)	
	<hr/>	
	26,000	
Decrease in trade and other receivables	3,000	
Increase in inventories	(2,000)	
Increase in trade payables	2,500	
	<hr/>	
Cash generated from operations	29,500	
Taxation paid (tax on profits)	(4,800)	
	<hr/>	
Net cash flow from operating activities		24,700

**Practice question****2**

During 2015, a company made a profit before taxation of Rs. 60,000. Depreciation charges were Rs. 25,000 and there was a gain on the disposal of a machine of Rs. 14,000.

Interest charges and payments of interest in the year were the same amount, Rs. 10,000.

Taxation payments were Rs. 17,000.

Values of working capital items at the beginning and end of the year were:

	<b>Receivables</b>	<b>Inventory</b>	<b>Trade payables</b>
<b>Beginning of the year</b>	Rs. 32,000	Rs. 49,000	Rs. 17,000
<b>End of the year</b>	Rs. 27,000	Rs. 53,000	Rs. 11,000

Calculate the net cash from operating activities, as it would be shown in a statement of cash flows (indirect method).

#### 4.7 Lack of detail

A question might not provide all the detail needed to split out working capital into all of its component parts. If this is the case the adjustment must be made using whatever totals are available in the question.



##### Example:

A company made an operating profit before tax of Rs. 16,000 in the year just ended.

Depreciation charges were Rs. 15,000.

There was a gain of Rs. 5,000 on disposals of non-current assets and there were no interest charges. Values of working capital items at the beginning and end of the year were:

	Current assets	Trade payables
Beginning of the year	Rs. 12,000	Rs. 4,000
End of the year	Rs. 11,000	Rs. 6,500

Taxation paid was Rs. 4,800.

##### Required

Calculate the amount of cash generated from operations, as it would be shown in a statement of cash flows using the indirect method.



##### Answer

	Rs.	Rs.
<b>Cash flows from operating activities</b>		
Profit before taxation	16,000	
Adjustments for:		
Depreciation and amortisation charges	15,000	
Gains on disposal of non-current assets	(5,000)	
	<u>26,000</u>	
Decrease in current assets	1,000	
Increase in trade payables	2,500	
Cash generated from operations	<u>29,500</u>	
Taxation paid (tax on profits)	(4,800)	
Net cash flow from operating activities		<u>24,700</u>

## 5 CASH FLOWS FROM OPERATING ACTIVITIES: THE DIRECT METHOD

### Section overview

- Cash from sales
- Cash paid for materials
- Cash paid for wages and salaries
- Cash paid for other expenses

### 5.1 Cash from sales

The format for the direct method of presenting a statement of cash flows is as follows:



#### Illustration:

<b>Statement of cash flows: direct method</b>	<b>Rs.</b>
<b>Cash flows from operating activities</b>	
Cash receipts from customers	348,800
Cash payments to suppliers	(70,000)
Cash payments to employees	(150,000)
Cash paid for other operating expenses	(30,000)
Cash generated from operations	<u>98,800</u>
Taxation paid (tax on profits)	(21,000)
Interest charges paid	(2,500)
Net cash flow from operating activities	<u>75,300</u>

The task is therefore to establish the amounts for cash receipts and cash payments. In an examination, you might be expected to calculate any of these cash flows from figures in the opening and closing statements of financial position, and the statement of profit or loss.

The cash receipts from sales during a financial period can be calculated as follows:

**Illustration:**

	<b>Rs.</b>
Trade receivables at the beginning of the year	X
Sales in the year	X
	X
Trade receivables at the end of the year	(X)
Cash from sales during the year	X

A T account could also be used to calculate the cash receipt

Receivables			
Balance b/f	X		
Sales	X	Cash (balancing figure)	X
		Balance c/f	X
	X		X

## 5.2 Cash paid for materials

To calculate the amount of cash paid to suppliers, you might need to calculate first the amount of material purchases during the period.

**Illustration: Calculation of purchases in the year**

	<b>Rs.</b>
Closing inventory at the end of the year	X
Cost of sales	X
	X
Opening inventory at the beginning of the year	(X)
Purchases in the year	X

Having calculated purchases from the cost of sales, the amount of cash payments for purchases may be calculated from purchases and opening and closing trade payables.

**Illustration:**

	<b>Rs.</b>
Trade payables at the beginning of the year	X
Purchases in the year (as above)	X
	X
Trade payables at the end of the year	(X)
Cash paid for materials	X
	X

A T account could also be used to calculate the cash paid

Payables			
		<b>Balance b/f</b>	X
<b>Cash (balancing figure)</b>	X	<b>Purchases</b>	X
<b>Balance c/f</b>	X		
	X		X

Note that if the business had paid for goods in advance at the start or end of the year they would have an opening or closing receivable but this situation would be quite unusual.

### 5.3 Cash paid for wages and salaries

Cash payments for wages and salaries can be calculated in a similar way.

**Illustration:**

	<b>Rs.</b>
Accrued wages and salaries at the beginning of the year	X
Wages and salaries expenses in the year	X
	X
Accrued wages and salaries at the end of the year	(X)
Cash paid for wages and salaries	X
	X

A T account could also be used to calculate the cash paid

Payables			
		<b>Balance b/f</b>	X
<b>Cash (balancing figure)</b>	X	<b>Purchases</b>	X
<b>Balance c/f</b>	X		
	X		X

If wages and salaries had been paid in advance the business would have a receivable and the workings would change to the following.

**Illustration:**

	<b>Rs.</b>
Wages and salaries paid in advance at the beginning of the year	(X)
Wages and salaries expenses in the year	X
	X
Wages and salaries paid in advance at the end of the year	X
Cash paid for wages and salaries	X
	X

A T account could also be used to calculate the cash paid

Payables			
<b>Balance b/f</b>	X		
<b>Cash (balancing figure)</b>	X	<b>Purchases</b>	X
		<b>Balance c/f</b>	X
	X		X

#### 5.4 Cash paid for other expenses

Other expenses in the statement of profit or loss usually include depreciation charges, which are not cash flows. Depreciation charges should therefore be excluded from other expenses when calculating cash payments.

Cash payments for other expenses can be calculated as follows.

**Illustration:**

	<b>Rs.</b>
Payables for other expenses at the beginning of the year	X
Other expenses in the year, excluding depreciation and amortisation	X
	X
Payables for other expenses at the end of the year	(X)
Cash paid for other expenses	X
	X

Payables for other expenses should exclude accrued wages and salaries, accrued interest charges and taxation payable.

**Example:**

The following information has been extracted from the financial statements of Hopper Company for the year ended 31 December 2015.

	Rs.
Sales	1,280,000
Cost of sales	(400,000)
Gross profit	<u>880,000</u>
Wages and salaries	(290,000)
Other expenses (including depreciation Rs. 25,000)	(350,000)
	<u>240,000</u>
Interest charges	(50,000)
Profit before tax	<u>190,000</u>
Tax on profit	(40,000)
Profit after tax	<u><u>150,000</u></u>

Extracts from the statement of financial position:

	At 1 January 2015	At 31 December 2015
	Rs.	Rs.
Trade receivables	233,000	219,000
Inventory	118,000	124,000
Trade payables	102,000	125,000
Accrued wages and salaries	8,000	5,000
Accrued interest charges	30,000	45,000
Tax payable	52,000	43,000

**Required**

Present the cash flows from operating activities as they would be presented in a statement of cash flows using:

- a) the direct method; and
- b) the indirect method.

**Answer: Direct method**

<b>Statement of cash flows: direct method</b>	<b>Rs.</b>
Cash flows from operating activities	
Cash receipts from customers(W1)	1,294,000
Cash payments to suppliers(W3)	(383,000)
Cash payments to employees(W4)	(293,000)
Cash paid for other operating expenses	(325,000)
Cash generated from operations	293,000
Taxation paid (tax on profits)(W5)	(49,000)
Interest charges paid(W5)	(35,000)
Net cash flow from operating activities	209,000

**Workings**

<b>(W1) Cash from sales</b>	<b>Rs.</b>
Trade receivables at 1 January 2015	233,000
Sales in the year	1,280,000
	1,513,000
Trade receivables at 31 December 2015	(219,000)
Cash from sales during the year	1,294,000

<b>(W2) Purchases</b>	<b>Rs.</b>
Closing inventory at 31 December 2015	124,000
Cost of sales	400,000
	524,000
Opening inventory at 1 January 2015	(118,000)
Purchases in the year	406,000

<b>(W3) Cash paid for materials supplies</b>	<b>Rs.</b>
Trade payables at 1 January 2015	102,000
Purchases in the year (W2)	406,000
	508,000
Trade payables at 31 December 2015	(125,000)
Cash paid for materials	383,000

**Answer: Direct method (continued)**

<b>(W4) Cash paid for wages and salaries</b>	Rs.
Accrued wages and salaries at 1 January 2015	8,000
Wages and salaries expenses in the year	290,000
	<u>298,000</u>
Accrued wages and salaries at 31 December 2015	(5,000)
Cash paid for wages and salaries	<u>293,000</u>

<b>(W5) Interest and tax payments</b>	<b>Tax</b>	<b>Interest</b>
	Rs.	Rs.
Liability at the beginning of the year	52,000	30,000
Taxation charge/interest charge for the year	40,000	50,000
	<u>92,000</u>	<u>80,000</u>
Liability at the end of the year	(43,000)	(45,000)
Tax paid/interest paid during the year	<u>49,000</u>	<u>35,000</u>

**Answer: Indirect method**

<b>Statement of cash flows: indirect method</b>	Rs.
<b>Cash flows from operating activities</b>	
Profit before taxation	190,000
Adjustments for:	
Depreciation and amortisation charges	25,000
Interest charges in the statement of profit or loss	50,000
	<u>265,000</u>
Decrease in receivables (233,000 - 219,000)	14,000
Increase in inventories (124,000 - 118,000)	(6,000)
Increase in trade payables	20,000
(125,000 + 5,000) - (102,000 + 8,000)	
Cash generated from operations	<u>293,000</u>
Taxation paid	(49,000)
Interest charges paid	(35,000)
Net cash flow from operating activities	<u>209,000</u>

## 6 CASH FLOWS FROM INVESTING ACTIVITIES

### Section overview

- Cash paid for the purchase of property, plant and equipment
- Cash from disposals of property, plant and equipment
- Cash paid for the purchase of investments and cash received from the sale of investments
- Non-cash purchases

### 6.1 Cash paid for the purchase of property plant and equipment

This is the second part of a statement of cash flows, after cash flows from operating activities.

The most important items in this part of the statement are cash paid to purchase non-current assets and cash received from the sale or disposal of non-current assets but it also includes interest received and dividends received on investments.

It is useful to remember the following relationship:



#### Illustration: Movement on non-current assets

	<b>Rs.</b>
Carrying amount at the start of the year	X
Depreciation	(X)
Disposals	(X)
Additions	X
Revaluation	X/(X)
Carrying amount at the end of the year	<u>X</u>

### When there are no disposals or revaluations during the year

When there are no disposals or revaluations of non-current assets during the year, purchases of non-current assets (normally assumed to be the amount of cash paid for these purchases) may be calculated as follows:



#### Illustration:

Using cost:	<b>Rs.</b>
Non-current assets at the beginning of the year at cost	X
Additions to non-current assets (balancing figure)	X
Non-current assets at the end of the year at cost	<u>X</u>
Alternatively carrying amount (NBV) can be used	<b>Rs.</b>
Non-current assets at the beginning of the year at NBV	X
Depreciation	<u>(X)</u>
	X
Additions to non-current assets (balancing figure)	<u>X</u>
Non-current assets at the end of the year at NBV	<u>(X)</u>



#### Example: Cash paid for property, plant and equipment

The plant and equipment of PM Company at the beginning and the end of its financial year were as follows:

	At cost	Accumulated depreciation	Net book value
	Rs.	Rs.	Rs.
Beginning of the year	180,000	(30,000)	150,000
End of the year	240,000	(50,000)	190,000

There were no disposals of plant and equipment during the year.

The cash paid for plant and equipment in the year (additions) may be calculated in either of the following ways.

	Cost	or	NBV
Balance at the start of the year	180,000		150,000
Less: Depreciation charge for the year (50,000 – 30,000)			<u>(20,000)</u>
Additions (balancing figure)			130,000
	<u>60,000</u>		<u>60,000</u>
Balance at the start of the year	<u>240,000</u>		<u>190,000</u>

Note that in the above example it is assumed that the purchases have been made for cash. This might not be the case. If the purchases are on credit the figure must be adjusted for any amounts outstanding at the year end.



**Example: Cash paid for property, plant and equipment**

PM company has purchased various items of property, plant and equipment on credit during the year. The total purchased was Rs. 60,000.

The statements of financial position of PM company at the beginning and end of 2015 include the following information:

Payables:	2014 (Rs. m)	2015 (Rs. m)
Suppliers of non-current assets	4,000	12,000

The cash paid to buy property, plant and equipment in the year can be calculated as follows:

	Rs. m
Additions	60,000
Less: increase in payables that relate to these items	<u>(8,000)</u>
Cash paid in the year	<u>52,000</u>

This can be thought of as the payment of the Rs. 4,000 owed at the start and a payment of Rs. 48,000 towards this year's purchases.

If the payables had decreased the movement would be added to the additions figure to find the cash outflow.



**Example: Cash paid for property, plant and equipment**

PM company has purchased various items of property, plant and equipment on credit during the year. The total purchased was Rs. 60,000.

The statements of financial position of PM company at the beginning and end of 2015 include the following information:

Payables:	2014 (Rs. m)	2015 (Rs. m)
Suppliers of non-current assets	14,000	4,000

The cash paid to buy property, plant and equipment in the year can be calculated as follows:

	Rs. m
Additions	60,000
Plus: decrease in payables that relate to these items	<u>10,000</u>
Cash paid in the year	<u>70,000</u>

This can be thought of as the payment of the Rs. 14,000 owed at the start and a payment of Rs. 56,000 towards this year's purchases.

### When there are disposals during the year

When there are disposals of non-current assets during the year, the purchases of non-current assets may be calculated as follows:



#### Illustration: Movement on non-current assets

	<b>Rs.</b>
Assets at cost at the beginning of the year	X
Disposals during the year (cost)	(X)
	<hr/> X
Additions to non-current assets (balancing figure)	X
Assets at cost at the end of the year	<hr/> X
Alternatively carrying amount (NBV) can be used	<b>Rs.</b>
Non-current assets at the beginning of the year at NBV	X
Depreciation	(X)
Disposals during the year (NBV)	(X)
	<hr/> X
Additions to non-current assets (balancing figure)	X
Non-current assets at the end of the year at NBV	<hr/> (X)



#### Example: Cash paid for property, plant and equipment with disposals

The motor vehicles of PM Company at the beginning and the end of its financial year were as follows:

	At cost	Accumulated depreciation	Carrying amount
	Rs.	Rs.	Rs.
Beginning of the year	150,000	(105,000)	45,000
End of the year	180,000	(88,000)	92,000

During the year a vehicle was disposed of for a gain of Rs. 3,000. The original cost of this asset was Rs. 60,000. Accumulated depreciation on the asset was Rs. 45,000.

Additions may be calculated as follows:

	Cost	NBV
Balance at the start of the year	150,000	45,000
Disposals during the year:		
At cost	(60,000)	
At carrying amount: (60,000 – 45,000)		(15,000)
Depreciation (88,000 – (105,000 – 45,000))		(28,000)
	<hr/> 90,000	2,000
Additions (balancing figure)	90,000	90,000
Balance at the end of the year	<hr/> 180,000	<hr/> 92,000

### When there are revaluations during the year

When there are revaluations of non-current assets during the year, the purchases of non-current assets should be calculated as follows.



#### Illustration: Movement on non-current assets

	<b>Rs.</b>
At cost or valuation, at the beginning of the year	X
Disposals during the year (cost)	(X)
Upward/(downward) revaluation during the year	X/(X)
	X
Additions to non-current assets (balancing figure)	X
At cost or valuation, at the end of the year	X
Alternatively carrying amount (NBV) can be used	<b>Rs.</b>
Non-current assets at the beginning of the year at NBV	X
Depreciation	(X)
Disposals during the year (NBV)	(X)
Upward/(downward) revaluation during the year	X/(X)
	X
Additions to non-current assets (balancing figure)	X
Non-current assets at the end of the year at NBV	(X)



#### Example:

The statements of financial position of Grand Company at the beginning and end of 2015 include the following information:

Property, plant and equipment	2014	2015
	Rs.	Rs.
At cost/re-valued amount	1,400,000	1,900,000
Accumulated depreciation	350,000	375,000
Carrying value	<u>1,050,000</u>	<u>1,525,000</u>

During the year, some property was revalued upwards by Rs. 200,000. An item of equipment was disposed of during the year at a profit of Rs. 25,000. This equipment had an original cost of Rs. 260,000 and accumulated depreciation of Rs. 240,000 at the date of disposal.

Depreciation charged in the year was Rs. 265,000.

**Example (continued)**

Additions may be calculated as follows:

	Cost	NBV
Balance at the start of the year	1,400,000	1,050,000
Disposals during the year:		
At cost	(260,000)	
At carrying amount: (260,000 – 240,000)		(20,000)
Depreciation		(265,000)
Revaluation	200,000	200,000
	1,340,000	965,000
Additions (balancing figure)	560,000	560,000
Balance at the end of the year	1,900,000	1,525,000

The revaluation recognised in the year can be found by comparing the opening and closing balances on the revaluation surplus account. There might also be revaluation double entry recognised as a gain or loss in other comprehensive income. You need to total revaluation recognised in the year so you may have to add or net both amounts.

Revaluation accounting is explained in detail in chapter 7.

**When there are other additions during the year**

The above example showed the need to take revolution into account when reconciling the opening and closing balances on non-current assets so as to find the additions figure as a balancing amount.

This applies to other additions too:

- ❑ Transfers from capital work in progress
  - These are assets constructed by a company for its own use.
  - During the course of construction costs are accumulated in a capital work in progress account and these are transferred into the relevant category of non-current asset on completion.
  - The cash consequence of capital work in progress is estimated as a separate exercise.
  - Transfers into the relevant category of non-current asset on completion show as an addition and so must be taken into account when trying to estimate the cash additions.
- ❑ Assets acquired under finance leases. (finance leases are covered in detail in chapter 9).
  - A finance lease is capitalised on the statement of financial position as an assets and as a liability.
  - The asset side of the entry will show as an addition into non-current assets and so must be taken into account when trying to estimate the cash additions.
  - The liability is a form of loan. Movements on the liability represent new amounts borrowed (additions to non-current assets) and repayments of capital.

**Example:**

The statements of financial position of Grand Company at the beginning and end of 2015 include the following information:

<b>Property, plant and equipment</b>	<b>2014</b>	<b>2015</b>
	Rs.	Rs.
At cost/re-valued amount	1,400,000	1,900,000
Accumulated depreciation	350,000	375,000
Carrying value	1,050,000	1,525,000
 Capital work in progress	 600,000	 620,000
 Finance lease liability	 300,000	 410,000

During the year:

Property was revalued upwards by Rs. 200,000.

An item of equipment was disposed of at a profit of Rs. 25,000. This equipment had an original cost of Rs. 260,000 and accumulated depreciation of Rs. 240,000 at the date of disposal.

Depreciation charged in the year was Rs. 265,000.

The company capitalised Rs. 200,000 as capital work in progress and repaid Rs. 50,000 of the finance lease loan.

**Example (continued)**

Additions may be calculated as follows:

	Cost	NBV
Balance at the start of the year	1,400,000	1,050,000
Disposals during the year:		
At cost	(260,000)	
At carrying amount: (260,000 – 240,000)		(20,000)
Depreciation		(265,000)
Revaluation	200,000	200,000
Additions – new assets under finance leases (W)	160,000	160,000
Additions – Transfer from capital WIP (W)	180,000	180,000
	1,680,000	1,305,000
Additions (balancing figure)	220,000	220,000
Balance at the end of the year	1,900,000	1,525,000

**Workings**

Additions – new assets under finance leases (W)	
Liability at the start of the year	300,000
Less: repayments	(50,000)
	250,000
New loan – other side of entry to property, plant and equipment (balancing figure)	160,000
	410,000
Capital work in progress	
Balance at the start of the year	600,000
New WIP capitalised	200,000
	800,000
Transfer to property, plant and equipment (balancing figure)	(180,000)
Balance at the end of the year	620,000

## 6.2 Cash from disposals of property plant and equipment

A statement of cash flows should include the net cash received from any disposals of non-current assets during the period.

This might have to be calculated from the gain or loss on disposal and the carrying amount of the asset at the time of its disposal.



### Illustration: Disposal of property, plant and equipment

	Rs.
At cost (or re-valued amount at the time of disposal)	X
Accumulated depreciation, at the time of disposal	(X)
Net book value/carrying amount at the time of disposal	<u>X</u>
Gain or (loss) on disposal	X
Net disposal value (= <b>assumed cash flow</b> )	<u>X</u>

If there is a gain on disposal, the net cash from the disposal is more than the net book value.

If there is a loss on disposal the net cash from the disposal is less than the net book value.



### Example:

During an accounting period, an entity disposed of some equipment and made a gain on disposal of Rs. 6,000.

The equipment originally cost Rs. 70,000 and at the time of its disposal, the accumulated depreciation on the equipment was Rs. 56,000.

What was the amount of cash obtained from the disposal of the asset?

Disposal of equipment	Rs.
At cost	70,000
Accumulated depreciation, at the time of disposal	(56,000)
Net book value/carrying amount at the time of disposal	<u>14,000</u>
Gain on disposal	6,000
Net disposal value (assumed cash flow)	<u>20,000</u>

This cash flow would be included in the cash flows from investing activities.

Note that in the above example it is assumed that the cash received for the disposal has been received. This might not be the case. If the disposal was on credit the figure must be adjusted for any amounts outstanding at the year end.

**Practice question****3**

At 1 January 2015, the property, plant and equipment in the statement of financial position of NC Company amounted to Rs. 329,000 at cost or valuation.

At the end of the year, the property, plant and equipment was Rs. 381,000 at cost or valuation.

During the year, a non-current asset that cost Rs. 40,000 (and has not been re-valued) was disposed of at a loss of Rs. 4,000. The accumulated depreciation on this asset at the time of disposal was Rs. 21,000.

Another non-current asset was re-valued upwards during the year from Rs. 67,000 (cost) to Rs. 102,000.

Calculate the following amounts, for inclusion in the cash flows from investing activities section of the company's statement of cash flows for 2015:

- a) Purchases of property, plant and equipment
- b) Proceeds from the sale of non-current assets

### 6.3 Cash paid for the purchase of investments and cash received from the sale of investments

A statement of cash flows should include the net cash paid to buy investments in the period and the cash received from the sale of investment in the period.

It is useful to remember the following relationship:



#### Illustration: Movement on investments

	Rs.
Carrying amount at the start of the year	X
Disposals	(X)
Additions	X
Revaluation	X/(X)
Carrying amount at the end of the year	<u>X</u>

The issues to be considered in calculating cash paid for investments or cash received on the sale of investments are very similar to those for the purchase and sale of property, plant and equipment except for the absence of depreciation.



#### Example: Cash paid for investments

The statements of financial position of Grand Company at the beginning and end of 2015 include the following information:

	2014 (Rs. m)	2015 (Rs. m)
Non-current asset investments	1,000	1,500

#### Additional information:

The investments were revalued upwards during the year. A revaluation gain of Rs. 150m has been recognised.

Investments sold for Rs. 250m resulted in a profit on the sale (measured as the difference between sale proceeds and carrying amount at the date of sale) of Rs. 50m

The cash paid to buy investments in the period can be calculated as a balancing figure as follows:

	Rs. m
Investments at the start of the year (given)	1,000
Disposal (carrying amount of investments sold = Rs. 250m - Rs. 50m)	(200)
Revaluation gains (given)	150
	<u>950</u>
Additions (as balancing figure):	550
Investments at the end of the year (given)	<u>1,500</u>

## 6.4 Non-cash purchases

IAS 7 states that investing and financing transactions that do not require the use of cash must be excluded from the statement of cash flows, but that details of these transactions should be disclosed somewhere in the financial statements, possibly as a note to the financial statements.

An example of a non-cash transaction is the acquisition of non-current assets under a finance lease arrangement. The assets are included in the financial statements at cost, but the lessee has not paid the purchase price.

IAS 7 therefore suggests that there should be a disclosure, in a note to the financial statements, of the total amount of property, plant and equipment acquired during the period, and the cash payments that were made to acquire them. These two amounts are different, because some of the non-current assets might have been acquired under finance lease arrangements.



### Illustration

An example of a note to the financial statements is as follows.

During the period, the company acquired property, plant and equipment with an aggregate cost of Rs. 250,000, of which Rs. 60,000 was acquired by means of finance leases. Cash payments of Rs. 190,000 were made to purchase property, plant and equipment.

In this example, Rs. 190,000 would appear as a cash outflow in the statement of cash flows in the section for cash flows from investing activities for the period.

- ❑ The Rs. 190,000 is the amount of cash actually paid for purchases of property, plant and equipment in the period.
- ❑ The cash payments under the terms of the finance leases are not included in this part of the statement of cash flows. The treatment of finance lease payments is explained later.

## 7 CASH FLOWS FROM FINANCING ACTIVITIES

### Section overview

- Examples of cash flows from financing activities
- Cash from new share issues
- Cash from new loans/cash used to repay loans
- Dividend payments to equity shareholders
- Repayments on finance leases

### 7.1 Examples of cash flows from financing activities

Examples of cash flows from financing activities are listed below:

Cash payments	Cash receipts
Cash payments to redeem/buy back shares	Cash proceeds from issuing shares
Cash payments to repay a loan or redeem bonds	Cash proceeds from a loan or issue of bonds
Cash payments to a lessor under a finance lease agreement that represent a reduction in the remaining finance lease obligation (= a reduction in the creditors for finance leases)	

As explained earlier, payments of dividends are also usually included within cash flows from financing activities, in this part of the statement of cash flows. (Some entities may also include interest payments in this section, instead of including them in the section for cash flows from operating activities.)

## 7.2 Cash from new share issues

The cash raised from new share issues can be established by comparing the equity share capital and the share premium in the statements of financial position at the beginning and the end of the year.



### Illustration:

	<b>Rs.</b>
Share capital + Share premium at the end of the year	X
Share capital + Share premium at the beginning of the year	X
Cash obtained from issuing new shares in the year	<u>X</u>



### Example:

The statements of financial position of Company P at 1 January and 31 December included the following items:

	<b>1 January 2015</b>	<b>31 December 2015</b>
	Rs.	Rs.
Equity shares of Rs.1 each	600,000	750,000
Share premium	800,000	1,100,000

The cash obtained from issuing shares during the year is calculated as follows.

	<b>Rs.</b>
Share capital + Share premium at the end of 2015	1,850,000
Share capital + Share premium at the beginning of 2015	<u>(1,400,000)</u>
Cash obtained from issuing new shares in 2015	<u>450,000</u>

The above example assumes that the only cause of movement on the share capital and share premium account was an issue of shares for cash. A question may provide information about a non-cash movement (e.g a bonus issue or an issue of shares in exchange for shares in another company). All non-cash movements would need to be taken into account when calculating the cash movement.

**Example:**

The statements of financial position of Company P at 1 January and 31 December included the following items:

	<b>1 January 2015</b>	<b>31 December 2015</b>
	Rs.	Rs.
Equity shares of Rs.1 each	600,000	750,000
Share premium	800,000	1,100,000

There was a 1 for 6 bonus issue during the year funded out of retained earnings. The bonus issue was followed later in the year by a rights issue to raise cash for the purchase of new plan.

(The information about the bonus issue means that for every 6 shares held at the start of the year one new share was issued. Therefore, the share capital changed from Rs. 600,000 to Rs. 700,000. The double entry to achieve this was Dr Retained earnings and Cr Share capital).

The cash obtained from issuing shares during the year is calculated as follows.

	Rs.
Share capital + Share premium at the end of 2015	1,850,000
Share capital + Share premium at the beginning of 2015	(1,400,000)
Bonus issue ( $600,000 \times \frac{7}{6}$ )	(100,000)
Cash obtained from issuing new shares in 2015	<u>350,000</u>

If a bonus issue is funded out of share premium it can be ignored because the balances on the two accounts are added together so the total would not be affected.

### 7.3 Cash from new loans/cash used to repay loans

Cash from new loans or cash paid to redeem loans in the year can be calculated simply by looking at the difference between the liabilities for loans and bonds at the beginning and the end of the year.

- ❑ An increase in loans or bonds means there has been an inflow of cash.
- ❑ A reduction in loans or bonds means there has been a payment (outflow) of cash.

Remember to add any loans, loan notes or bonds repayable within one year (current liability) to the loans, loan notes or bonds repayable after more than one year (non-current liability) to get the total figure for loans, loan notes or bonds.



#### Illustration:

	<b>Rs.</b>
Loans at end of year (current and non-current liabilities)	X
Loans at beginning of year (current and non-current liabilities)	X
Cash inflow or outflow	X

**Note:** The same calculation can be applied to bonds or loan notes that the company might have issued. Bonds and loan notes are long-term debt.



#### Example:

The statements of financial position of Company Q at 1 January and 31 December included the following items:

	<b>1 January 2015</b>	<b>31 December 2015</b>
	Rs.	Rs.
Loans repayable within 12 months	760,000	400,000
Loans repayable after 12 months	1,400,000	1,650,000

The cash flows relating to loans during the year are calculated as follows.

	<b>Rs.</b>
Loans outstanding at the end of 2015	2,050,000
Loans outstanding at the beginning of 2015	2,160,000
= Net loan repayments during the year (= cash outflow)	110,000

## 7.4 Dividend payments to equity shareholders

These should be the final dividend payment from the previous year and the interim dividend payment for the current year. The dividend payments during the year are shown in the statement of changes in equity (SOCIE).

You might be expected to calculate dividend payments from figures for retained earnings and the profit after tax for the year.

If there have been no transfers to the retained earnings reserve from the revaluation reserve in the year, the equity dividend payments can be calculated as follows:



### Illustration:

	Rs.
Retained earnings reserve at the beginning of the year	X
Profit for the year after tax	X
Increase in the retained earnings reserve	<u>X</u>
Retained earnings reserve at the end of the year	(X)
Equity dividend payments	<u>X</u>



### Example:

From the following information, calculate the cash flows from investing activities for Company X in 2015.

	Beginning of 2015	End of 2015
	Rs.	Rs.
Share capital (ordinary shares)	400,000	500,000
Share premium	275,000	615,000
Retained earnings	<u>390,000</u>	<u>570,000</u>
	1,065,000	1,685,000
Loans repayable after more than 12 months	600,000	520,000
Loans repayable within 12 months or less	80,000	55,000

The company made a profit of Rs.420,000 for the year after taxation.

Required

Calculate for 2015, for inclusion in the statement of cash flows:

- the cash from issuing new shares
- the cash flows received or paid for loans
- the payment of dividend to ordinary shareholders.

**Answer****Workings**

<b>Proceeds from new issue of shares</b>	<b>Rs.</b>
Share capital and share premium:	
At the end of the year (500,000 + 615,000)	1,115,000
At the beginning of the year (400,000 + 275,000)	675,000
<b>Proceeds from new issue of shares during the year</b>	<u>440,000</u>

<b>Repayment of loans</b>	<b>Rs.</b>
Loans repayable:	
At the end of the year (520,000 + 55,000)	575,000
At the beginning of the year (600,000 + 80,000)	680,000
<b>Repayment of loans during the year</b>	<u>105,000</u>

<b>Payment of dividends</b>	<b>Rs.</b>
Retained earnings at the beginning of the year	390,000
Profit after taxation for the year	420,000
	<u>810,000</u>
Retained earnings at the end of the year	570,000
<b>Dividends paid during the year</b>	<u>240,000</u>

Cash flows from financing activities can now be presented as follows.

<b>Cash flows from financing activities</b>	<b>Rs.</b>	<b>Rs.</b>
Proceeds from issue of shares	440,000	
Repayment of loans	(105,000)	
Dividends paid to shareholders	(240,000)	
<b>Net cash from financing activities</b>	<u>95,000</u>	

### 7.5 Repayments on finance leases

When non-current assets are acquired under a finance lease, the lessee makes payments under the lease agreement. For accounting purposes, payments under finance leases are treated:

- partly as interest payments, and
- partly as repayment of the lease finance.

For the purposes of the statement of cash flows:

- The interest element in the lease payments is treated as an interest payment. It is included either as a cash flow from operating activities or a cash flow from financing activities
- The repayment of the lease liability is treated as a repayment of a debt, and is included as a cash flow from financing activities.

If interest payments are treated as a cash flow from financing activities, the full amount of lease payments is included in this part of the statement of cash flows.

**Practice question****4**

The following financial statements relate to KK Ltd for the year ended 31 December 2015.

<b>Statements of financial position</b>	<b>2015</b>	<b>2014</b>
	<b>Rs. m</b>	<b>Rs. m</b>
<b>Non-current assets</b>		
Property, plant and equipment	272	196
Investments	80	20
Intangible assets	3	4
	<u>355</u>	<u>220</u>
<b>Current assets</b>		
inventories	140	155
Receivables	130	110
Cash at bank	34	3
	<u>304</u>	<u>268</u>
	<u>659</u>	<u>488</u>
<b>Equity and liabilities</b>		
Share capital	132	100
Share premium account	45	35
Accumulated profits	153	99
	<u>330</u>	<u>234</u>
Non-current liabilities	80	90
Current liabilities	249	164
	<u>659</u>	<u>488</u>
<b>Statement of profit or loss</b>	<b>2015</b>	
	<b>Rs. m</b>	
Revenue	335	
Cost of sales	(177)	
Gross profit	<u>158</u>	
Distribution costs	(31)	
Administrative expenses	(27)	
Operating profit	<u>100</u>	
Interest expense	(7)	
Interest income	3	
Profit before tax	<u>96</u>	
Taxation	(22)	
Profit for the financial year	<u>74</u>	

**Practice question (continued)****4**

Further information:

**a) Property, plant and equipment**

	Rs. m
Carrying amount at 01.01.2015	196
<b>Additions</b>	
finance leases	28
purchases at cost	104
Disposals at carrying amount	(19)
Depreciation for the year	(37)
Carrying amount at 31.12.2015	272

The disposals realised Rs. 21,000,000.

**b) All of the interest due on the investments for the year ending 31.12.2015 had been received and there was no interest due on 31.12.2014.****c) The intangible asset is development expenditure capitalised in accordance with IAS 38. It is being amortised over its useful life.****d) Equity**

	Share capital Rs. m	Share premium Rs. m	Accumulated profits Rs. m
Balance at start of the year	100	35	99
Issued during year	10	3	
Shares converted	22	7	
Profit for period			74
Dividends			(20)
Balance at end of the year	132	45	153

**e) Non-current liabilities**

	2015 Rs. m	2014 Rs. m
Obligations under finance leases	49	30
6% Loan notes 2019	31	60
	80	90

Rs. 29m of 6% loan notes 2019 were converted into Rs. 22m of ordinary shares during the year. Interest paid in the year was Rs. 2m

**Practice question (continued)****4**

Further information (continued):

<b>f) Current liabilities</b>	<b>2015</b>	<b>2014</b>
	<b>Rs. m</b>	<b>Rs. m</b>
Bank overdraft	8	20
Obligations under finance leases	5	3
Trade payables	220	131
Taxation	16	10
	<hr/>	<hr/>
	249	164
<b>g) Obligations under finance leases</b>	<b>2015</b>	<b>2014</b>
	<b>Rs. m</b>	<b>Rs. m</b>
Amounts payable within one year	6	4
Within two to five years	55	33
	61	37
Less finance charges allocated to future periods	(7)	(4)
	<hr/>	<hr/>
	54	33
<b>h) Interest expense</b>	<b>2015</b>	
	<b>Rs. m</b>	
Finance charges payable under finance leases	3	
Other interest expense	4	
	<hr/>	
	7	
	<hr/>	

**Required:**

Prepare a statement of cash flows for the year ended 31 December 2015.

## SOLUTIONS TO PRACTICE QUESTIONS

### Solutions

**1**

- (a) In the adjustments to get from the operating profit to the cash flow from operations, the loss on disposal of Rs. 8,000 should be added.
- (b) Under the heading 'Cash flows from investing activities', the sale price of the vehicle of Rs. 22,000 should be included as a cash inflow.

#### Workings:

Original cost of vehicle	50,000
Accumulated depreciation at date of disposal	(20,000)
Net book value at the time of disposal	<u>30,000</u>
Loss on disposal	(8,000)
Therefore net sales proceeds	<u>22,000</u>

### Solutions

**2**

	Rs.
Profit before taxation	60,000
Adjustments for:	
Depreciation	25,000
Interest charges	10,000
Gain on disposal of non-current asset	(14,000)
	<u>81,000</u>
Reduction in trade and other receivables	5,000
Increase in inventories	(4,000)
Reduction in trade payables	(6,000)
	<u>76,000</u>
Taxation paid	(17,000)
Interest charges paid	(10,000)
Cash flows from operating activities	<u>49,000</u>

<b>Solutions</b>		<b>3</b>
<b>Property, plant and equipment purchases</b>		Rs.
At cost or valuation at the end of the year	381,000	
At cost or valuation at the beginning of the year	329,000	
	<u>52,000</u>	
Add: Cost of assets disposed of in the year	40,000	
Subtract: Asset revaluation during the year (102,000 – 67,000)	(35,000)	
Purchases during the year	<u>57,000</u>	
 <b>Disposal of equipment</b>		 Rs.
At cost	40,000	
Accumulated depreciation, at the time of disposal	(21,000)	
Net book value/carrying amount at the time of disposal	<u>19,000</u>	
Loss on disposal	4,000	
Net disposal value (= assumed cash flow)	<u>15,000</u>	

<b>Solutions</b>	<b>4</b>	
<b>KK Ltd: Statement of cash flows for the year ended 31 December 2015</b>		
	Rs. m	Rs. m
<b>Cash flows from operating activities</b>		
Net profit before taxation	96	
Adjustments for:		
Depreciation	37	
Amortisation of development expenditure	1	
Profit on sale of property, plant and equipment (21 - 19)	(2)	
Interest receivable	(3)	
Interest expense	7	
Operating profit before working capital changes	136	
Decrease in inventories (140 - 155)	15	
Increase in receivables (130 - 110)	(20)	
Increase in payables (220 - 131)	89	
Cash generated from operations	220	
Interest paid	(4)	
Interest element of finance lease payments	(3)	
Income taxes paid (W1)	(16)	
<i>Net cash from operating activities</i>		197
<b>Cash flows from investing activities</b>		
Purchase of property, plant and equipment	(104)	
Receipts from sale of tangible non-current assets	21	
Interest received	3	
<i>Net cash used in investing activities</i>		(80)
<b>Cash flows from financing activities</b>		
Proceeds from issue of share capital (W2)	13	
Payment of finance lease liabilities (W3)	(7)	
Purchase of investments (80 - 20)	(60)	
Dividends paid	(20)	
<i>Net cash used in financing activities</i>		(74)
<b>Net increase in cash and cash equivalents</b>		43
Cash and cash equivalents at beginning of period (W4)		(17)
Cash and cash equivalents at end of period (W4)		26

<b>Solutions</b>		<b>4</b>	
<b>Workings</b>			
<b>W1</b>	<b>Income tax paid</b>		
		Rs. m	
	Liability at the start of the year		10
	Charge for the year		22
	Total amount payable in the year		<u>32</u>
	Liability at the end of the year		(16)
	Cash paid		<u>16</u>
<b>W2</b>	<b>Proceeds from issue of share capital</b>		
		Rs. m	
	Share capital at the start of the year		100
	Share premium at the start of the year		35
			135
	Share capital at the end of the year		132
	Share premium at the end of the year		45
			177
	Increase in the year		42
	Non-cash transaction (redemption of debentures)		(29)
	Cash issue		<u>13</u>
<b>W3</b>	<b>Repayment of finance lease liabilities</b>		
		Rs. m	
	Liability at the start of the year (30 + 3)		33
	Additions in the year (see note a in the question)		28
	Interest expense (given in note h of the question)		3
	Total amount payable in the year		<u>64</u>
	Liability at the end of the year (49 + 5)		(54)
	Cash paid		10
	Interest element		(3)
	Capital element		<u>7</u>
<b>W4</b>	<b>Cash and cash equivalents</b>	<b>2015</b>	<b>2014</b>
		Rs. m	Rs. m
	Cash at bank	34	3
	Bank overdraft	(8)	(20)
		<u>26</u>	<u>(17)</u>

## Consolidated accounts: Statements of financial position – Basic approach

### Contents

- 1 The nature of a group and consolidated accounts
- 2 Consolidated statement of financial position
- 3 Consolidation double entry

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

**LO 1            Prepare financial statements in accordance with the relevant law of the country and in compliance with the reporting requirement of the international pronouncements.**

- LO1.2.1        Describe the concept of a group as a single economic unit.
- LO1.2.2        Define using simple examples subsidiary, parent and control
- LO1.2.3        Describe situations when control is presumed to exist.
- LO1.2.4        Identify and describe the circumstances in which an entity is required to prepare and present consolidated financial statements
- LO1.2.5        Eliminate (by posting journal entries) the carrying amount of the parent's investment in subsidiary against the parent's portion of equity of subsidiary and recognize the difference between the two balances as either goodwill; or gain from bargain purchase.
- LO1.3.1        Define and describe non- controlling interest in the case of a partially owned subsidiary.
- LO1.3.2        Identify the non-controlling interest in the net assets of a consolidated subsidiary; and profit or loss of the consolidated subsidiary for the reporting period.

# 1 THE NATURE OF A GROUP AND CONSOLIDATED ACCOUNTS

## Section overview

- Group as a single economic entity
- A group of companies: parent and subsidiaries
- Situations where control exists
- Purpose and nature of consolidated financial statements
- The requirement to prepare consolidated accounts
- Sundry accounting issues

### 1.1 Group as a single economic entity



#### Illustration: Single economic entity

A Limited (a car manufacturer) buys 100% of B Limited (an automotive parts manufacturer).

The 100% ownership gives A Limited complete control over B Limited.

A Limited's business has changed as a result of buying B Limited.

It was a car manufacturer. Now it is a car manufacturer and a manufacturer of automotive parts.

The two parts of the business are operated by two separate legal entities (A Limited and B Limited). However, the two parts of the business are controlled by the management of A Limited.

In substance, the two separate legal entities are a single economic entity.

IFRS contains rules that require the preparation of a special form of financial statements (consolidated financial statements also known as group accounts) in circumstances like the one described above.

This chapter explains some of the rules contained in the following standards:

- *IFRS 10: Consolidated financial statements*
- *IFRS 3: Business combinations.*

## 1.2 A group of companies: parent and subsidiaries



### Definitions: Group, parent and subsidiary

**Group:** A parent and its subsidiaries

**Parent:** An entity that controls one or more entities.

**Subsidiary:** An entity that is controlled by another entity.

A group consists of a parent entity and one or more entities that it has control over. These are called subsidiaries.

The entity that ultimately controls all the entities in the group is called the parent.

Some parent companies have no assets at all except shares in the subsidiaries of the group. A parent whose main assets (or only assets) are shares in subsidiaries is sometimes called a **holding company**.

### Control

An entity is a subsidiary of another entity if it is controlled by that other entity.



### Definition: Control

An investor controls an investee when:

- a. it is exposed, or has rights, to variable returns from its involvement with the investee; and
- b. it has the ability to affect those returns through its power over the investee.

In other words an investor controls an investee, if and only if, it has all the following:

- power over the investee;
- exposure, or rights, to variable returns from its involvement with the investee; and
- ability to use its power over the investee to affect the amount of its returns

## 1.3 Situations where control exists

The above definition of control is quite complicated.

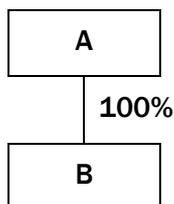
In practice, the vast majority of cases involve a company achieving control of another through buying a controlling interest in its shares.

Furthermore, in the vast majority of cases obtaining a controlling interest means buying shares which give the holder more than 50% of the voting rights in the other company.



### Illustration: Wholly owned subsidiary

A owns 100% of B's voting share capital.



This 100% holding is described as a controlling interest and gives A complete control of B.

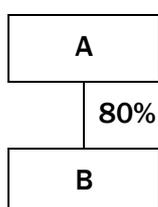
B would be described as a wholly owned subsidiary.

A company does not have to own all of the shares in another company in order to control it.



### Illustration: Partly owned subsidiary

A owns 80% of B's voting share capital.



This 80% holding is described as a controlling interest and gives A complete control of B.

B would be described as a partly owned subsidiary.

Other parties own the remaining 20% of the shares. They have an ownership interest in B but do not have control.

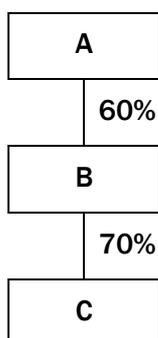
This is described as a non-controlling interest.

Non-controlling interest (NCI) is defined by IFRS 10 as: "the equity in a subsidiary not attributable ... to a parent."

Control is assumed to exist when the parent owns directly, or indirectly through other subsidiaries, more than half of the voting power of the entity, unless in exceptional circumstances it can be clearly demonstrated that such control does not exist.



### Illustration:



A owns a controlling interest in B.

B owns a controlling interest in C.

Therefore, A controls C indirectly through its ownership of B.

C is described as being a sub-subsidiary of A.

Consolidation of sub-subsidiaries is not in this syllabus

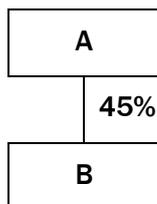
In certain circumstances, a company might control another company even if it owns shares which give it less than half of the voting rights. Such a company is said to have **de facto** control over the other company. (*De facto* is a Latin phrase which translates as **of fact**. It is used to mean **in reality** or to refer to a position held in fact if not by legal right).



**Illustration: Wholly owned subsidiary**

A owns 45% of B's voting share capital.

The other shares are held by a large number of unrelated investors none of whom individually own more than 1% of B.



This 45% holding probably gives A complete control of B.

It would be unlikely that a sufficient number of the other shareholders would vote together to stop A directing the company as it wishes.

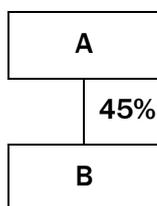
A company might control another company even if it owns shares which give it less than half of the voting rights because it has an agreement with other shareholders which allow it to exercise control.



**Illustration: Wholly owned subsidiary**

A owns 45% of B's voting share capital.

A further 10% is held by A's bank who have agreed to use their vote as directed by A.



This 45% holding together with its power to use the votes attached to the banks shares gives A complete control of B.

It was stated above but is worth emphasising that in the vast majority of cases control is achieved through the purchase of shares that give the holder more than 50% of the voting rights in a company.

## 1.4 Purpose and nature of consolidated financial statements

An investment in a company is usually included in the statement of financial position of the parent at cost. This does not reflect the substance of the situation. The directors have control of the net assets of the subsidiary and use these to generate profit.

To solve this problem IFRS requires that where a company holds a subsidiary it must prepare group accounts in addition to its own accounts.

The type of group accounts specified by IFRS are called consolidations.

The purpose of consolidated financial statements is to provide financial statements that have meaning and relevance to users. When a parent acquires a subsidiary, both the parent and the subsidiary remain legally separate entities. However, in practice they operate as if they were one organisation. Consolidated financial statements reflect the reality (or substance) of the situation: the group is a **single economic unit**.

In preparing consolidated financial statements:

- ❑ the assets and liabilities of the parent and its subsidiaries are combined in a single consolidated statement of financial position.
- ❑ the profits of the parent and its subsidiaries, and their other comprehensive income, are combined into a single in a consolidated statement of comprehensive income

In other words a lot of the numbers in the consolidated financial statements are constructed as a simple cross cast of the balance in the financial statements of the parent and its subsidiary (or subsidiaries).



### Example: Consolidated figures

	Parent		Subsidiary		Consolidated
Property, plant and equipment	1,000	+	500	=	1,500
Inventory	500	+	800	=	1,300
Sales	2,000	+	1,000	=	3,000

It is not always as straightforward as this. Sometimes there is a need for adjustments in the cross cast. This will be explained later.

Note that the share capital and reserves for the consolidated balance sheet **are not** calculated simply by adding the capital and reserves of all the companies in the group!). This is explained later.

## 1.5 The requirement to prepare consolidated accounts

IFRS 10 states that, with certain exceptions, a parent must present consolidated financial statements in which it consolidates its investments in subsidiaries. In other words, a parent must prepare consolidated financial statements for the group as a whole.

### Exception to this rule

There is an exception to this rule. This allows a parent that is itself a subsidiary not to prepare consolidated financial statements.

A parent need not present consolidated financial statements if (and only if) **all** the following conditions apply:

- The parent itself (X) is a wholly-owned subsidiary, with its own parent (Y). Alternatively, the parent (X) is a partially-owned subsidiary, with its own parent (Y), and the other owners of X are prepared to allow it to avoid preparing consolidated financial statements.
- The parent's debt or equity instruments are not traded in a public market.
- The parent does not file its financial statements with a securities commission for the purpose of issuing financial instruments in a public market.
- The parent's own parent, or the ultimate parent company (for example, the parent of the parent's parent), **does** produce consolidated financial statements for public use that comply with IFRS.

### All subsidiaries

Consolidated financial statements must include **all** the subsidiaries of the parent (IFRS 10). There are no grounds for excluding a subsidiary from consolidation.

## 1.6 Sundry accounting issues

### Common reporting date

IFRS 10 requires that the financial statements of the parent and its subsidiaries that are used to prepare the consolidated financial statements should all be prepared with the same reporting date (the same financial year-end date), unless it is impracticable to do so.

If it is impracticable for a subsidiary to prepare its financial statements with the same reporting date as its parent, adjustments must be made for the effects of significant transactions or events that occur between the dates of the subsidiary's and the parent's financial statements. In addition, the reporting date of the parent and the subsidiary must not differ by more than three months.

### Uniform accounting policies

Since the consolidated accounts combine the assets, liabilities, income and expenses of all the entities in the group, it is important that the methods used for recognition and measurement of all these items should be the same for all the entities in the group.

IFRS 10 therefore states that consolidated financial statements must be prepared using uniform accounting policies. The policies used to prepare the financial statements in all the entities in the group must be the same.

## 2 CONSOLIDATED STATEMENT OF FINANCIAL POSITION

### Section overview

- The basic approach
- Example 1: To illustrate the basics
- Pre- acquisition and post-acquisition profits
- Goodwill
- Non-controlling interest
- Suggested step by step approach

### 2.1 The basic approach



#### Definition

**Consolidated financial statements:** The financial statements of a group presented as those of a single economic entity.

The technique of consolidation involves combining the financial statements of the parent and its subsidiaries. We will first explain how to consolidate the statement of financial position. Consolidation of the statement of comprehensive income will be covered in chapter 6.

#### Question structure

There are often two major stages in answering consolidation questions:

- **Stage 1** involves making adjustments to the financial statements of the parent and subsidiary to take account of information provided. This might involve correcting an accounting treatment that has been used in preparing the individual company accounts.
- **Stage 2** involves consolidating the correct figures that you have produced.

The early examples used to demonstrate the consolidation technique look only at step 2. It is assumed that the financial statements provided for the parent and its subsidiary are correct.

#### Approach in this section

This section will demonstrate the techniques used to consolidate the statements of financial position using a series of examples introducing complications one at a time.

The examples will be solved using an approach that you might safely use to answer exam questions. This approach is quick but it does not show how the double entry works. The double entry will be covered in section 3 of this chapter so that you are able to understand the flow of numbers in the consolidation and able to prepare journal entries if asked to do so.

Note the following features in following examples:

- ❑ The asset in the parent's statement of financial position representing the cost of investment in the subsidiary disappears in the consolidation.
- ❑ Each consolidated asset and liability is constructed by adding together the balances from the statements of financial position of the parent and the subsidiary.
- ❑ The share capital (and share premium) in the consolidated statement of financial position is always just the share capital (and share premium) of the parent. That of the subsidiary disappears in the consolidation process.

### Major workings

There are three major calculations to perform in preparing a consolidated statement of financial position:

- ❑ Calculation of goodwill
- ❑ Calculation of consolidated retained earnings
- ❑ Calculation of non-controlling interest

In order to calculate the above figures (all of which will be explained in the following pages) information about the net assets of the subsidiary at the date of acquisition and at the date of consolidation is needed.

This is constructed using facts about the equity balances (as net assets = equity).



#### Illustration: Net assets summary of the subsidiary

	At date of consolidation	At date of acquisition
<b>Share capital</b>	X	X
<b>Share premium</b>	X	X
<b>Retained earnings*</b>	X	X
<b>Net assets</b>	<u>X</u>	<u>X</u>

\* Retained earnings are also known as unappropriated profits or accumulated profits.

You are not yet in a position to full understand this but all will be explained in the following pages.

## 2.2 Example 1 - To illustrate the basics

**Example:**

P acquired 100% of the equity shares of S on incorporation of S (i.e. when S was first established as a company).

The date of this transaction was 31 December 20X1 (this known as the date of acquisition).

The cost of this investment was Rs. 120,000.

S had net assets (total assets minus total liabilities) when it was first set up of Rs. 120,000.

The statements of financial position P and S as at 31 December 20X1 (the date of acquisition) were as follows.

	P Rs.	S Rs.
<b>Non-current assets:</b>		
Property, plant and equipment	640,000	125,000
Investment in S	120,000	-
Current assets	140,000	20,000
	900,000	145,000
<b>Equity</b>		
Share capital	200,000	80,000
Share premium	250,000	40,000
Retained earnings	350,000	-
	800,000	120,000
Current liabilities	100,000	25,000
	900,000	145,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

**P Group: Consolidated statement of financial position as 31 December 20X1**

<b>Non-current assets:</b>		Rs.
Property, plant and equipment	(640,000 + 125,000)	765,000
Current assets	(140,000 + 20,000)	160,000
		925,000
<b>Equity</b>		
Share capital	(parent company only)	200,000
Share premium	(parent company only)	250,000
Retained earnings		350,000
		800,000
Current liabilities	(100,000 + 25,000)	125,000
		925,000

**Note:** In practice, there is no reason to prepare a consolidated statement of financial position when a subsidiary is acquired. However, it is used here to illustrate the basic principles of consolidation, before going on to consider what happens after the subsidiary has been acquired.

### Observations

The asset in the parent's statement of financial position representing the cost of investment in the subsidiary disappears in the consolidation.

Each consolidated asset and liability is constructed by adding together the balances from the statements of financial position of the parent and the subsidiary.

The share capital (and share premium) in the consolidated statement of financial position is always just the share capital (and share premium) of the parent. That of the subsidiary disappears in the consolidation process.

### Closing comment

The cost of investment was the same as the net assets acquired (Rs. 120,000). This is very rarely the case. Usually there is a difference. This difference is called goodwill. It will be explained later.

## 2.3 Pre-acquisition and post-acquisition profits

Subsidiaries are usually acquired after they have been in business for some time rather than when they were incorporated.

This means that the acquired subsidiary will have retained earnings at the date of the acquisition. These are called pre-acquisition profits.

Only profits earned by the subsidiary since the date of acquisition are included as retained earnings in the consolidated financial statements. These are called post-acquisition retained earnings.

Pre-acquisition profits of a subsidiary are not included as retained earnings in the consolidated financial statements.

The working for the consolidated retained earnings balance is as follows:



#### Illustration: Consolidated retained earnings

	Rs.
All of P's retained earnings	X
P's share of the post-acquisition retained earnings of S	X
<b>Consolidated retained earnings</b>	<u>X</u>

### Other reserves

Sometimes a subsidiary has reserves other than retained earnings. The same basic rules apply.

Only that part of a subsidiary's reserve that arose after the acquisition date is included in the group accounts (and then only the parent's share of it).

**Example:**

P acquired 100% of the share capital of S on 1 January 20X1 for Rs. 200,000.

The balance on the retained earnings account of S was Rs. 80,000 at this date.

The statements of financial position P and S as at 31 December 20X1 were as follows.

	P Rs.	S Rs.
<b>Non-current assets:</b>		
Property, plant and equipment	680,000	245,000
Investment in S	200,000	-
Current assets	<u>175,000</u>	<u>90,000</u>
	<u>1,055,000</u>	<u>335,000</u>
<b>Equity</b>		
Share capital	150,000	30,000
Share premium	280,000	90,000
Retained earnings	<u>470,000</u>	<u>140,000</u>
	900,000	260,000
Current liabilities	<u>155,000</u>	<u>75,000</u>
	<u>1,055,000</u>	<u>335,000</u>

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

**P Group: Consolidated statement of financial position at 31 December 20X1**

		Rs.
<b>Non-current assets:</b>		
Property, plant and equipment	(680,000 + 245,000)	925,000
Current assets	(175,000 + 90,000)	<u>265,000</u>
		<u>1,190,000</u>
<b>Equity</b>		
Share capital	(parent company only)	150,000
Share premium	(parent company only)	280,000
Consolidated retained earnings	<b>(see working)</b>	<u>530,000</u>
		960,000
Current liabilities	(155,000 + 75,000)	<u>230,000</u>
		<u>1,190,000</u>

**Example (continued): Workings****Net assets summary of S:**

	At date of consolidation	At date of acquisition	Post acqu <sup>n</sup>
Share capital	30,000	30,000	
Share premium	90,000	90,000	
Retained earnings	140,000	80,000	<b>60,000</b>
Net assets	<u>140,000</u>	<u>200,000</u>	

**Consolidated retained profits:**

	Rs.
All of P's retained earnings	470,000
P's share of the post-acquisition retained earnings of S (100% of <b>60,000</b> (see above))	60,000
	<u>530,000</u>

**Observations**

The asset in the parent's statement of financial position representing the cost of investment in the subsidiary disappears in the consolidation.

Each consolidated asset and liability is constructed by adding together the balances from the statements of financial position of the parent and the subsidiary.

The share capital (and share premium) in the consolidated statement of financial position is always just the share capital (and share premium) of the parent. That of the subsidiary disappears in the consolidation process.

The consolidated retained profits is made up of the parent's retained profits plus the parent's share of the growth in the subsidiary's retained profits since the date of acquisition.

**Closing comment**

The cost of investment was the same as the net assets acquired (Rs. 120,000). This is very rarely the case. Usually there is a difference. This difference is called goodwill. It will be explained later.

## 2.4 Goodwill

In each of the two previous examples the cost of investment was the same as the net assets of the subsidiary at the date of acquisition.

In effect what has happened in both examples is the cost of investment has been replaced by the net assets of the subsidiary as at the date of acquisition.

The net assets have grown since acquisition to become the net assets at consolidation. These have been included as part of the net assets of the group, but remember that the consolidated retained earnings includes the parent's share of post-acquisition retained earnings so everything balances.

Do not worry if this is not obvious to you. The double entry is explained in section 3 of this chapter.

In almost all cases the cost of investment will be different to the net assets purchased. The difference is called goodwill.



### Definition: Goodwill

**Goodwill: An asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognised.**

When a parent buys a subsidiary the price it pays is not just for the assets in the statement of financial position. It will pay more than the value of the assets because it is buying the potential of the business to make profit.

The amount it pays in excess of the value of the assets is for the goodwill.

*IFRS 3 Business combinations*, sets out the calculation of goodwill as follows:



### Illustration: Goodwill

N.B. All balances are as at the date of acquisition.

	Rs.
Consideration transferred (cost of the business combination)	X
Non-controlling interest	X
	<hr style="width: 100%;"/>
	X
The net of the acquisition date amounts of identifiable assets acquired and liabilities assumed (measured in accordance with IFRS 3)	X
	<hr style="width: 100%;"/>
Goodwill recognised	X
	<hr style="width: 100%;"/>

The above calculation compares the total value of the company represented by what the parent has paid for it and the non-controlling interest to the net assets acquired at the date of acquisition.

The guidance requires the **net of the acquisition date amounts of identifiable assets acquired and liabilities assumed (measured in accordance with IFRS 3)**. This will be explained later.

The guidance also refers to non-controlling interest. This will be explained later but first we will present an example where there is no non-controlling interest.

**Example:**

P acquired 100% of S on 1 January 20X1 for Rs. 230,000.

The retained earnings of S were 100,000 at that date.

The statements of financial position P and S as at 31 December 20X1 were as follows:

	<b>P</b> Rs.	<b>S</b> Rs.
<b>Assets:</b>		
Investment in S, at cost	230,000	-
Other assets	570,000	240,000
	<u>800,000</u>	<u>240,000</u>
<b>Equity</b>		
Share capital	200,000	50,000
Share premium	100,000	20,000
Retained earnings	440,000	125,000
	<u>740,000</u>	<u>195,000</u>
<b>Current liabilities</b>	60,000	45,000
	<u>800,000</u>	<u>240,000</u>

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

**P Group: Consolidated statement of financial position at 31 December 20X1**

	Rs.
<b>Assets</b>	
Goodwill (see working)	60,000
Other assets (570 + 240)	810,000
Total assets	<u>870,000</u>
<b>Equity</b>	
Share capital (P only)	200,000
Share premium (P only)	100,000
Consolidated retained earnings (see working)	465,000
	<u>765,000</u>
<b>Current liabilities (60 + 40)</b>	105,000
Total equity and liabilities	<u>870,000</u>

**Example (continued): Net assets summary of S**

	At date of consolidation	At date of acquisition	Post acq <sup>n</sup>
Share capital	50,000	50,000	
Share premium	20,000	20,000	
Retained earnings	125,000	100,000	25,000
Net assets	<u>195,000</u>	<u>170,000*</u>	
<b>Goodwill</b>			
		<b>Rs.</b>	
Cost of investment		230,000	
Non-controlling interest		nil	
		<u>230,000</u>	
Net assets at acquisition 100% of 170,000* (see above)		<u>(170,000)</u>	
		<u>60,000</u>	
<b>Consolidated retained profits:</b>			
		<b>Rs.</b>	
All of P's retained earnings		440,000	
P's share of the post-acquisition retained earnings of S (100% of 25,000 (see above))		25,000	
		<u>465,000</u>	

**Observations**

The asset in the parent's statement of financial position representing the cost of investment in the subsidiary disappears in the consolidation. It is taken into the goodwill calculation.

Each consolidated asset and liability is constructed by adding together the balances from the statements of financial position of the parent and the subsidiary.

The share capital (and share premium) in the consolidated statement of financial position is always just the share capital (and share premium) of the parent. That of the subsidiary disappears in the consolidation process.

The consolidated retained profits is made up of the parent's retained profits plus the parent's share of the growth in the subsidiary's retained profits since the date of acquisition.

**Accounting for goodwill**

Goodwill is recognised as an asset in the consolidated financial statements.

It is not amortised but is tested for impairment on an annual basis.

## 2.5 Non-controlling interest

When a parent entity acquires less than 100% of the equity shares in a subsidiary, the remainder of the shares in the subsidiary are held by other shareholders. These are called the non-controlling interest (NCI) in the subsidiary. The abbreviation **NCI** is used for non-controlling interests.

For example, P might acquire 60% of the shares in S.

- ❑ It has acquired 60% of the 'equity' ownership of S.
- ❑ The remaining 40% of the equity in S is owned by the non-controlling interest.

Non-controlling interest (NCI) is defined by IFRS 10 as: 'the equity in a subsidiary not attributable ... to a parent.'

All of the assets and liabilities of S are consolidated just as before. However, part of the net assets that have been consolidated belongs to the NCI. A figure for the NCI is recognised in equity to show their ownership interest in the net assets.

### Measuring the NCI

The NCI at the reporting date made up as follows:



#### Illustration: Consolidated retained earnings

	Rs.
NCI at the date of acquisition	X
NCI's share of the post-acquisition retained earnings of S	X
NCI's share of each other post-acquisition reserves of S (if any)	X
<b>Consolidated retained earnings</b>	<b>X</b>

There are two ways of measuring the NCI at the date of acquisition.

- ❑ As a percentage of the net assets of the subsidiary at the date of acquisition; or
- ❑ At fair value as at the date of acquisition.

The first technique is the easier of the two because it allows for the use of a short cut. Also, it is far the more common in practice.

The different approaches will obviously result in a different figure for NCI but remember that the NCI at acquisition is also used in the goodwill calculation. This is affected also.

**Example:**

P acquired 80% of S on 1 January 20X1 for Rs. 230,000.

The retained earnings of S were 100,000 at that date.

It is P's policy to recognise non-controlling interest at the date of acquisition as a proportionate share of net assets.

The statements of financial position P and S as at 31 December 20X1 were as follows

	P Rs.	S Rs.
<b>Assets:</b>		
Investment in S, at cost	230,000	-
Other assets	570,000	240,000
	<u>800,000</u>	<u>240,000</u>
<b>Equity</b>		
Share capital	200,000	50,000
Share premium	100,000	20,000
Retained earnings	440,000	125,000
	<u>740,000</u>	<u>195,000</u>
<b>Current liabilities</b>	60,000	45,000
	<u>800,000</u>	<u>240,000</u>

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

**P Group: Consolidated statement of financial position at 31 December 20X1**

	Rs.
<b>Assets</b>	
Goodwill (see working)	94,000
Other assets (570 + 240)	810,000
Total assets	<u>904,000</u>
<b>Equity</b>	
Share capital (P only)	200,000
Share premium (P only)	100,000
Consolidated retained earnings (see working)	460,000
	<u>760,000</u>
Non-controlling interest (see working)	39,000
	<u>799,000</u>
Current liabilities (60 + 40)	105,000
Total equity and liabilities	<u>904,000</u>

**Example (continued): Net assets summary of S**

	At date of consolidation	At date of acquisition	Post acq <sup>n</sup>
Share capital	50,000	50,000	
Share premium	20,000	20,000	
Retained earnings	125,000	100,000	25,000
Net assets	<u>195,000*</u>	<u>170,000</u>	

<b>Non-controlling interest</b>	<b>Rs.</b>
NCI's share of net assets at the date of acquisition (20% × 170,000)	34,000
NCI's share of the post-acquisition retained earnings of S (20% of 25,000 (see above))	5,000
NCI's share of net assets at the date of consolidation	<u>39,000</u>

<b>Goodwill</b>	<b>Rs.</b>
Cost of investment	230,000
Non-controlling interest at acquisition	34,000
	<u>264,000</u>
Net assets at acquisition (see above)	(170,000)
	<u>94,000</u>

<b>Consolidated retained profits:</b>	<b>Rs.</b>
All of P's retained earnings	440,000
P's share of the post-acquisition retained earnings of S (80% of 25,000 (see above))	20,000
	<u>460,000</u>

The NCI at the date of consolidation has been calculated as NCI share of net assets at acquisition plus the NCI share of profit since the date of acquisition.

NCI share of profit since the date of acquisition is the same as the NCI share of net assets since the date of acquisition.

Therefore the NCI at the date of consolidation is simply the NCI share of net assets at the date of consolidation.



**Example (continued): Net assets summary of S**

	At date of consolidation	At date of acquisition	Post acq <sup>n</sup>
Share capital	50,000	50,000	
Share premium	20,000	20,000	
Retained earnings	125,000	100,000	25,000
Net assets	<u>195,000*</u>	<u>170,000</u>	
<b>Non-controlling interest</b>			<b>Rs.</b>
NCI's share of net assets at the date of consolidation (20% × 195,000*)			39,000

This short cut is not available if the NCI at acquisition is measured at fair value.

**NCI at fair value at the date of acquisition****Example: NCI at date of acquisition measured at fair value**

Continuing the earlier example with the extra information that the fair value of the NCI at acquisition was 40,000.

**Net assets summary of S**

	At date of consolidation	At date of acquisition	Post acq <sup>n</sup>
Share capital	50,000	50,000	
Share premium	20,000	20,000	
Retained earnings	125,000	100,000	25,000
Net assets	<u>195,000</u>	<u>170,000</u>	

Figures under both methods are shown so that you can see the difference between the two.

	NCI at fair value Rs.	NCI as share of net assets Rs.
<b>Non-controlling interest</b>		
NCI at the date of acquisition at fair value	40,000	
share of net assets (20% × 170,000)		34,000
NCI's share of the post-acquisition retained earnings of S (20% of 25,000 (see above))	5,000	5,000
NCI's share of net assets at the date of consolidation	<u>45,000</u>	<u>39,000</u>
<b>Goodwill</b>		
Cost of investment	230,000	230,000
Non-controlling interest at acquisition	40,000	34,000
	<u>270,000</u>	<u>264,000</u>
Net assets at acquisition (see above)	<u>(170,000)</u>	<u>(170,000)</u>
	<u>100,000</u>	<u>94,000</u>

## 2.6 Suggested step by step approach

To prepare a consolidated statement of financial position as at the acquisition date, the following steps should be taken.

**Step 1.** Establish the group share (parent company share) in the subsidiary and the percentage owned by non-controlling interests.

**Step 2:** Perform double entry to record any individual company adjustments that might be necessary. Mark these in the face of the question. The information can be lifted into workings later so that the marker can understand what you have done.

**Step 3:** Set out a pro-forma (skeleton) statement of financial position and fill in the easy numbers (for example those assets and liabilities that are a straight cross cast and the share capital)

**Step 4.** Calculate the net assets of the subsidiary S at the acquisition date and at the end of the reporting period

**Step 5.** Calculate the goodwill

**Step 6.** Calculate the non-controlling interest.

**Step 7.** Calculate consolidated retained earnings.

### 3 CONSOLIDATION DOUBLE ENTRY

#### Section overview

- Calculating goodwill
- Calculating NCI
- Calculating consolidated retained earnings
- Tutorial note

#### Introductory comment

The learning outcomes include a requirement to prepare journals necessary to calculate goodwill and non-controlling interest.

Usually journals are prepared to process changes in the general ledger. This is not the case of the journals in this section. There is no general ledger for the group accounts. Consolidated financial statements are prepared from independent sets of financial statements which are extracted from separate general ledgers. Information from these independent financial statements is transferred to working papers where the consolidation is performed.

The journals described in this refer to adjustments made to numbers in those working papers.

#### 3.1 Calculating goodwill

The cost of investment account is renamed the cost of control account. This is the account used to calculate goodwill.

P's share of net assets is compared with the cost of investment in this account by transferring in P's share of each of S's equity balances at the date of acquisition.



#### Illustration:

	Debit	Credit
Share capital of S	40,000	
Cost of control		40,000
<b>Being: Transfer of P's share of S's share capital to cost of control account as at the date of acquisition (80% of 50,000)</b>		
Share premium of S	16,000	
Cost of control		16,000
<b>Being: Transfer of P's share of S's share premium to cost of control account as at the date of acquisition (80% of 20,000)</b>		
Retained earnings of S	80,000	
Cost of control		80,000
<b>Being: Transfer of P's share of S's retained earnings to cost of control account as at the date of acquisition (80% of 100,000)</b>		

The balance on the cost of control account is the goodwill figure.



**Example:**

Cost of control (goodwill)			
	Rs.		Rs.
Cost of investment	230,000	1) P's share of S's share capital	40,000
		2) P's share of S's share premium	16,000
		3) P's share of S's retained earnings at acquisition	80,000
		Balance c/d	94,000
	230,000		230,000
Balance b/d	94,000		

### 3.2 Calculating NCI

The NCI's share of net assets of S is constructed by transferring in their share of each of S's equity balances at the date of consolidation into an NCI account.



**Illustration:**

	Debit	Credit
Share capital of S	10,000	
Cost of control		10,000
Being: Transfer of NCI's share of S's share capital as at the date of acquisition to cost of control account (20% of 50,000)		
Share premium of S	4,000	
Cost of control		4,000
Being: Transfer of NCI's share of S's share premium as at the date of acquisition to cost of control account (20% of 20,000)		
Retained earnings of S	25,000	
Cost of control		25,000
Being: Transfer of NCI's share of S's retained earnings as at the date of acquisition to cost of control account (20% of 125,000)		

The balance on this account is the non-controlling interest



**Example:**

Non-controlling interest			
	Rs.		Rs.
		4) NCI's share of S's share capital (20% of 50,000)	10,000
		5) NCI's share of S's share premium (20% of 20,000)	4,000
		6) NCI's share of S's retained earnings (20% of 125,000)	25,000
Balance b/d	39,000		25,000
	<u>39,000</u>		<u>39,000</u>
		Balance b/d	39,000

### 3.3 Calculating consolidated retained earnings

P's share of S's retained earnings since the date of acquisition is credited to the P's retained earnings account.



**Illustration:**

	Debit	Credit
Retained earnings of S	20,000	
P's retained earnings		20,000
<p>Being: Transfer of P's share of post-acquisition profits of S into retained earnings. (80% of (125,000 - 100,000))</p>		

The balance on this account is the consolidated retained earnings.



**Example (continued):**

Retained earnings			
	Rs.		Rs.
		P's balance	440,000
		P's share of S's	20,000
Balance b/d	460,000		
	<u>460,000</u>		<u>460,000</u>
		Balance b/d	460,000

### 3.4 Tutorial note

The balances on S's share capital, share premium and retained earnings have all been removed elsewhere.



#### Example (continued):

Share capital (of S)			
	Rs.		Rs.
P's share at acquisition (to cost of control)	40,000	Balance b/d	50,000
S's share (to NCI)	10,000		
	<u>50,000</u>		<u>50,000</u>
Share premium (of S)			
	Rs.		Rs.
P's share at acquisition (to cost of control)	16,000	Balance b/d	20,000
S's share (to NCI)	4,000		
	<u>20,000</u>		<u>20,000</u>
Retained earnings (of S)			
	Rs.		Rs.
P's share at acquisition (to cost of control)	80,000	Balance b/d	125,000
P's share since acquisition (consolidated retained profits)	20,000		
S's share (to NCI)	25,000		
	<u>125,000</u>		<u>125,000</u>

**Practice question****1**

H Ltd acquired 80% of S Ltd several years ago for Rs. 30 million.

The balance on S Ltd's retained earnings was Rs. 5,000,000 at the date of acquisition.

H Ltd's policy is to measure non-controlling interest at the date of acquisition as a proportionate share of net assets.

The draft statements of financial position of the two companies at 31 December are:

	H (Rs. 000 )	S (Rs. 000)
<b>Non-current assets:</b>		
Property, plant and equipment	45,000	15,000
Investment in S	30,000	nil
<b>Current assets</b>	<u>28,000</u>	<u>12,000</u>
<b>Total assets</b>	<u><u>103,000</u></u>	<u><u>27,000</u></u>
<b>Equity</b>		
Share capital	5,000	1,000
Retained earnings	<u>76,000</u>	<u>10,000</u>
	<u>81,000</u>	<u>11,000</u>
<b>Non-current liabilities</b>	2,000	6,000
<b>Current liabilities</b>	<u>20,000</u>	<u>10,000</u>
<b>Total equity and liabilities</b>	<u><u>103,000</u></u>	<u><u>27,000</u></u>

Prepare a consolidated statement of financial position as at 31 December.

**SOLUTIONS TO PRACTICE QUESTIONS**

<b>Solutions</b>	<b>1</b>
<b>H Group: Consolidated statement of financial position at 31 December 20X1</b>	
	Rs.
<b>Assets</b>	
Goodwill (W3)	25,200
Property, plant and equipment (45,000 + 15,000)	60,000
	85,200
Current assets (28,000 + 12,000)	40,000
Total assets	125,200
<b>Equity</b>	
Share capital	5,000
Retained earnings (W4)	80,000
	85,000
Non-controlling interest (W2)	2,200
	87,200
Non-current liabilities (2,000 + 6,000)	8,000
Current liabilities (20,000 + 10,000)	30,000
Total equity and liabilities	125,200

**Solution: Workings****W1: Net assets summary of S**

	At date of		
	Consolidation	Acquisition	Post acq <sup>n</sup>
Share capital	1,000	1,000	
Retained earnings	10,000	5,000	5,000
Net assets	<u>11,000</u>	<u>6,000</u>	

**W2: Non-controlling interest****Rs.000**

NCI's share of net assets at the date of acquisition (20% × 6,000)	1,200
NCI's share of the post-acquisition retained earnings of S (20% of 5,000 (see above))	1,000
NCI's share of net assets at the date of consolidation	<u>2,200</u>

**W3: Goodwill****Rs. 000**

Cost of investment	30,000
Non-controlling interest at acquisition (20% × 6,000)	1,200
	<u>31,000</u>
Net assets at acquisition (see above)	(6,000)
Recoverable amount of goodwill	<u>25,200</u>

**W4: Consolidated retained profits:****Rs.**

All of H's retained earnings	76,000
H's share of the post-acquisition retained earnings of S (80% of 5,000 (see above))	4,000
	<u>80,000</u>

## Consolidated accounts: Statements of financial position - Complications

### Contents

- 1 Possible complications: Before consolidation
- 2 Possible complications: During consolidation
- 3 Possible complications: after consolidation

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

**LO 1            Prepare financial statements in accordance with the relevant law of the country and in compliance with the reporting requirement of the international pronouncements.**

LO1.4.1        Post adjusting entries to eliminate the effects of intergroup sale of inventory and depreciable assets.

LO1.5.1        Prepare and present simple consolidated statements of financial position involving a single subsidiary in accordance with IFRS 10.

LO1.6.1        Prepare and present a simple consolidated statement of comprehensive income involving a single subsidiary in accordance with IFRS 10.

## 1 POSSIBLE COMPLICATIONS: BEFORE CONSOLIDATION

### Section overview

- Acquisition-related costs
- Acquired intangible assets
- Fair value exercise at acquisition

#### 1.1 Acquisition-related costs

Acquisition-related costs are costs the acquirer incurs to effect a business combination. They include advisory, legal, accounting, valuation and other professional or consulting fees.

These costs are not capitalised as part of the cost of acquisition but expensed in the periods in which they are incurred. (This is different rule to that which applies to the purchase of property, plant and equipment or intangibles).

A question may incorrectly capitalise the costs. You would have to correct this before consolidating.

#### 1.2 Acquired intangible assets

A question might provide information about an unrecognised asset of the subsidiary. You would have to include the asset in the subsidiary's financial statements before consolidating them.

##### Reason

Goodwill is recognised by the acquirer as an asset from the acquisition date.

It is initially measured as the difference between:

- the cost of the acquisition plus the non-controlling interest; and
- the net of the acquisition date amounts of identifiable assets acquired and liabilities assumed (measured in accordance with IFRS 3).

When a company acquires a subsidiary, it may identify intangible assets of the acquired subsidiary, which are not included in the subsidiary's statement of financial position. If these assets are separately identifiable and can be measured reliably, they should be included in the consolidated statement of financial position as intangible assets, and accounted for as such.

This can result in the recognition of assets and liabilities not previously recognised by the acquiree.



##### Illustration:

If a company bought 100% of the Coca-Cola Corporation they would be buying a lot of assets but part (perhaps the largest part) of the purchase consideration would be to buy the Coca Cola brand.

Coca Cola does not recognise its own brand in its own financial statements because companies are not allowed to recognise internally generated brands.

However, as far as the company buying the Coca-Cola Corporation is concerned the brand is a purchased asset. It would be recognised in the consolidated financial statements and would be taken into account in the goodwill calculation.

**Example:**

P bought 80% of S 2 years ago.

At the date of acquisition S's retained earnings stood at Rs. 600,000. The fair value of its net assets was not materially different from the book value except for the fact that it had a brand which was not recognised in S's accounts. This had a fair value of 100,000 at this date and an estimated useful life of 20 years.

The statements of financial position P and S as at 31 December 20X1 were as follows:

	P Rs.	S Rs.
PP and E	1,800,000	1,000,000
Investment in S	1,000,000	
Other assets	400,000	300,000
	3,200,000	1,300,000
Share capital	100,000	100,000
Retained earnings	2,900,000	1,000,000
Liabilities	200,000	200,000
	3,200,000	1,300,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

**P Group: Consolidated statement of financial position at 31 December 20X1**

	Rs.
<b>Assets</b>	
Brand (see working)	90,000
Goodwill (see working)	360,000
Property, plant and equipment (1,800 + 1000)	2,800,000
Other assets (400 + 300)	700,000
Total assets	3,950,000
<b>Equity</b>	
Share capital (P only)	100,000
Consolidated retained earnings (see working)	3,212,000
	3,312,000
Non-controlling interest	238,000
	3,550,000
Current liabilities (200 + 200)	400,000
Total equity and liabilities	3,950,000

**Example (continued):****Net assets summary of S**

	At date of consolidation	At date of acquisition	Post acq <sup>n</sup>
Share capital	100,000	100,000	
Retained earnings			
Given in the question	1,000,000	600,000	
Extra depreciation on brand (100,000 × 2 years/20 years)	(10,000)	—	
	990,000	600,000	390,000
Consolidation reserve on recognition of the brand	100,000	100,000	0
<b>Net assets</b>	<b>1,190,000</b>	<b>800,000</b>	

**Non-controlling interest****Rs.**

NCI's share of net assets at the date of acquisition (20% × 800,000)	160,000
NCI's share of the post-acquisition retained earnings of S (20% of 390,000 (see above))	78,000
<b>NCI's share of net assets at the date of consolidation</b>	<b>238,000</b>

**Goodwill****Rs.**

Cost of investment	1,000,000
Non-controlling interest at acquisition (20% × 800,000)	160,000
	1,160,000
Net assets at acquisition (see above)	(800,000)
	<b>360,000</b>

**Consolidated retained profits:****Rs.**

All of P's retained earnings	2,900,000
P's share of the post-acquisition retained earnings of S (80% of 390,000 (see above))	312,000
	<b>3,212,000</b>

**Brand****Rs.**

On initial recognition	100,000
Depreciation since acquisition (100,000 × 2 years/20 years)	(10,000)
	<b>90,000</b>

### 1.3 Fair value exercise at acquisition

A question might provide information about the fair value of a subsidiary's assets at the date of acquisition. You might have to revalue the assets in the subsidiary's financial statements before consolidating them.

#### Reason

Goodwill is recognised by the acquirer as an asset from the acquisition date.

It is initially measured as the difference between:

- the cost of the acquisition plus the non-controlling interest; and
- the net of the acquisition date amounts of identifiable assets acquired and liabilities assumed (measured in accordance with IFRS 3).

IFRS 3 requires that most assets and liabilities be measured at their fair value.



#### Definition: Fair value

**Fair value:** The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

In every example so far it has been assumed that the fair value of the assets and liabilities of the subsidiary were the same as their book value as at the date of acquisition. In practice this will not be the case.

In other cases a question will include information about the fair value of an asset or assets as at the date of acquisition.

The net assets of a newly acquired business are subject to a fair valuation exercise.

Where the subsidiary has not reflected fair values at acquisition in its accounts, this must be done before consolidating. Note that this is almost always the case

#### Revaluation upwards

The asset is revalued in the consolidation working papers (not in the general ledger of the subsidiary). The other side of the entry is taken to a fair value reserve as at the date of acquisition. This will appear in the net assets working and therefore become part of the goodwill calculation.

The reserve is also included in the net assets working at the reporting date if the asset is still owned by the subsidiary.

If a depreciable asset is revalued the post-acquisition depreciation must be adjusted to take account of the change in the value of the asset being depreciated.

#### Revaluation downwards

Write off the amount to retained earnings in the net assets working (book value less fair value of net assets at acquisition) at acquisition and at the reporting date if the asset is still owned.

**Example:**

P bought 80% of S 2 years ago.

At the date of acquisition S's retained earnings stood at Rs. 600,000 and the fair value of its net assets were Rs. 1,000,000. This was Rs. 300,000 above the book value of the net assets at this date.

The revaluation was due to an asset that had a remaining useful economic life of 10 years as at the date of acquisition.

The statements of financial position P and S as at 31 December 20X1 were as follows:

	P Rs.	S Rs.
PP and E	1,800,000	1,000,000
Investment in S	1,000,000	
Other assets	400,000	300,000
	3,200,000	1,300,000
Share capital	100,000	100,000
Retained earnings	2,900,000	1,000,000
Liabilities	200,000	200,000
	3,200,000	1,300,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

**P Group: Consolidated statement of financial position at 31 December 20X1**

	Rs.
<b>Assets</b>	
Goodwill (see working)	200,000
PP and E (see working)	3,040,000
Other assets (400,000 + 300,000)	700,000
Total assets	3,940,000
<b>Equity</b>	
Share capital (P only)	100,000
Consolidated retained earnings (see working)	3,172,000
	3,272,000
Non-controlling interest	268,000
	3,540,000
Current liabilities (200 + 200)	400,000
Total equity and liabilities	3,940,000

**Example (continued):****Net assets summary of S**

	At date of consolidation	At date of acquisition	Post acq <sup>n</sup>
Share capital	100,000	100,000	
Retained earnings			
Given in the question	1,000,000	600,000	
Extra depreciation on fair value adjustment ( $300 \times 2 \text{ years} / 10 \text{ years}$ ) – see explanation on next page	(60,000)	–	
	940,000	600,000	340,000
Fair value reserve	300,000	300,000	
Net assets	<u>1,340,000</u>	<u>1,000,000</u>	

**Non-controlling interest****Rs.**

NCI's share of net assets at the date of acquisition ( $20\% \times 1,000$ )	200,000
NCI's share of the post-acquisition retained earnings of S (20% of 340 (see above))	68,000
NCI's share of net assets at the date of consolidation	<u>268,000</u>

**Goodwill****Rs.**

Cost of investment	1,000,000
Non-controlling interest at acquisition ( $20\% \times 1,000$ )	200,000
	<u>1,200,000</u>
Net assets at acquisition (see above)	(1,000,000)
	<u>200,000</u>

**Consolidated retained profits:****Rs.**

All of P's retained earnings	2,900,000
P's share of the post-acquisition retained earnings of S (80% of 340 (see above))	272,000
	<u>3,172,000</u>

**Example (continued): Net assets summary of S**

	Rs.
<b>Property plant and equipment</b>	
Parent's	1,800
Subsidiary's	
Given in question	1,000
Fair value adjustment	300
Extra depreciation on fair value adjustment (300 × 2 years / 10 years)	(60)
	<u>1,240</u>
<b>To statement of financial position</b>	<u><u>3,040</u></u>

**Explanation of extra depreciation**

If a depreciable asset is revalued (which is usually the case) the post-acquisition depreciation must be adjusted to take account of the change in the value of the asset being depreciated.

In this example, two years ago the subsidiary had an asset which had a fair value Rs.300,000 greater than its book value. This valuation was not recorded in the financial statements of the subsidiary so the subsidiary's figures need to be retrospectively adjusted, for the purposes of consolidation, at each year end.

Depreciation of an asset is based on its carrying amount. Depreciation of an asset increases when it is revalued. Therefore, the extra depreciation necessary as a result of the fair value adjustment is Rs. 30,000 per annum ( $\frac{\text{Rs. } 300,000}{10 \text{ years}}$ ).

The acquisition was 2 years ago so extra depreciation of Rs. 60,000 (Rs. 30,000 × 2 years) must be recognised retrospectively.

## 2 POSSIBLE COMPLICATIONS: DURING CONSOLIDATION

### Section overview

- Mid-year acquisitions
- Types of intra-group transaction
- The need to eliminate intra-group transactions on consolidation
- Unrealised profit – Inventory
- Unrealised profit – Transfers of non-current assets

### 2.1 Mid-year acquisitions

Goodwill is measured at the date of acquisition of the subsidiary.

H may not acquire S at the start or end of a year. If S is acquired mid-year, it is necessary to calculate the net assets at date of acquisition in order to calculate goodwill, non-controlling interest and consolidated retained earnings.

This usually involves calculating the subsidiary's retained earnings at the date of acquisition. The profits of the subsidiary are assumed to accrue evenly over time unless there is information to the contrary.



#### Illustration: Retained earnings at the date of acquisition

	Rs.
Retained earnings at the start of the year	X
Retained earnings for the year up to the date of acquisition	X
Retained earnings at the date of acquisition	<u>          </u> <u>          </u> <u>          </u>

**Example:**

P bought 70% of S on 31<sup>st</sup> March this year.

S's profit for the year was Rs. 12,000

The statements of financial position P and S as at 31 December 20X1 were as follows:

	P Rs.	S Rs.
PP and E	100,000	20,000
Investment in S	50,000	
Other assets	30,000	12,000
	180,000	32,000
Share capital	10,000	1,000
Retained earnings	160,000	30,000
Liabilities	10,000	1,000
	180,000	32,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

**P Group: Consolidated statement of financial position at 31 December 20X1**

	Rs.
<b>Assets</b>	
Goodwill (see working)	34,600
PP and E (100,000 + 20,000)	120,000
Other assets (30,000 + 12,000)	42,000
Total assets	196,600
<b>Equity</b>	
Share capital (P only)	10,000
Consolidated retained earnings (see working)	166,300
	176,300
Non-controlling interest	9,300
	185,600
Current liabilities (10,000 + 1,000)	11,000
Total equity and liabilities	196,600

**Example (continued):****Net assets summary of S**

	At date of consolidation	At date of acquisition	Post acq <sup>n</sup>
Share capital	1,000	1,000	
Retained earnings			
Given in the question	30,000		
See working below		21,000	
	30,000	21,000	9,000
Net assets	<u>31,000</u>	<u>22,000</u>	

**Retained earnings of the subsidiary as at the date of acquisition**

	Rs.
Retained earnings at the start of the year	
Retained earnings at the end of the year	30,000
Less: profit for the year	(12,000)
	18,000
Profit from the start of the year to the date of acquisition ( $3/12 \times 12,000$ )	3,000
NCI's share of net assets at the date of consolidation	<u>21,000</u>

**Non-controlling interest**

	Rs.
NCI's share of net assets at the date of acquisition ( $30\% \times 22,000$ )	6,600
NCI's share of the post-acquisition retained earnings of S (30% of 9,000 (see above))	2,700
NCI's share of net assets at the date of consolidation	<u>9,300</u>

**Goodwill**

	Rs.
Cost of investment	50,000
Non-controlling interest at acquisition ( $30\% \times 22,000$ )	6,600
	56,600
Net assets at acquisition (see above)	(22,000)
	<u>34,600</u>

**Consolidated retained profits:**

	Rs.
All of P's retained earnings	160,000
P's share of the post-acquisition retained earnings of S (70% of 9,000 (see above))	6,300
	<u>166,300</u>

## 2.2 Types of intra-group transaction

In many groups, business and financial transactions take place between entities within the group. These 'intra-group' transactions might be:

- ❑ the sale of goods or services between the parent and a subsidiary, or between two subsidiaries in the group
- ❑ transfers of non-current assets between the parent and a subsidiary, or between two subsidiaries in the group
- ❑ the payment of dividends by a subsidiary to the parent (or by one subsidiary to another subsidiary)
- ❑ loans by one entity in the group to another, and the payment of interest on intra-group loans.

## 2.3 The need to eliminate intra-group transactions on consolidation

Intra-group transactions should be eliminated on consolidation. In other words, the effects of intra-group transactions must be removed from the financial statements on consolidation.

The purpose of consolidated accounts is to show the financial position and the financial performance of the group as a whole, as if it is a single operating unit. If intra-group transactions are included in the consolidated financial statements, the statements will show too many assets, liabilities, income and expenses for the group as a single operating unit.

The consolidated financial statements represent the financial position and performance of a group of companies as if they are a single economic entity. A single economic entity cannot owe itself money!

IFRS 10 therefore requires that:

- ❑ Intra-group balances and transactions, including income, expenses and dividends, must be eliminated in full.
- ❑ Profits or losses resulting from intra-group transactions that are recognised in inventory or non-current assets must be eliminated in full.


**Example: Elimination of intra-group transactions on consolidation**

H owns 80% of S. H sells goods to S.

	P	S	Adjustment		Consolidated statement of financial position
			Dr	Cr	
<b>Receivables:</b>					
From S	1,000			1,000	–
<b>Payables:</b>					
To H		1,000	1,000		–

The above adjustment is simply a cancellation of the inter-company receivable in one group member's statement of financial position against the inter-company payable in another group member's statement of financial position.

### Items in transit

At the year-end current accounts may not agree, owing to the existence of in-transit items such as goods or cash.

The usual convention followed is to follow the item through to its ultimate destination and adjust the books of the ultimate recipient.

## 2.4 Unrealised profit – Inventory

Inter-company balances are cancelled on consolidation. The main reason for these arising is inter company (or intra group) trading. The other example you will come across is inter-company transfers of non-current assets.

If a member of a group sells inventory to another member of the group and that inventory is still held by the buying company at the year end:

- ❑ The company that made the sale will show profit in its own accounts.
  - This is fine from the individual company viewpoint but the profit has not been realised by the group.
- ❑ The company that made the purchase will record the inventory at cost to itself.
  - This is fine from the individual company view but consolidation of this value will result in the inclusion in the financial statements of a figure which is not at cost to the group.

IFRS 10 requires that the unrealised profit be removed in full from the closing inventory valuation. It gives no further guidance on how this should be done.

This is an inventory valuation adjustment and can be processed in the consolidated financial statements.

**Illustration:**

	Debit	Credit
Closing inventory – Statement of comprehensive income	X	
Closing inventory – Statement of financial position		X

There is a complication to think about. If S is the selling company the purpose of the above adjustment is to reduce the profit of the subsidiary because there is unrealised profit on the inter-company transaction and reduce the inventory held by P as it is not at cost to the group.

If the profit of the subsidiary is being reduced then NCI should share in that reduction. This implies a second journal as follows:

**Illustration:**

	Debit	Credit
NCI in the statement of financial position	X	
NCI in the statement of comprehensive income With their share of the adjustment		X

The two journals can be combined as follows to produce a composite adjustment in questions which only require the preparation of the statement of financial position.

**Illustration:**

	Debit	Credit
Consolidated retained earnings	X	
NCI in the statement of financial position	X	
Closing inventory – Statement of financial position		X

**Example:**

P bought 80% of S 2 years ago. At the date of acquisition S's retained earnings stood at Rs. 1,600

During the year S sold goods to H for Rs. 20,000 which gave S a profit of Rs. 8,000. H still held 40% of these goods at the year end.

The statements of financial position P and S as at 31 December 20X1 were as follows:

	P Rs.	S Rs.
PP and E	100,000	41,000
Investment in S	50,000	
Other assets	<u>110,000</u>	<u>50,000</u>
	<u>260,000</u>	<u>91,000</u>
Share capital	50,000	30,000
Retained earnings	200,000	56,000
Liabilities	<u>10,000</u>	<u>5,000</u>
	<u>260,000</u>	<u>91,000</u>

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

**P Group: Consolidated statement of financial position at 31 December 20X1**

<b>Assets</b>	Rs.
Goodwill (see working)	13,200
PP and E (100,000 + 41,000)	141,000
Other assets (110,000 + 50,000 - 3,200)	<u>156,800</u>
<b>Total assets</b>	<u>311,000</u>
<b>Equity</b>	
Share capital (P only)	50,000
Consolidated retained earnings (see working)	<u>229,440</u>
	279,440
Non-controlling interest	<u>16,560</u>
	296,000
Current liabilities (10,000 + 5,000)	<u>15,000</u>
<b>Total equity and liabilities</b>	<u>311,000</u>

**Example (continued):****Net assets summary of S**

	At date of consolidation	At date of acquisition	Post acq <sup>n</sup>
Share capital	30,000	30,000	
Retained earnings			
Given in the question	56,000	16,000	40,000
Net assets	<u>82,800</u>	<u>46,000</u>	

**Unrealised profit**

	Rs.
Total profit on transaction	8,000
Inventory held at year end (therefore the profit on this is unrealised by the group)	40%
Adjustment	<u>3,200</u>

Double entry in consolidated financial statements	Dr	Cr
Consolidated retained earnings (80% × 3,200)	2,560	
NCI – Statement of financial position (20% × 3,200)	640	
Closing inventory – Statement of financial position		3,200

Non-controlling interest	Rs.
NCI's share of net assets at the date of acquisition (20% × 46,000)	9,200
NCI's share of the post-acquisition retained earnings of S (20% of 40,000 (see above))	8,000
NCI share of unrealised profit adjustment	(640)
NCI's share of net assets at the date of consolidation	<u>16,560</u>

Goodwill	Rs.
Cost of investment	50,000
Non-controlling interest at acquisition (20% × 46,000)	9,200
	<u>59,200</u>
Net assets at acquisition (see above)	(46,000)
Recoverable amount of goodwill (given)	<u>13,200</u>

**Example (continued)**

<b>Consolidated retained profits:</b>	<b>Rs.</b>
All of P's retained earnings	200,000
P's share of the post-acquisition retained earnings of S (80% of 40,000 (see above))	32,000
Unrealised profit adjustment	(2,560)
	<u>229,440</u>

## 2.5 Unrealised profit – Transfers of non-current assets

One member of a group may sell a non-current asset to another member of the group.

The company making the sale will recognise a profit or loss on disposal.

The company buying the asset will include the asset at purchase cost in its own accounts and depreciation will be based on that amount. This cost will be different to cost to the group.

As far as the group is concerned no transfer has occurred. The group accounts must reflect non-current assets at the amount they would have been stated at had the transfer not been made.

Summary of adjustments:

- remove profit from the financial statements of the company that made the sale; and
- correct the depreciation charge in the financial statements of the company that made the purchase.

These two adjustments establish the transferred asset at its cost less accumulated depreciation to the group.

The double entry is shared to the NCI as appropriate in the consolidated statement of financial position.

- if the sale was to S the NCI would share the depreciation adjustment.
- If the sale was from S to H the NCI would share the profit adjustment.

This is best seen with an illustration.

**Example:**

H owns 80% of S.

There was a transfer of an asset within the group for Rs. 15,000 on 1 January 20X3.

The original cost to H was Rs. 20,000 and the accumulated depreciation at the date of transfer was Rs. 8,000.

Both companies depreciate such assets at 20% per year on cost to the company, recognising a full year's depreciation in the year of purchase and none in the year of sale.

	Figures in the accounts	Figures if no transfer had been made	Adjustment required
<b>Against S's figures:</b>			
Cost	15,000	20,000	5,000 Dr
Accumulated depreciation	(3,000)	(12,000)	9,000 Cr
	<u>12,000</u>	<u>8,000</u>	4,000 Cr
Charge for the year	<u>3,000</u>	<u>4,000</u>	1,000 Dr

**Against P's figures:**

Profit on disposal

Proceeds

Carrying amount at disposal (20,000 – 8,000)

15,000	
(12,000)	
<u>3,000</u>	nil

**If the transfer was from H to S – Full journal**

Consolidated financial statements	Dr	Cr
Income statement (profit on disposal)	3,000	
Income statement (depreciation)	1,000	
Non-current asset		4,000
NCI in the statement of financial position	200	
NCI in the statement of comprehensive income		200
Being the NCI share of the depreciation adjustment (20% × 1,000)		

**Composite journal if just preparing the consolidated statement of financial position**

	Dr	Cr
Consolidated retained earnings	3,800	
Non-current asset		4,000
NCI in the statement of financial position	200	

**Example (continued)****If the transfer was from S to H – Full journal**

<b>Consolidated financial statements</b>	Dr	Cr
Income statement (profit on disposal)	3,000	
Income statement (depreciation)	1,000	
Non-current asset		4,000
NCI in the statement of financial position	600	
NCI in the statement of comprehensive income		600
Being the NCI share of the profit adjustment (20% × 3,000)		

**Composite journal if just preparing the consolidated statement of financial position**

	Dr	Cr
Consolidated retained earnings	3,400	
Non-current asset		4,000
NCI in the statement of financial position	600	

### 3 POSSIBLE COMPLICATIONS: AFTER CONSOLIDATION

#### Section overview

- Accounting for goodwill
- Negative goodwill and bargain purchases

#### 3.1 Accounting for goodwill

Goodwill is carried as an asset. It is not depreciated or amortised but instead it is subject to an annual impairment review.

This means that the recoverable amount of goodwill must be estimated on an annual basis. If the recoverable amount is less than the carrying amount, the goodwill is written down to the recoverable amount.

The amount of the impairment is included as a charge against profit in the consolidated statement of comprehensive income.



#### Example:

P acquired 80% of S when the retained earnings of S were Rs. 20,000.

The values for assets and liabilities in the statement of financial position for S represent fair values.

A review of goodwill at 31 December 20X1 found that goodwill had been impaired, and was now valued at Rs. 55,000.

The statements of financial position of a parent company P and its subsidiary S at 31 December 20X1 are as follows:

	P (Rs. )	S (Rs. )
<b>Non-current assets:</b>		
Property, plant and equipment	408,000	100,000
Investment in S	142,000	-
Current assets	120,000	40,000
	670,000	140,000
<b>Equity</b>		
Share capital	100,000	20,000
Share premium	100,000	50,000
Retained earnings	400,000	60,000
	600,000	130,000
Bank loan	70,000	10,000
	670,000	140,000

**Example (continued):**

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

**P Group: Consolidated statement of financial position at 31 December 20X1**

Rs.

**Assets**

Goodwill (see working)	55,000
Property, plant and equipment (508 + 100)	508,000
Current assets (120,000 + 40,000)	160,000
<b>Total assets</b>	<u><u>723,000</u></u>

**Equity**

Share capital (P only)	100,000
Share premium (P only)	100,000
Consolidated retained earnings (see working)	417,000
	<u>617,000</u>

Non-controlling interest	26,000
	<u>643,000</u>

Current liabilities (70,000 + 10,000)	80,000
<b>Total equity and liabilities</b>	<u><u>723,000</u></u>

**Example (continued):****Net assets summary of S**

	At date of		
	Consolidation	Acquisition	Post acq <sup>n</sup>
Share capital	20,000	20,000	
Share premium	50,000	50,000	
Retained earnings	60,000	20,000	40,000
Net assets	<u>130,000</u>	<u>90,000</u>	

**Non-controlling interest****Rs.**

NCI's share of net assets at the date of acquisition (20% × 90,000)	18,000
NCI's share of the post-acquisition retained earnings of S (20% of 40,000 (see above))	8,000
NCI's share of net assets at the date of consolidation	<u>26,000</u>

**Goodwill****Rs.**

Cost of investment	142,000
Non-controlling interest at acquisition (20% × 90,000)	18,000
	<u>160,000</u>
Net assets at acquisition (see above)	(90,000)
	70,000
Write down of goodwill (balancing figure)	(15,000)
Recoverable amount of goodwill (given)	<u>55,000</u>

**Consolidated retained profits:****Rs.**

All of P's retained earnings	400,000
P's share of the post-acquisition retained earnings of S (80% of 40,000 (see above))	32,000
Write down of goodwill (see goodwill working)	(15,000)
	<u>417,000</u>

## 2.2 Negative goodwill and bargain purchases

A bargain purchase is a business combination in which the calculation of goodwill leads to a negative figure.

When this happens the acquirer must then review the procedures used to measure the amounts recognised at the acquisition date for all of the following:

- the identifiable assets acquired and liabilities assumed;
- the non-controlling interest in the acquiree (if any); and
- the consideration transferred.

Any amount remaining after applying the above requirements is recognised as a gain in profit or loss on the acquisition date.

This means that in most cases when a bargain purchase occurs, the 'negative goodwill' should be added to the consolidated profit for the group for the year.

**Practice question****1**

Haidar plc acquired 75% of Saqib Ltd's ordinary shares on 1 April for an agreed consideration of Rs. 25 million when Saqib had retained earnings of Rs. 10,200,000.

The draft statements of financial position of the two companies at 31 December are:

	H (Rs. 000 )	S (Rs. 000)
<b>Non-current assets:</b>		
Property, plant and equipment	78,540	27,180
Investment in S	25,000	nil
<b>Current assets</b>		
Inventory	7,450	4,310
Accounts receivable	12,960	4,330
Cash and bank	nil	920
<b>Total assets</b>	<b>123,950</b>	<b>36,740</b>
<b>Equity</b>		
Share capital	30,000	8,000
Share premium	20,000	2,000
Retained earnings	64,060	15,200
	<b>114,060</b>	<b>25,200</b>
Bank loan		6,000
<b>Current liabilities</b>		
Accounts payable and accruals	5,920	4,160
Bank overdraft	2,100	Nil
Taxation	1,870	1,380
	<b>9,890</b>	<b>5,540</b>
<b>Total equity and liabilities</b>	<b>123,950</b>	<b>36,740</b>

The following information is relevant

- (i) The fair value of Saqib Ltd's land at the date of acquisition was Rs. 4 million in excess of its carrying value. The fair value of Saqib Ltd's other net assets approximated to their carrying values.
- (ii) During the year Haidar plc sold inventory to Saqib Ltd for Rs. 2.4 million. The inventory had originally cost Haidar plc Rs. 2.0 million. Saqib Ltd held 25% of these goods at the year-end.
- (iii) The two companies agreed their current account balances as Rs. 500,000 payable by Saqib Ltd to Haidar plc at the year-end. Inter-company current accounts are included in accounts receivable or payable as appropriate.
- (iv) An impairment test at 31 December on the consolidated goodwill concluded that it should be written down by Rs. 625,000.

Prepare a consolidated statement of financial position as at 31 December.

## SOLUTIONS TO PRACTICE QUESTIONS

Solutions	1
<b>H Group: Consolidated statement of financial position at 31 December 20X1</b>	
	Rs.
<b>Assets</b>	
Goodwill (W3)	6,225
Property, plant and equipment (78,450 + 27,180 - 4,000)	109,720
	115,945
<b>Current assets</b>	
Inventory (7,450 + 4,310 - 100)	11,660
Accounts receivable (12,960 + 4,330 - 500)	16,790
Cash and bank	920
	29,370
<b>Total assets</b>	<b>145,315</b>
<b>Equity</b>	
Share capital	30,000
Share premium	20,000
Retained earnings (W4)	67,085
	117,085
Non-controlling interest (W2)	7,300
	124,385
Non-current liabilities	6,000
<b>Current liabilities</b>	
Accounts payable and accruals (5,920 + 4,160 - 500)	9,580
Bank overdraft	2,100
Taxation (1,870 + 1,380)	3,250
	14,930
<b>Total equity and liabilities</b>	<b>145,315</b>

**Solution: Workings****1****W1: Net assets summary of S**

	At date of		
	Consolidation	Acquisition	Post acqu <sup>n</sup>
Share capital	8,000	8,000	
Share premium	2,000	2,000	
Retained earnings	15,200	10,200	5,000
Fair value adjustment	4,000	4,000	
Net assets	<u>29,200</u>	<u>24,200</u>	

**W2: Non-controlling Interest****Rs.000**

NCI's share of net assets at the date of acquisition (25% × 24,200)	6,050
NCI's share of the post-acquisition retained earnings of S (25% of 5,000 (see above))	1,250
NCI's share of net assets at the date of consolidation	<u>7,300</u>

**W3: Goodwill****Rs. 000**

Cost of investment	25,000
Non-controlling interest at acquisition (25% × 24,200)	6,050
	<u>31,050</u>
Net assets at acquisition (see above)	(24,200)
	6,850
Write down of goodwill (given)	(625)
Recoverable amount of goodwill	<u>6,225</u>

**W4: Consolidated retained profits:****Rs.**

All of H's retained earnings	64,060
Unrealised profit	(100)
H's share of the post-acquisition retained earnings of S (75% of 5,000 (see above))	3,750
Write down of goodwill (given)	(625)
	<u>67,085</u>



## Consolidated accounts: Statements of comprehensive income

### Contents

- 1 Consolidated statement of comprehensive income
- 2 Complications

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

**LO 1            Prepare financial statements in accordance with the relevant law of the country and in compliance with the reporting requirement of the international pronouncements.**

LO1.6.1        Prepare and present a simple consolidated statement of comprehensive income involving a single subsidiary in accordance with IFRS 10.

# 1 CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

## Section overview

- Consolidated income statement: the basic rules
- Pre- and post-acquisition profits

### 1.1 Consolidated income statement: the basic rules

The main problems with preparing a consolidated statement of comprehensive income relate to reporting profit or loss for the period, and this section therefore focuses on profit or loss items.

A consolidated statement of comprehensive income brings together the sales revenue, income and expenses of the parent and the sales revenue, income and expenses of its subsidiaries.

All items of income and expense in the consolidated statement of comprehensive income are a straight cross cast of equivalent items in the individual financial statements of the members of the group.

#### Non-controlling interest

Consolidated financial statements must also disclose the profit or loss for the period and the total comprehensive income for the period attributable to:

- owners of the parent company; and
- non-controlling interests.

The figure for NCI is simply their share of the subsidiary's profit for the year that has been included in the consolidated statement of comprehensive income.

The amounts attributable to the owners of the parent and the non-controlling interest are shown as a metric (small table) immediately below the statement of comprehensive income.



#### Illustration:

<b>Total comprehensive income attributable to:</b>	<b>Rs.</b>
Owners of the parent (balancing figure)	X
Non-controlling interests (x% of y)	X
	X

**Where:** x% is the NCI ownership interest  
 y is the subsidiary's profit for the year that has been included in the consolidated statement of comprehensive income

**Example:**

Entity P bought 80% of S several years ago.

The income statements for the year to 31 December 20X1 are as follows.

	<b>P</b> Rs.	<b>S</b> Rs.
Revenue	500,000	250,000
Cost of sales	(200,000)	(80,000)
Gross profit	<u>300,000</u>	<u>170,000</u>
Other income	25,000	6,000
Distribution costs	(70,000)	(60,000)
Administrative expenses	(90,000)	(50,000)
Other expenses	(30,000)	(18,000)
Finance costs	(15,000)	(8,000)
Profit before tax	<u>120,000</u>	<u>40,000</u>
Income tax expense	(45,000)	(16,000)
Profit for the period	<u><u>75,000</u></u>	<u><u>24,000</u></u>

A consolidated statement of comprehensive income can be prepared as follows:

	<b>Working</b>		<b>Consolidated</b> Rs.
	<b>P</b> Rs.	<b>S</b> Rs.	
Revenue	500,000	250,000	750,000
Cost of sales	(200,000)	(80,000)	(280,000)
Gross profit	<u>300,000</u>	<u>170,000</u>	<u>470,000</u>
Other income	25,000	6,000	31,000
Distribution costs	(70,000)	(60,000)	(130,000)
Administrative expenses	(90,000)	(50,000)	(140,000)
Other expenses	(30,000)	(18,000)	(48,000)
Finance costs	(15,000)	(8,000)	(23,000)
Profit before tax	<u>120,000</u>	<u>40,000</u>	<u>160,000</u>
Income tax expense	(45,000)	(16,000)	(61,000)
Profit for the period	<u><u>75,000</u></u>	<u><u>24,000</u></u>	<u><u>99,000</u></u>

Total comprehensive income attributable to:

Owners of the parent (balancing figure)	94,200
Non-controlling interests (20% of 24,000)	4,800
	<u><u>99,000</u></u>

## 1.2 Pre- and post-acquisition profits

Only post acquisition profits are consolidated. When a parent acquires a subsidiary **during** a financial year, the profits of the subsidiary have to be divided into pre-acquisition and post-acquisition profits.



### Example:

Entity P acquired 80% of S on 1 October 20X1.

The acquisition date was 1 October. This means that only  $\frac{3}{12}$  of the subsidiary's profit for the year is post-acquisition profit.

The income statements for the year to 31 December 20X1 are as follows.

	P Rs.	S Rs.
Revenue	400,000	260,000
Cost of sales	(200,000)	(60,000)
Gross profit	200,000	200,000
Other income	20,000	-
Distribution costs	(50,000)	(30,000)
Administrative expenses	(90,000)	(95,000)
Profit before tax	80,000	75,000
Income tax expense	(30,000)	(15,000)
Profit for the period	50,000	60,000

A consolidated statement of comprehensive income can be prepared as follows:

	Working		Consolidated Rs.
	P Rs.	S ( $\frac{3}{12}$ ) Rs.	
Revenue	400,000	65,000	465,000
Cost of sales	(200,000)	(15,000)	(215,000)
Gross profit	200,000	50,000	250,000
Other income	20,000	-	20,000
Distribution costs	(50,000)	(7,500)	(57,500)
Administrative expenses	(90,000)	(23,750)	(113,750)
Profit before tax	80,000	18,750	98,750
Income tax expense	(30,000)	(3,750)	(33,750)
Profit for the period	50,000	15,000	65,000

Total comprehensive income attributable to:

Owners of the parent (balancing figure)	62,000
Non-controlling interests (20% of 15,000)	3,000
	65,000

## 2 COMPLICATIONS

### Section overview

- Inter-company items
- Fair value adjustments
- Impairment of goodwill and consolidated profit

### 2.1 Inter-company items

Consolidated income statements are prepared by combining the information given in the income statements of the individual companies.

It is usually necessary to make adjustments to eliminate the results of inter-company trading. This includes adjustments to cancel out inter-company trading balances and unrealised profit.

#### Inter-company trading

Inter-company trading will be included in revenue of one group company and purchases of another. These are cancelled on consolidation.



#### Illustration:

	Debit	Credit
Revenue	X	
Cost of sales (actually purchases within cost of sales)		X

**Example:**

P acquired 80% of S 3 years ago.

During the year P sold goods to S for Rs. 50,000.

By the year-end S had sold all of the goods bought from P to customers.

Extracts of the income statements for the year to 31 December 20X1 are as follows.

	P Rs.	S Rs.
Revenue	800,000	420,000
Cost of sales	(300,000)	(220,000)
Gross profit	500,000	200,000

The adjustment in respect of inter-company trading can be shown as follows:

	Workings				Consol. Rs.(000)
	P Rs.(000)	S Rs.(000)	Dr Rs.(000)	Cr Rs.(000)	
Revenue	800	420	(50)		1,170
Cost of sales	(300)	(220)		50	(470)
Gross profit	500	200	(50)	50	700

The adjustment has no effect on gross profit.

**Unrealised profits on trading**

If any items sold by one group company to another are included in inventory (i.e. have not been sold on outside the group by the year end), their value must be adjusted to lower of cost and net realisable value from the group viewpoint (as for the consolidated statement of financial position).

This is an inventory valuation adjustment made in the consolidated financial statements.

**Illustration:**

	Debit	Credit
Closing inventory – Statement of comprehensive income	X	
Closing inventory – Statement of financial position		X

The adjustment in the statement of comprehensive income reduces gross profit and hence profit for the year. The NCI share in this reduced figure and the balance is added to retained earnings. Thus, the adjustment is shared between both ownership interests.

**Example:**

P acquired 80% of S 3 years ago.

During the year P sold goods to S for Rs. 50,000 at a mark-up of 25% on cost. This means that the cost of the goods to P was Rs. 40,000 ( $\frac{100}{125} \times \text{Rs. } 50,000$ ) and P made a profit of Rs. 10,000 ( $\frac{25}{125} \times \text{Rs. } 50,000$ ) on the sale to S.

At the year-end S still had a third of the goods in inventory.

This means that S still held goods which it had purchased from P for Rs. 15,000 at a profit to P of Rs. 3,000. The Rs. 3,000 is unrealised by the group as at the year-end.

Extracts of the income statements for the year to 31 December 20X1 are as follows.

	P (Rs.)	S (Rs.)
Revenue	800,000	420,000
Cost of sales	(300,000)	(220,000)
Gross profit	500,000	200,000

The adjustments in respect of inter-company trading<sup>1</sup> and unrealised profit<sup>2</sup> can be shown as follows:

	Workings				Consol. Rs.(000)
	P Rs.(000)	S Rs.(000)	Dr Rs.(000)	Cr Rs.(000)	
Revenue	800	420	(50) <sup>1</sup>		1,170
Cost of sales	(300)	(220)	(3) <sup>2</sup>	50 <sup>1</sup>	(473)
Gross profit	500	200	(53)	50	697

The adjustment in respect of inter-company trading<sup>1</sup> has no effect on gross profit.

The adjustment in respect of and unrealised profit<sup>2</sup> reduces gross profit.

If the sale is from S to P the unrealised profit adjustment must be shared with the NCI.



**Example:**

P acquired 80% of S 3 years ago.

During the year S sold goods to P for Rs. 50,000 at a mark-up of 25% on cost. This means that the cost of the goods to S was Rs. 40,000 ( $\frac{100}{125} \times \text{Rs. } 50,000$ ) and S made a profit of Rs. 10,000 ( $\frac{25}{125} \times \text{Rs. } 50,000$ ) on the sale to S.

At the year-end P still had a third of the goods in inventory.

This means that P still held goods which it had purchased from S for Rs. 15,000 at a profit to S of Rs. 3,000. The Rs. 3,000 is unrealised by the group as at the year-end. The NCI's share of the unrealised profit adjustment is Rs. 600 ( $20\% \times \text{Rs. } 3,000$ )

Extracts of the income statements for the year to 31 December 20X1 are as follows.

	P (Rs.)	S (Rs.)
Revenue	800,000	420,000
Cost of sales	(300,000)	(220,000)
Gross profit	<u>500,000</u>	<u>200,000</u>
Expenses	(173,000)	(123,000)
Profit before tax	<u><u>327,000</u></u>	<u><u>77,000</u></u>

The adjustments in respect of inter-company trading<sup>1</sup> and unrealised profit<sup>2</sup> can be shown as follows:

	Workings				Consol. Rs.(000)
	P Rs.(000)	S Rs.(000)	Dr Rs.(000)	Cr Rs.(000)	
Revenue	800	420	(50) <sup>1</sup>		1,170
Cost of sales	(300)	(220)	(3) <sup>2</sup>	50 <sup>1</sup>	(473)
Gross profit	<u>500</u>	<u>200</u>	<u>(53)</u>	<u>50</u>	<u>697</u>
	(173)	(123)			(296)
	<u>427</u>	<u>77</u>	<u>(53)</u>	<u>50</u>	<u>401</u>

The adjustment in respect of and unrealised profit<sup>2</sup> reduces gross profit and is shared with the NCI.

Total comprehensive income attributable to:	Rs.(000)
Owners of the parent (balancing figure)	386.2
Non-controlling interests ( $20\% \times 77,000$ ) – 600)	<u>14.8</u>
	<u><u>401.0</u></u>

### Inter-company management fees and interest

All other inter-company amounts must also be cancelled.

Where a group company charges another group company, management fees/interest, there is no external group income or external group expense and they are cancelled one against the other like inter-company sales and cost of sales.



#### Illustration:

	Debit	Credit
Income (management fees)	X	
Expense (management charges)		X



#### Example:

P acquired 80% of S 3 years ago.

Other income in P's statement of comprehensive income includes an inter-company management charge of Rs. 5,000 to S. S has recognised this in administrative expenses.

Extracts of the income statements for the year to 31 December 20X1 are as follows.

	P Rs.	S Rs.
Revenue	800,000	420,000
Cost of sales	(300,000)	(220,000)
Gross profit	500,000	200,000
Administrative expenses	(100,000)	(90,000)
Distribution costs	(85,000)	(75,000)
Other income	12,000	2,000
Profit before tax	327,000	37,000

**Example continued**

The adjustments in respect of inter-company management charge can be shown as follows:

	Workings				Consol. Rs.(000)
	P Rs.(000)	S Rs.(000)	Dr Rs.(000)	Cr Rs.(000)	
Revenue	800	420			1,220
Cost of sales	(300)	(220)			(520)
Gross profit	500	200			700
Administrative expenses	(100)	(90)		5	(185)
Distribution costs	(85)	(75)			(160)
Other income	12	2	(5)		9
Profit before tax	327	37			364

The adjustment in respect of inter-company management charge has no effect on gross profit.

**Inter-company dividends**

The parent may have accounted for dividend income from a subsidiary. This is cancelled on consolidation.

Dividends received from a subsidiary are ignored in the consolidation of the statement of comprehensive income because the profit out of which they are paid has already been consolidated.

## 2.2 Fair value adjustments

Depreciation is charged on the carrying amount of assets.

If a depreciable asset is revalued on consolidation the depreciation stream that relates to that asset will also need to be revalued.

This adjustment is carried out in the financial statements of the subsidiary. It will affect the subsidiary's profit after tax figure and therefore will affect the NCI.



### Example:

P acquired 80% of S 3 years ago.

At the date of acquisition S had a depreciable asset with a fair value of Rs. 120,000 in excess of its book value. This asset had a useful life of 10 years at the date of acquisition.

This means that the group has to recognise extra depreciation of Rs. 36,000 (Rs.  $120,000/10 \text{ years} \times 3 \text{ years}$ ) by the end of this period. One year's worth of this (Rs. 12,000) is recognised in S's statement of comprehensive income prior to consolidation this year.

Extracts of the income statements for the year to 31 December 20X1 are as follows.

	<b>P</b>	<b>S</b>
	Rs.	Rs.
Revenue	800,000	420,000
Cost of sales	(300,000)	(220,000)
Gross profit	500,000	200,000
Expenses	(173,000)	(163,000)
Profit before tax	327,000	37,000

The adjustments in respect of extra depreciation can be shown as follows:

	Workings				Consol.
	P	S	Dr	Cr	
	Rs.(000)	Rs.(000)	Rs.(000)	Rs.(000)	Rs.(000)
Revenue	800	420			1,220
Cost of sales	(300)	(220)			(520)
Gross profit	500	200			700
Expenses	(173)	(163)			(348)
Adjustment		(12)			
Profit before tax	327	25			352

The adjustment in respect of the extra depreciation reduces the profit of S that is consolidated.

### 2.3 Impairment of goodwill and consolidated profit

When purchased goodwill is impaired, the impairment does not affect the individual financial statements of the parent company or the subsidiary. The effect of the impairment applies exclusively to the consolidated statement of financial position and the consolidated income statement.

If goodwill is impaired:

- ❑ it is written down in value in the consolidated statement of financial position, and
- ❑ the amount of the write-down is charged as an expense in the consolidated income statement (normally in administrative expenses).



#### Example:

P acquired 80% of S 3 years ago.

Goodwill on acquisition was Rs. 200,000.

The annual impairment test on goodwill has shown it to have a recoverable amount of only Rs. 175,000. Thus a write down of Rs. 25,000 is required.

Extracts of the income statements for the year to 31 December 20X1 are as follows.

	<b>P</b> Rs.	<b>S</b> Rs.
Revenue	800,000	420,000
Cost of sales	(300,000)	(220,000)
Gross profit	500,000	200,000
Expenses	(173,000)	(163,000)
Profit before tax	327,000	37,000

The adjustment in respect of inter-company trading<sup>1</sup> and unrealised profit<sup>2</sup> can be shown as follows:

	Workings				Consol. Rs.(000)
	P Rs.(000)	S Rs.(000)	Dr Rs.(000)	Cr Rs.(000)	
Revenue	800	420			1,220
Cost of sales	(300)	(220)			(520)
Gross profit	500	200			700
Expenses	(173)	(163)	(25)		(361)
Profit before tax	327	37	(25)		339

The adjustment in respect of the goodwill reduces the consolidated profit. (There is no impact on NCI).

**Practice question****1**

P acquired 80% of S 3 years ago. Goodwill on acquisition was 80,000. The recoverable amount of goodwill at the year-end was estimated to be 65,000. This was the first time that the recoverable amount of goodwill had fallen below the amount at initial recognition.

S sells goods to P. The total sales in the year were 100,000. At the year-end P retains inventory from S which had cost S 30,000 but was in P's books at 35,000.

The distribution costs of S include depreciation of an asset which had been subject to a fair value increase of 100,000 on acquisition. This asset is being written off on a straight line basis over 10 years.

The income statements for the year to 31 December 20X1 are as follows.

	<b>P</b>	<b>S</b>
	Rs.(000)	Rs.(000)
Revenue	1,000	800
Cost of sales	(400)	(250)
Gross profit	600	550
Distribution costs	(120)	(75)
Administrative expenses	(80)	(20)
	400	455
Dividend from S	80	-
Finance cost	(25)	(15)
Profit before tax	455	440
Tax	(45)	(40)
Profit for the period	410	400

Prepare the consolidated income statement for the year ended 31 December.

## SOLUTIONS TO PRACTICE QUESTIONS

### Solutions

**1**

Consolidated statement of comprehensive income for the year ended 31 December.

	Workings				Consol. Rs.(000)
	P Rs.(000)	S Rs.(000)	Dr Rs.(000)	Cr Rs.(000)	
Revenue	1,000	800	(100)		1,700
Cost of sales	(400)	(250)	<sup>3</sup> (5)	100	(555)
Gross profit	600	550	(105)	100	1,145
Distribution costs	(120)	(75)			
<i>Fair value adjustment</i>		<sup>1</sup> (10)			
	(120)	(85)			(205)
Administrative expenses	(80)	(20)	<sup>2</sup> (15)		(115)
	400	445			
Dividend from S	80	-	(80)		
Finance cost	(25)	(15)			(40)
Profit before tax	455	430			785
Tax	(45)	(40)			(85)
Profit for the period	410	390	(200)	100	700

Total comprehensive income attributable to:	Rs.(000)
Owners of the parent (balancing figure)	633
Non-controlling interests (20% of 390,000) – (20% of <sup>3</sup> 5,000)	77
	700

**Notes:**

- 1: Extra depreciation on fair value adjustment (<sup>100</sup>/<sub>10</sub> years)
- 2: Goodwill impairment
- 3: Unrealised profit



## IAS 16: Property, plant and equipment

### Contents

- 1 Initial measurement of property, plant and equipment
- 2 IAS 23: Borrowing costs
- 3 Depreciation and carrying amount
- 4 Revaluation of property, plant and equipment
- 5 Derecognition of property, plant and equipment
- 6 Disclosure requirements of IAS 16
- 7 Question problems

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

- LO 2            Account for transactions relating to tangible and intangible assets including transactions relating to their common financing matters.**
- LO2.1.1        Explain and apply the accounting treatment of property, plant and equipment.
- LO2.1.2        Formulate accounting policies in respect of property, plant and equipment.
- LO2.3.1        Describe borrowing cost and qualifying assets using examples.
- LO2.3.2        Identify and account for borrowing costs in accordance with IAS 23.
- LO2.3.3        Disclose borrowing costs in financial statements.
- LO2.3.4        Formulate accounting policies in respect of borrowing cost.

# 1 INITIAL MEASUREMENT OF PROPERTY, PLANT AND EQUIPMENT

## Section overview

- Introduction
- Initial measurement
- Exchange transactions
- Elements of cost
- Subsequent expenditure
- Measurement after initial recognition

### 1.1 Introduction

Rules on accounting for property, plant and equipment are contained in *IAS 16: Property, plant and equipment*.

#### Definition



#### **Definition: Property, plant and equipment**

Property, plant and equipment are tangible items that:

- (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
- (b) are expected to be used during more than one period.

Items such as spare parts, stand-by equipment and servicing equipment are recognised as property, plant and equipment when they meet the above definition. If this is not the case they are recognised as inventory.

#### Initial recognition

The cost of an item of property, plant and equipment must be recognised as an asset if, and only if:

- it is probable that future economic benefits associated with the item will flow to the entity; and
- the cost of the item can be measured reliably.

Items of property, plant and equipment may be acquired for safety or environmental reasons. At first sight it looks as if such items would not be recognised as property, plant and equipment according to the recognition criteria because they do not directly increase future economic benefits. However, they may be necessary in order that a company obtain the future economic benefits from its other assets so they do qualify for recognition.



#### **Illustration:**

A chemical manufacturer may install new chemical handling processes to comply with environmental requirements for the production and storage of dangerous chemicals.

This would be recognised as an asset because without them the company cannot make and sell chemicals.

## 1.2 Initial measurement

Property, plant and equipment are initially recorded in the accounts of a business at their cost.



### Definition: Property, plant and equipment

Cost is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction or, where applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other IFRSs. (For example assets held under finance leases – see chapter 9).

The cost of an item of property, plant and equipment is the cash price equivalent at the recognition date. If payment is deferred beyond normal credit terms, the difference between the cash price equivalent and the total payment is recognised as interest over the period of credit unless it is capitalised in accordance with IAS 23: *Borrowing costs* (covered later).



### Example: Deferred consideration

A company buys a machine on 1 January 2016.

The terms of the purchase are that the company will pay Rs. 5 million for the machine on 31 December 2016 (1 year later).

An appropriate discount rate is 6%

#### 1 January 2016 – Initial recognition

Initial measurement of the purchase price  $\text{Rs. } 5\text{m} \times \frac{1}{(1 + 0.06)} = \text{Rs. } 4,716,981$

	Debit	Credit
Property, plant and equipment	4,716,981	
Liability		4,716,981

#### 31 December 2016 – Date of payment

Recognition of interest expense  $\text{Rs. } 4,716,981 @ 6\% = 283,019$

	Debit	Credit
Statement of comprehensive income	283,019	
Liability		283,019

Balance on the liability		Rs.
Balance brought forward		4,716,981
Interest expense recognised in the period		283,019
		<hr/> 5,000,000
Cash/bank		<hr/> (5,000,000) <hr/>
		<hr/> – <hr/>

### 1.3 Exchange transactions

An asset may be acquired in exchange for another asset. The cost of such asset is measured at its fair value unless:

- ❑ the exchange transaction lacks commercial substance; or
- ❑ the fair value of neither the asset received nor the asset given up is reliably measurable.

If the new asset is measured at fair value, the fair value of the asset given up is used to measure the cost of the asset received unless the fair value of the asset received is more clearly evident.

If the new asset is not measured at fair value, its cost is measured at the carrying amount of the asset given in exchange for it. This would be the case when the exchange lacked commercial substance or when the fair value of either asset cannot be measured.

#### Lack of commercial substance

The determination of whether an exchange transaction has commercial substance depends on the extent to which future cash flows are expected to change as a result of the transaction. If there is minimal impact on future cash flows then the exchange lacks commercial substance.

### 1.4 Elements of cost

The definition of 'cost' for property, plant and equipment has close similarities with the cost of inventories, although property, plant and equipment will often include more items of 'other expense' within cost.

The cost of an item of property, plant and machinery consists of:

- ❑ its purchase price after any trade discount has been deducted, plus any import taxes or non-refundable sales tax; plus
- ❑ the directly attributable costs of bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. These directly attributable costs may include:
  - employee costs arising directly from the installation or construction of the asset;
  - the cost of site preparation;
  - delivery costs ('carriage inwards');
  - installation and assembly costs;
  - testing costs to assess whether the asset is functioning properly (net of sale proceeds of items produced during the testing phase).
  - professional fees directly attributable to the purchase.
- ❑ When the entity has an obligation to dismantle and remove the asset at the end of its life, its initial cost should also include an estimate of the costs of dismantling and removing the asset and restoring the site where it is located. This will be explained in more detail in chapter 10 which covers *IAS 37: Provisions, contingent liabilities and contingent assets*.

**Example: Cost**

A company has purchased a large item of plant.

The following costs were incurred.

List price of the machine	1,000,000
Trade discount given	50,000
Delivery cost	100,000
Installation cost	125,000
Cost of site preparation	200,000
Architect's fees	15,000
Administration expense	150,000
Test run cost	75,000

The test run cost was to ensure that the asset was installed and working correctly. Items of inventory were produced during the test run. These had a sale value of Rs. 10,000.

Local government officials have granted the company a license to operate the asset on condition that the company will remove the asset and return the site to its former condition at the end of the asset's life.

The company has recognised a liability of Rs. 250,000 in respect of the expected clearance cost.

The cost of the asset is as follows:

	<b>Rs.</b>
Purchase price of the machine (1,000,000 – 50,000)	950,000
Delivery cost	100,000
Installation cost	125,000
Cost of site preparation	200,000
Architect's fees	15,000
Decommissioning cost	250,000
Test run cost (75,000 – 10,000)	65,000
	<b>1,705,000</b>

The recognition of costs ceases when the asset is ready for use. This is when it is in the location and condition necessary for it to be capable of operating in the manner intended by management.

**Cost of self-constructed assets**

The cost of a self-constructed asset is determined using the same principles as for an acquired asset.

A company might make similar assets for sale in the normal course of business. The cost of an asset for the company to use itself would normally be the same as the cost of an asset for sale as measured according to *IAS 2: Inventories*.

*IAS23: Borrowing costs*, deals with whether interest costs on borrowing to finance the construction of a non-current asset should be included in the cost of the asset. This is covered in the next section of this chapter.

**Not part of cost**

Only those costs necessary to bring an asset to a condition and location where it is capable of operating in the manner intended by management are recognised.

IAS 16 provides the following list of costs that are not costs of an item of property, plant and equipment:

- costs of opening a new facility;
- costs of introducing a new product or service (including costs of advertising and promotional activities);
- costs of conducting business in a new location or with a new class of customer (including costs of staff training); and
- administration and other general overhead costs.

**1.5 Subsequent expenditure**

Expenditure relating to non-current assets, after their initial acquisition, should be capitalised if it meets the criteria for recognising an asset.

In practice, this means that expenditure is capitalised if it:

- improves the asset (for example, by enhancing its performance or extending its useful life); or
- is for a replacement part (provided that the part that it replaces is treated as an item that has been disposed of).

Repairs and maintenance expenditure is revenue expenditure. It is recognised as an expense as it is incurred, because no additional future economic benefits will arise from the expenditure.

A basic rule is that improvements are capitalised but repairs are expensed. You may have to correct situations when an amount spent has not been treated correctly. This is covered in section 7 of this chapter.

**Major inspections**

A company might only be allowed to operate some assets if those assets are subject to regular major inspections for faults.

The cost of such major inspections is recognised in the carrying amount of the asset as a replacement if the recognition criteria are satisfied.

When a major inspection is carried out any remaining carrying amount of the cost of the previous inspection is derecognised.



### Example: Major overhaul

A shipping company is required to put its ships into dry dock every three years for an overhaul, at a cost of Rs. 3,000,000. The ships have a useful life of 20 years. A ship is purchased from a shipbuilder at a cost of Rs. 200 million.

#### Initial recognition

Rs. 3,000,000 of the asset cost should be treated as a separate component and depreciated over three years.

The rest of the cost of the ship (Rs. 197 million) should be depreciated over 20 years.

#### End of year 3

An overhaul is required.

The cost of the overhaul is capitalised and added to the asset's cost.

The cost (Rs. 3,000,000) and accumulated depreciation of the depreciated component is removed from the accounts.

## 1.6 Measurement after initial recognition

IAS 16 allows a choice of accounting treatments after initial recognition.

All items of property, plant and equipment in a class can be accounted for using one of two models:

- ❑ Cost model - Property, plant and equipment is carried at cost less any accumulated depreciation and any accumulated impairment losses.
- ❑ Revaluation model - Property, plant and equipment is carried at a revalued amount. This is the fair value at the date of the revaluation less any subsequent accumulated depreciation and any accumulated impairment losses.

The above choice must be applied consistently. A business cannot carry one item of property, plant & equipment at cost and revalue a similar item. However, a business can use different models for different classes of property, plant & equipment. For example, companies might use the cost model for plant and equipment but use the revaluation model for property.

Depreciation is an important component of both models.

## 2 IAS 23; BORROWING COSTS

### Section overview

- Introduction
- Borrowing costs eligible for capitalisation
- Period of capitalisation

### 2.1 Introduction

A company might incur significant interest costs if it has to raise a loan to finance the purchase or construction of an asset. *IAS 23: Borrowing costs* defines borrowing costs and sets guidance on the circumstances under which are to be capitalised as part of the cost of qualifying assets.



#### Definition: Borrowing costs

Borrowing costs are interest and other costs that an entity incurs in connection with the borrowing of funds.



#### Definition: Qualifying asset

A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.

Any of the following may be qualifying assets depending on circumstances:

- inventories;
- items of property, plant and equipment;
- intangible assets.

The following are not qualifying assets:

- inventories that are manufactured, or otherwise produced, over a short period of time, are not qualifying assets
- assets that are ready for their intended use or sale when acquired.

Qualifying assets are usually self-constructed non-current assets.

## 2.2 Borrowing costs eligible for capitalisation

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset must be capitalised as part of the cost of that asset. All other borrowing costs are recognised as an expense in the period in which they are incurred.

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are those that would have been avoided if the expenditure on the qualifying asset had not been made.

This includes the costs associated with specific loans taken to fund the production or purchase of an asset and general borrowings. General borrowings are included because if an asset were not being constructed it stands to reason that there would have been a lower need for cash.

### Funds specifically borrowed to obtain a qualifying asset

When a specific loan is taken in order to obtain a qualifying asset the borrowing costs eligible for capitalisation are the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings.



#### Example: Specific borrowings

On 1 January 2016 Karachi Engineering issued a bond to raise Rs. 25,000,000 to fund a capital project which will take three years to complete.

Amounts not yet needed for the project are invested on a temporary basis.

During the year to 31 December 2016, Karachi Engineering spent Rs. 9,000,000 on the project.

The cost of servicing the bond was Rs. 1,250,000 during this period and the company was able to earn Rs. 780,000 through the temporary reinvestment of the amount borrowed.

The amounts recognised as capital work in progress in the period was:

	Rs.
Costs incurred (labour, material, overhead etc.)	9,000,000
Interest capitalised:	
Actual interest cost	1,250,000
Less: return on temporary investment	(780,000)
	470,000
<b>Additions to capital work in progress</b>	<b>9,470,000</b>

### General funds used for the purpose of obtaining a qualifying asset.

When general borrowings are used the amount of borrowing costs eligible for capitalisation is obtained by applying a capitalisation rate to the expenditures on that asset.

The capitalisation rate is the weighted average of the borrowing costs applicable to the borrowings that are outstanding during the period except for borrowings made specifically for the purpose of obtaining a qualifying asset.

The amount of borrowing costs capitalised cannot exceed the amount of borrowing costs it incurred during a period.


**Example: General borrowings: Capitalisation rate**

Chiniot Construction has three sources of borrowing:

	Average loan in the year (Rs.)	Interest expense incurred in the year (Rs.)
7 year loan	8,000,000	800,000
10 year loan	10,000,000	900,000
Bank overdraft	5,000,000	900,000

The 7 year loan has been specifically raised to fund the building of a qualifying asset.

A suitable capitalisation rate for other projects is found as follows:

	Average loan in the year (Rs.)	Interest expense incurred in the year (Rs.)
10 year loan	10,000,000	900,000
Bank overdraft	5,000,000	900,000
	15,000,000	1,800,000

$$\text{Capitalisation rate} = \frac{1,800,000}{15,000,000} \times 100 = 12\%$$

**Alternatively:**

$$\text{Rate on 10 year loan} = \frac{900,000}{10,000,000} \times 100 = 9\%$$

$$\text{Rate on bank overdraft} = \frac{900,000}{5,000,000} \times 100 = 18\%$$

$$\begin{aligned} \text{Weighted average: } & 9\% \times \frac{10,000,000}{15,000,000} + 18\% \times \frac{5,000,000}{15,000,000} \\ & 6\% + 6\% = 12\% \end{aligned}$$

The capitalisation rate is applied from the time expenditure on the asset is incurred.



#### Example: General borrowings: Capitalisation rate

Continuing the example above, Chiniot Construction has incurred the following expenditure on a project funded from general borrowings for year ended 31 December 2016.

Date incurred:	Amount (Rs.)
31 <sup>st</sup> March	1,000,000
31 <sup>st</sup> July	1,200,000
30 <sup>th</sup> October	800,000

The amount capitalised in respect of capital work in progress during 2016 is as follows:

	Rs.
31 <sup>st</sup> March – Expenditure	1,000,000
Interest ( $1,000,000 \times 10\% \times \frac{9}{12}$ )	75,000
31 <sup>st</sup> July – Expenditure	1,200,000
Interest ( $1,200,000 \times 10\% \times \frac{5}{12}$ )	50,000
30 <sup>th</sup> October – Expenditure	800,000
Interest ( $800,000 \times 10\% \times \frac{2}{12}$ )	13,333
	<u>3,138,333</u>

## 2.3 Period of capitalisation

### Commencement of capitalisation

Capitalisation of borrowing costs should start only when:

- expenditures for the asset are being incurred; and
- borrowing costs are being incurred, and
- activities necessary to prepare the asset have started.

### Suspension of capitalisation

Capitalisation of borrowing costs should be suspended if development of the asset is suspended for an extended period of time.

### Cessation of capitalisation

Capitalisation of borrowing costs should cease when the asset is substantially complete. The costs that have already been capitalised remain as a part of the asset's cost, but no additional borrowing costs may be capitalised.

### 3 DEPRECIATION AND CARRYING AMOUNT

#### Section overview

- Depreciation
- Depreciable amount and depreciation period
- Reviews of the remaining useful life and expected residual value
- Depreciation method
- Review of depreciation method
- Impairment

You should be familiar with the measurement and recognition of depreciation from your previous studies. This section provides a reminder of the key concepts.

#### 3.1 Depreciation

Depreciation is an expense that matches the cost of a non-current asset to the benefit earned from its ownership. It is calculated so that a business recognises the full cost associated with a non-current asset over the entire period that the asset is used.



##### Definitions

**Depreciation** is the systematic allocation of the depreciable amount of an asset over its useful life.

**Depreciable amount** is the cost of an asset, or other amount substituted for cost, less its residual value.

The **residual value** of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

**Useful life** is:

- (a) the period over which an asset is expected to be available for use by an entity; or
- (b) the number of production or similar units expected to be obtained from the asset by an entity.

**Carrying amount** is the amount at which an asset is recognised after deducting any accumulated depreciation and accumulated impairment losses. (Net book value (NBV) is a term that is often used instead of carrying amount).

### Parts of an asset

Each part of an asset that has a cost that is significant in relation to the total cost of the item must be depreciated separately. This means that the cost of an asset might be split into several different assets and each depreciated separately.



#### Illustration: Cost

A company has purchased a new Gulf Stream jet for Rs.5,500 million.

The company has identified the following cost components and useful lives in respect of this jet.

	Rs. million	Useful lives
Engines	2,000	3 years
Airframe	1,500	10 years
Fuselage	1,500	20 years
Fittings	500	5 years
	5,500	

Depreciation is charged as an expense in the statement of comprehensive income each year over the life of the asset unless it relates to an asset being used to construct another asset. In this case the depreciation is capitalised as part of the cost of that other asset in accordance with the relevant standard (For example: *IAS 2: Inventories; IAS 16 Property, plant and equipment; IAS 38; Intangible assets*).

### Accounting for depreciation

The double entry for depreciation should be familiar to you from your earlier studies. This section gives a brief recap.



#### Illustration: Depreciation double entry

	Debit	Credit
Depreciation expense	X	
Accumulated depreciation		X

The balance on the depreciation expense account is taken to the statement of comprehensive income as an expense for the period.

The non-current asset figure in the statement of financial position is made up of two figures, the cost less accumulated depreciation.



#### Illustration: Carrying amount of a non-current asset

	Rs.	
Non-current asset at cost	X	
Less accumulated depreciation	(X)	
Carrying amount (net book value)	X	<b>This figure appears on the face of the statement of financial position</b>

### 3.2 Depreciable amount and depreciation period

The depreciable amount of an asset must be allocated on a systematic basis over its useful life.

#### Commencement of depreciation

Depreciation of an asset begins when that asset is available for use. This means when the asset is in the location and condition necessary for it to be capable of operating in the manner intended by management. This might be before the asset is actually used.

#### Cessation of depreciation

Depreciation ends at the earlier of when an asset is classified as held for sale in accordance with *IFRS 5: Non-current assets held for sale and discontinued operations* and when it is derecognised.

IFRS 5 is outside the scope of your syllabus but is mentioned here for completeness. For questions in this exam you should depreciate to that an asset is derecognised.

Depreciation does not cease when an asset becomes idle or is withdrawn or retired from active use.

#### Residual value

In practice, the residual value of an asset is often insignificant and therefore immaterial in the calculation of the depreciable amount.

However, in some cases, the residual value may be equal to or greater than the asset's carrying amount. In this case the depreciation charge would be zero.

#### Land and buildings

Land and buildings are separable assets and are dealt with separately for accounting purposes, even when they are acquired together.

Land normally has an unlimited life and is therefore not depreciated. However, there are exceptions to this. If land has a physical attribute that is used over a period then the land should be depreciated over this period.



#### Example: Land

Quetta Quarries has purchased a site from which they will extract gravel for sale to the construction industry.

The site cost Rs. 50,000,000.

It is estimated that gravel will be extracted from the site over the next 20 years.

The land must be depreciated over 20 years.

Buildings normally have a limited life and are therefore depreciable assets.

### 3.3 Reviews of the remaining useful life and expected residual value

#### Review of useful life

IAS 16 requires useful lives and residual values to be reviewed at each year-end. Any change is a change in accounting estimate. The carrying amount (cost minus accumulated depreciation) of the asset at the date of change is written off over the (revised) remaining useful life of the asset.



#### Example:

Chiniot Engineering owns a machine which originally cost Rs. 60,000 on 1 January 2012.

The machine was being depreciated over its useful life of 10 years on a straight-line basis and has no residual value.

On 31 December 2015 Chiniot Engineering revised the total useful life for the machine to eight years (down from the previous 10).

#### Required

Calculate the depreciation charge for 2015 and subsequent years.



#### Answer

The change in accounting estimate is made at the end of 2015 but may be applied to the financial statements from 2015 onwards.

	Rs.
Cost on 1 January 2012	60,000
Depreciation for 2012 to 2014 ( $60,000 \times 3/10$ )	<u>(18,000)</u>
Carrying amount at end of 2014	<u>42,000</u>

Remaining useful life at the end of 2014 = 8 - 3 years = 5 years.

Depreciation for 2015 and subsequent years = Rs. 42,000 ÷ 5 years = Rs. 8,400.

#### Residual value

The residual value of an item of property, plant and equipment must be reviewed at least at each financial year end and if expectations differ from previous estimates the depreciation rate for the current and future periods is adjusted.

A change in the asset's residual value is accounted for prospectively as an adjustment to future depreciation.



#### Practice question

**1**

A machine was purchased three years ago on 1 January Year 2. It cost Rs.150,000 and its expected life was 10 years with an expected residual value of Rs.30,000.

Due to technological changes, the estimated life of the asset was reassessed during Year 5. The total useful life of the asset is now expected to be 7 years and the machine is now considered to have no residual value.

The financial year of the entity ends on 31 December.

What is the depreciation charge for the year ending 31 December Year 5?

### 3.4 Depreciation method

The depreciation method used should reflect the way in which the economic benefits of the asset are consumed by the business over time.

The main choice is between the straight line method and the reducing balance method (also known as the diminishing balance method).

#### Straight-line method



##### Definition: Straight line depreciation

The depreciable amount is charged in equal amounts to each reporting period over the expected useful life of the asset.

$$\text{Depreciation charge for the year} = \frac{\text{Cost of asset less expected residual value}}{\text{Expected useful life (years)}}$$

The charge in the first and last year is time apportioned.



##### Example: Straight line depreciation – mid-year acquisition

A machine cost Rs. 250,000. It has an expected economic life of five years.

It is expected that the machine will have a zero scrap value at the end of its useful life.

The machine was bought on the 1<sup>st</sup> September and the company has a 31<sup>st</sup> December year end.

The depreciation charge in the first year of ownership is:

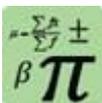
$$\text{Depreciation charge} = \frac{250,000}{5 \text{ years}} \times \frac{4}{12} = \text{Rs. 16,667}$$

### Reducing balance method



#### Definition: Reducing balance method

The annual depreciation charge is a fixed percentage of the carrying amount of the asset at the start of the period.



#### Formula: Reducing balance depreciation

$$\text{Depreciation charge for the year} = \text{Carrying amount at the start of the year} \times \text{Fixed percentage}$$



#### Example: Reducing balance method

A machine cost Rs. 100,000 on 30 September.

The company has a 31 December year end.

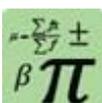
It has an expected life of five years, and it is to be depreciated by the reducing balance method at the rate of 30% each year.

Annual depreciation and carrying amount over the life of the asset will be as follows.

Year	Carrying amount at start Rs.		Annual depreciation charge Rs.	Carrying amount at end Rs.
1	100,000	$\times 30\% \times \frac{3}{12}$	7,500	92,500
2	92,500	$\times 30\%$	27,750	64,750
3	64,750	$\times 30\%$	19,425	45,325
4	45,325	$\times 30\%$	13,598	31,727

Note that the depreciation in the year after the first full year's depreciation (year 2) can be calculated by multiplying the previous year's charge by (1 - the reducing balance percentage).

3	$27,750 \times 70\%$	19,425
4	$19,425 \times 70\%$	13,598



#### Formula: Calculation of reducing balance percentage

$$x = \sqrt[n]{\frac{\text{Residual value}}{\text{Cost}}} - 1$$

Where:

x = The reducing balance percentage

n = Expected useful life.

**Example: Reducing balance**

An asset cost Rs. 10,000 and has an expected residual value of Rs. 2,000 at the end of its expected useful life which is 5 years.

The reducing balance percentage is calculated as follows.

$$x = \sqrt[n]{\frac{\text{Residual value}}{\text{Cost}}} - 1 = \sqrt[5]{\frac{2,000}{10,000}} - 1 = 0.275 \text{ or } 27.5\%$$

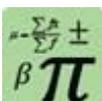
This percentage reduces Rs.10,000 to Rs. 2,000 over 5 years.

Year	Carrying amount at start of year Rs.	Annual depreciation charge (at 27.5% reducing balance) Rs.	Carrying amount at end of year Rs.
1	10,000	2,750	7,250
2	7,250	1,994	5,256
3	5,256	1,445	3,811
4	3,811	1,048	2,763
5	2,763	763	2,000

Note that the depreciation charge in year 5 contains a rounding difference of 3.

**Depreciation by number of units produced****Definition**

Depreciation is calculated by expressing the useful life of an asset in terms of its expected total output and allocating the annual charge to depreciation based on actual output.

**Formula: Depreciation by number of units produced**

$$\text{Depreciation charge} = \frac{\text{Cost} - \text{residual value}}{\text{Total expected production over the life of the asset}} \times \text{Number of units produced in period}$$

### 3.5 Review of depreciation method

The depreciation method applied to property, plant and equipment must be reviewed periodically and, if there has been a significant change in the expected pattern of economic benefits from those assets, the method is changed to reflect the changed pattern.

Where there is a change in the depreciation method used, this is a change in accounting estimate. A change of accounting estimate is applied from the time of the change, and is not applied retrospectively. The carrying amount (cost minus accumulated depreciation) of the asset at the date of the change is written off over the remaining useful life of the asset.



#### Example:

Marden Fabrics owns a machine which originally cost Rs. 30,000 on 1 January 2012. It has no residual value.

It was being depreciated over its useful life of 10 years on a straight-line basis.

At the end of 2015, when preparing the financial statements for 2015, Marden Fabrics decided to change the method of depreciation, from straight-line to the reducing balance method, using a rate of 25%.

#### Required

Calculate the depreciation charge for 2015.



#### Answer

The change in accounting estimate is made at the end of 2015, but is applied to the financial statements from 1 January 2015.

The reducing balance method of depreciation is applied to the 2015 statements.

	Rs.
Cost on 1 January 2012	30,000
Depreciation for 2012 to 2014 ( $30,000 \times 3/10$ )	<u>(9,000)</u>
Carrying amount at end of 2014	<u>21,000</u>

Depreciation for 2015 will therefore be Rs.  $21,000 \times 25\% =$  Rs. 5,250.

### 3.6 Impairment

Both the cost model and the revaluation model refer to impairment losses.

IAS 36 *Impairment of assets* contains detailed guidance on impairment.



#### Definition

**Impairment loss:** The amount by which the carrying amount of an asset (or a cash-generating unit) exceeds its recoverable amount.

An impairment loss is a write down in the value of an asset to its recoverable amount. IAS 36 operates to ensure that assets are carried in the financial statements at no more than their recoverable amount. (This is very similar to the rule that requires inventory to be measured at the lower of cost and net realisable value).

The recoverable amount of an asset is defined as the higher of its:

- ❑ Fair value less costs to sell (the amount that would be received for the asset in an orderly transaction between market participants less costs of selling it); and
- ❑ Value in use (the present value of future cash flows from using an asset, including its eventual disposal).

You will not be asked to compute these figures in the exam but you might be given the two amounts and be expected to identify the recoverable amount and account for any impairment loss.



#### Example: Impairment

The following information relates to 3 assets.

	Asset 1	Asset 2	Asset 3
Carrying amount	80,000	120,000	140,000
Value in use	150,000	105,000	107,000
Fair value less cost to sell	60,000	90,000	110,000
Recoverable amount	150,000	105,000	110,000
Impairment loss	nil	15,000	30,000

### Approach

Impairment of an asset should be identified and accounted for as follows.

- ❑ At the end of each reporting period, a business should assess whether there are any indications that an asset may be impaired.
- ❑ If there are such indications, the business should estimate the asset's recoverable amount.
- ❑ When the recoverable amount is less than the carrying amount of the asset, the carrying amount should be written down to this amount. The amount by which the value of the asset is written down is an impairment loss.
- ❑ This impairment loss is recognised as a loss for the period.
- ❑ Depreciation charges for the impaired asset in future periods should be adjusted to allocate the asset's revised carrying amount, minus any residual value, over its remaining useful life (revised if necessary).

There is no specific guidance on the double entry needed to record impairment. One way of accounting for it is to set up an accumulated impairment loss account and account for it just like depreciation.

## 4 REVALUATION OF PROPERTY, PLANT AND EQUIPMENT

### Section overview

- Revaluation and the entity's accounting policy
- Companies Ordinance 1984: Rules on revaluation
- Accounting for revaluation
- Changing the carrying amount of a revalued asset
- Depreciation of a re-valued asset
- Realisation of the revaluation surplus
- Revaluation model: the frequency of revaluations

### 4.1 Revaluation and the entity's accounting policy

Property, plant and equipment is recognised at cost when it is first acquired.

IAS 16 allows a business to choose one of two measurement models as its accounting policy for property, plant and equipment after acquisition. The same model should be applied to all assets in the same class.

The two measurement models for property, plant and equipment after acquisition are:

- cost model (i.e. cost less accumulated depreciation); and
- revaluation model (i.e. revalued amount less accumulated depreciation since the most recent revaluation).

For example, a company's policy might be to value all its motor vehicles at cost, but to apply the revaluation model to all its land and buildings.

#### Revaluation model – Issues

The following accounting issues have to be addressed when using the revaluation model:

#### Issue

- 1 What happens to the other side of the entry when the carrying amount of an asset is changed as a result of a revaluation adjustment?  
An asset value may increase or decrease.  
What happens in each case?

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- 2 How is the carrying amount of the asset being revalued changed?. The carrying amount is located in two accounts (cost and accumulated depreciation) and it is the net amount that must be changed so how is this done?

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- 3 How often should the revaluation take place?

The Companies Ordinance 1984 contains rules on accounting for revaluation of assets which conflict with those in IAS 16. The rules in the Companies Ordinance take precedence when there is such a conflict. This impacts the answer to issue 1 above.

## 4.2 Companies Ordinance 1984: Rules on revaluation

Section.235 of the Companies Ordinance 1984 sets out the following rules.

Where a company revalues its fixed assets any increase in the value of such assets must be transferred to an account to be called “Surplus on Revaluation of Fixed Assets Account” and shown in the balance-sheet of the company after Capital and Reserves. This means that the revaluation surplus is recognised outside equity. This has an impact on the revaluation double entry and this will be explained later.

Unless a surplus is subsequently realised on disposal of a revalued asset it cannot be used to reduce a loss or to add to the income, profit or surplus of the company, or used directly or indirectly by way of dividend or bonus. However, it can be used to set a deficit arising from the revaluation of any other fixed asset of the company.

Depreciation of revalued assets is based on the revalued amount of those assets and must be charged to the Profit and Loss Account. However, an amount equal to incremental depreciation for the period must be transferred from “Surplus on Revaluation of Fixed Assets Account” to accumulated profit through the statement of changes in equity to record the realisation of surplus to the extent of the incremental depreciation charge for the period.

### Conflict with IAS 16

The requirement to recognise the revaluation surplus outside equity causes a conflict with IAS 16.

Revaluation gains under IFRS fall within the definition of income.



#### Definition: Income

**Increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants.**

Under IFRS any gain must be recognised through other comprehensive income and accumulated as a revaluation surplus in equity.

However, under law in Pakistan the surplus is outside equity. Only inflows or enhancements that increase equity are recognised in other comprehensive income. Therefore, gains recognised under the law in Pakistan are recognised directly in the revaluation surplus account.

### 4.3 Accounting for revaluation

When a non-current asset is revalued, its 'carrying amount' in the statement of financial position is adjusted from carrying amount to its fair value (normally current market value) at the date of the revaluation.

How the carrying amount is changed will be addressed later. This section concentrates on the other side of the entry.

#### Asset carried at cost revalued upwards

**Companies Ordinance 1984:** An increase in value is credited to directly to an account outside equity called revaluation surplus.

**IAS 16:** An increase in value is credited to other comprehensive income and accumulated in equity under the heading of revaluation surplus.



#### Example: Upward revaluation

Land was purchased for 100 on the first day of the 2015 accounting period.

The business revalues land as permitted by the IAS 16.

The land was revalued to 130 at the end of the first year of ownership.

<b>Double entry: Companies' Ordinance 1984</b>		
	<b>Debit</b>	<b>Credit</b>
Land	30	
Revaluation surplus		30

<b>Double entry: IAS 16</b>		
	<b>Debit</b>	<b>Credit</b>
Land	30	
Other comprehensive income (an accumulated in a revaluation surplus).		30

#### Extract from the statement of financial position as at 31/12/13

	<b>CO 1984</b>	<b>IFRS</b>
Property, plant and equipment	130	130
Equity (revaluation surplus)		30
Revaluation surplus	30	

**Asset carried at cost revalued downwards**

A decrease in value is debited as an expense to the statement of comprehensive income.

**Example: Downward revaluation**

Land was purchased for 100 on the first day of the 2015 accounting period.

The business revalues land as permitted by the IAS 16.

The land was revalued to 90 at the end of the first year of ownership.

**Double entry: Companies' Ordinance 1984 and IAS 16**

	Debit	Credit
Statement of comprehensive income	10	
Land		10

**Asset carried at a revaluation deficit is revalued upwards**

An asset might be carried at an amount lower than its original cost as a result of being revalued downwards.

If the asset is later revalued upwards, the revaluation increase is recognised in the statement of comprehensive income to the extent of the previously recognised expense. That part of any increase above the previously recognised expense is recognised in the usual way, directly in the revaluation surplus account (Companies' Ordinance 1984) or in other comprehensive income (IAS 16).

**Asset carried at a revaluation surplus revalued downwards**

An asset might be carried at an amount higher than its original cost as a result of being revalued upwards.

**Companies Ordinance 1984:** If the asset is later revalued downwards, the revaluation decrease is recognised directly in equity to the extent of the previously recognised surplus. That part of any decrease above the previously recognised surplus is recognised in the statement of comprehensive income the usual way.

**IAS 16:** If the asset is later revalued downwards, the revaluation decrease is recognised in other comprehensive income to the extent of the previously recognised surplus. That part of any decrease above the previously recognised surplus is recognised in the statement of comprehensive income the usual way.



**Example: Downward revaluation – Accounted for under Companies’ Ordinance 1984**

A business purchased a plot of land on the first day of the 2015 accounting period. The business applies the IAS 16 revaluation model to the measurement of land after initial recognition. The business has a policy of revaluing land annually.

The initial amount recognised and the year end values are shown below:

	Rs.
Measurement on initial recognition	100
Valuation as at:	
31 December 2015	130
31 December 2016	110
31 December 2017	95
31 December 2018	116

The double entries are as follows:

<b>31 December 2015</b>	<b>Debit</b>	<b>Credit</b>
Land (130 – 100)	30	
Revaluation surplus		30

<b>31 December 2016</b>	<b>Debit</b>	<b>Credit</b>
Revaluation surplus	20	
Land (110 – 130)		20

The fall in value reverses a previously recognised surplus. It is recognised in revaluation surplus to the extent that it is covered by the surplus.

<b>31 December 2017</b>	<b>Debit</b>	<b>Credit</b>
Revaluation surplus	10	
Statement of comprehensive income	5	
Land (95 – 110)		15

The fall in value in part reverses a previously recognised surplus. It is recognised in Revaluation surplus to the extent that it is covered by the surplus. This reduces the revaluation surplus to zero.

Any amount not covered by the surplus is recognised as an expense in the statement of comprehensive income.

<b>31 December 2018</b>	<b>Debit</b>	<b>Credit</b>
Land (116 – 95)	21	
Statement of comprehensive income		5
Revaluation surplus		16

A rise in value that reverses a previously recognised expense is recognised in the statement of comprehensive income to the extent that it reverses the expense. Any amount above this is recognised in equity.

**Example (continued) – Overview**

	Land	Revaluation surplus	Statement of comprehensive income
At start	100	–	–
Double entry	30	30 <sup>Cr</sup>	
<b>31/12/13</b>	<b>130</b>		
b/f	130		
Adjustment	(20)	20 <sup>Dr</sup>	–
<b>31/12/14</b>	<b>110</b>		
b/f	110		
Adjustment	(15)	10 <sup>Dr</sup>	5 <sup>Dr</sup>
<b>31/12/15</b>	<b>95</b>		
b/f	95		
Adjustment	21	16 <sup>Cr</sup>	5 <sup>Cr</sup>
<b>31/12/16</b>	<b>116</b>		


**Example: Downward revaluation – Accounted for under IAS 16**

A business purchased a plot of land on the first day of the 2015 accounting period. The business applies the IAS 16 revaluation model to the measurement of land after initial recognition. The business has a policy of revaluing land annually.

The initial amount recognised and the year end values are shown below:

	Rs.
Measurement on initial recognition	100
Valuation as at:	
31 December 2015	130
31 December 2016	110
31 December 2017	95
31 December 2018	116

The double entries are as follows:

<b>31 December 2015</b>	<b>Debit</b>	<b>Credit</b>
Land (130 – 100)	30	
Other comprehensive income		30

<b>31 December 2016</b>	<b>Debit</b>	<b>Credit</b>
Other comprehensive income	20	
Land (110 – 130)		20

The fall in value reverses a previously recognised surplus. It is recognised in OCI to the extent that it is covered by the surplus.

<b>31 December 2017</b>	<b>Debit</b>	<b>Credit</b>
Other comprehensive income	10	
Statement of comprehensive income	5	
Land (95 – 110)		15

The fall in value in part reverses a previously recognised surplus. It is recognised in OCI to the extent that it is covered by the surplus. This reduces the revaluation surplus to zero.

Any amount not covered by the surplus is recognised as an expense in the statement of comprehensive income.

<b>31 December 2018</b>	<b>Debit</b>	<b>Credit</b>
Land (116 – 95)	21	
Statement of comprehensive income		5
Other comprehensive income		16

A rise in value that reverses a previously recognised expense is recognised in the statement of comprehensive income to the extent that it reverses the expense. Any amount above this is recognised in other comprehensive income.

**Example (continued) – Overview**

	Land	Other comprehensive income	Statement of comprehensive income
At start	100	–	–
Double entry	30	30 <sup>Cr</sup>	
<b>31/12/13</b>	<b>130</b>		
b/f	130		
Adjustment	(20)	20 <sup>Dr</sup>	–
<b>31/12/14</b>	<b>110</b>		
b/f	110		
Adjustment	(15)	10 <sup>Dr</sup>	5 <sup>Dr</sup>
<b>31/12/15</b>	<b>95</b>		
b/f	95		
Adjustment	21	16 <sup>Cr</sup>	5 <sup>Cr</sup>
<b>31/12/16</b>	<b>116</b>		

All later examples will follow only Companies' Ordinance 1984.

#### 4.4 Changing the carrying amount of the asset.

In the previous example land was revalued. Land is not depreciated so the carrying amount of land is represented in a single account. This made it easy to change:

The carrying amount of depreciable assets is the net of balances on two separate accounts. The double entry to revalue the asset must take this into account.

IAS 16 allows a choice of two approaches which differ in the treatment of the accumulated depreciation account.

When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is treated in one of the following ways:

##### Method 1

Restate accumulated depreciation proportionately with the change in the gross carrying amount of the asset so that the carrying amount of the asset after revaluation equals its revalued amount.

##### Method 2

**Step 1:** Transfer the accumulated depreciation to the asset account. The result of this is that the balance on the asset account is now the carrying amount of the asset and the accumulated depreciation account in respect of this asset is zero.

**Step 2:** Change the balance on the asset account to the revalued amount.

**Example: Method 1**

A building owned by a company is carried at Rs. 20 million (Cost of Rs. 25 million less accumulated depreciation of Rs. 5 million). The company's policy is to apply the revaluation model to all of its land and buildings.

A current valuation of this building is now Rs. 26 million.

	<b>Before</b>		<b>After</b>
Cost	25	$\times \frac{26}{20}$	32.5
Accumulated depreciation	(5)	$\times \frac{26}{20}$	(6.5)
Carrying amount	<u>20</u>	$\times \frac{26}{20}$	<u>26</u>

<b>Journals</b>	<b>Rs. m</b>	<b>Rs. m</b>
Asset	7.5	
Accumulated depreciation		1.5
Revaluation surplus		6

**Example: Method 2**

A building owned by a company is carried at Rs. 20 million (Cost of Rs. 25 million less accumulated depreciation of Rs. 5 million). The company's policy is to apply the revaluation model to all of its land and buildings.

A current valuation of this building is now Rs. 26 million.

<b>Step 1</b>	<b>Rs. m</b>	<b>Rs. m</b>
Accumulated depreciation	5	
Asset		5

<b>Step 2</b>	<b>Rs. m</b>	<b>Rs. m</b>
Asset (Rs. 26 – Rs. 20m)	6	
Revaluation surplus		6

Alternatively this could be done with a single journal

Asset (Rs. 26 – Rs. 25m)	1	
Accumulated depreciation	5	
Revaluation surplus		6

	<b>Before</b>	<b>1</b>	<b>2</b>	<b>After</b>
Cost	25	(5)	6	26
Accumulated depreciation	(5)	5		–
Carrying amount	<u>20</u>			<u>26</u>

**Example:**

An office building was purchased four years ago for Rs.3 million.

The building has been depreciated by Rs.100,000.

It is now re-valued to Rs.4 million. Show the book-keeping entries to record the revaluation.

**Answer**

**Building account**

	Rs.		Rs.
Opening balance b/f	3,000,000	Accumulated depreciation	100,000
Revaluation account	1,100,000	Closing balance c/f	4,000,000
	4,100,000		4,100,000
Opening balance b/f	4,000,000		

**Accumulated depreciation of building account**

	Rs.		Rs.
Building account	100,000	Opening balance b/f	100,000

**Revaluation surplus**

	Rs.		Rs.
		Revaluation account	1,100,000

**Practice question****2**

A company owns a building which was purchased three years ago for Rs.1 million. The building has been depreciated by Rs.60,000.

It is now to be revalued to Rs.2 million. Show the book-keeping entries to record the revaluation.

## 4.5 Depreciation of a revalued asset

After a non-current asset has been revalued, depreciation charges are based on the new valuation.



### Example:

An asset was purchased three years ago, at the beginning of Year 1, for Rs.100,000.

Its expected useful life was six years and its expected residual value was Rs.10,000.

It has now been re-valued to Rs.120,000. Its remaining useful life is now estimated to be three years and its estimated residual value is now Rs.15,000.

The straight-line method of depreciation is used.

### Required

- What is the transfer to the revaluation surplus at the end of Year 3?
- What is the annual depreciation charge in Year 4?
- What is the carrying amount of the asset at the end of Year 4?



### Answer

Original annual depreciation (for Years 1 – 3) =  $\text{Rs.}(100,000 - 10,000) / 6 \text{ years} = \text{Rs.}15,000$ .

	Rs.
Cost	100,000
Less: Accumulated depreciation at the time of revaluation (= 3 years x Rs.15,000)	(45,000)
Carrying amount at the time of the revaluation	55,000
Revalued amount of the asset	120,000
Transfer to the revaluation surplus	65,000

Revised annual depreciation =  $\text{Rs.}(120,000 - 15,000) / 3 \text{ years} = \text{Rs.}35,000$ .

The annual depreciation charge in Year 4 will therefore be Rs.35,000.

	Rs.
Revalued amount	120,000
Less: depreciation charge in Year 4	(35,000)
Carrying amount at the end of Year 4	85,000

## 4.6 Realisation of the revaluation surplus

All assets eventually disappear from the statement of financial position either by becoming fully depreciated or because the company sells them.

If nothing were done this would mean that there was a revaluation surplus on the face of the statement of financial position that related to an asset that was no longer owned.

- ❑ IAS 16 allows (but does not require) the transfer of a revaluation surplus to retained earnings when the asset to which it relates is derecognised (realised).
- ❑ Section 235 Companies Ordinance 1984 requires this.

This might happen over several years as the asset is depreciated or at a point in time when the asset is sold.

### Revalued assets being depreciated

Revaluation of an asset causes an increase in the annual depreciation charge. The difference is known as excess depreciation (or incremental depreciation):

Excess depreciation is the difference between:

- ❑ the depreciation charge on the re-valued amount of the asset, and
- ❑ the depreciation that would have been charged on historical cost.

Each year a business might make a transfer from the revaluation surplus to the retained profits equal to the amount of the excess depreciation.



#### Illustration:

	Debit	Credit
Revaluation surplus	X	
Retained earnings		X

### Revalued assets being sold

When a revalued asset is sold the business might transfer the balance on the revaluation surplus in respect of the asset into retained earnings. The journal entry would be the same as above.

**Example:**

An asset was purchased two years ago at the beginning of Year 1 for Rs.600,000. It had an expected life of 10 years and nil residual value.

Annual depreciation is Rs.60,000 ( $\text{Rs.}600,000/10 \text{ years}$ ) in the first two years.

At the end of Year 2 the carrying value of the asset -Rs.480,000.

After two years it is re-valued to Rs.640,000.

**Double entry: Revaluation**

	Debit	Credit
Asset (Rs.640,000 – Rs.600,000)	40	
Accumulated depreciation	120	
Revaluation surplus		160

Each year the business is allowed to make a transfer between the revaluation surplus and retained profits:

**Double entry: Transfer**

	Debit	Credit
Revaluation surplus ( $160/8$ )	20	
Retained profits		20

#### 4.7 Revaluation model: the frequency of revaluations

When the revaluation model is applied to the measurement of property, plant and equipment, revaluations must be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period.

The frequency of revaluations should depend on the volatility in the value of the assets concerned. When the value of assets is subject to significant changes (high volatility), annual revaluations may be necessary.

However, such frequent revaluations are unnecessary for items subject to only insignificant changes in fair value. In such cases it may be necessary to revalue the item only every three or five years.

## 5 DERECOGNITION OF PROPERTY, PLANT AND EQUIPMENT

### Section overview

- Gain or loss on disposal of a non-current asset
- Accounting for the disposal of property, plant and equipment
- Disposal of property, plant and equipment: part-exchange of an old asset

### 5.1 Gain or loss on disposal of a non-current asset

Property, plant and equipment are eventually disposed of:

- by sale, or
- if they have no sale value, through disposal as scrap.

Disposal can occur at any time, and need not be at the end of the asset's expected useful life.

There is a gain or loss on disposal of the asset, as follows:



#### Illustration: Gain or loss on disposal

		Rs.
Sale proceeds on disposal		X
Less disposal costs		(X)
Net disposal value		<u>X</u>
Asset at cost	X	
Less: Accumulated depreciation	(X)	
Carrying amount at date of disposal	<u>        </u>	(X)
Gain /loss on disposal		<u>        </u> <u>X</u>

**Example:**

A non-current asset originally cost Rs.75,000. Accumulated depreciation is Rs.51,000.

The asset is now sold for Rs.18,000. Disposal costs are Rs.500.

What is the gain or loss on disposal?

**Answer**

	Rs.	Rs.
<b>Gain or loss on disposal</b>		
Sale proceeds on disposal		18,000
Less disposal costs		(500)
Net disposal value		<u>17,500</u>
Asset at cost	75,000	
Less: Accumulated depreciation	<u>(51,000)</u>	
Carrying amount at date of disposal		<u>(24,000)</u>
Loss on disposal		<u>(6,500)</u>

**Practice question****3**

A non-current asset cost Rs.96,000 and was purchased on 1 June Year 1. Its expected useful life was five years and its expected residual value was Rs.16,000. The asset is depreciated by the straight-line method.

The asset was sold on 1 September Year 3 for Rs.68,000. There were no disposal costs.

It is the company policy to charge depreciation on a monthly basis.

The financial year runs from 1 January to 31 December.

What was the gain or loss on disposal?

**Practice question****4**

A non-current asset was purchased on 1 June Year 1 for Rs.216,000. Its expected life was 8 years and its expected residual value was Rs.24,000. The asset is depreciated by the straight-line method. The financial year is from 1 January to 31 December.

The asset was sold on 1 September Year 4 for Rs.163,000. Disposal costs were Rs.1,000.

It is the company policy to charge a proportionate amount of depreciation in the year of acquisition and in the year of disposal, in accordance with the number of months for which the asset was held.

What was the gain or loss on disposal?

## 5.2 Accounting for the disposal of property, plant and equipment

In the general ledger the gain or loss on disposal of a non-current asset is recorded in a **disposal of asset account**. The double entry transactions required are as follows – for an asset recorded at cost rather than at a re-valued amount.

**Step 1:** Transfer the cost of the non-current asset from the asset account to the disposal account:

**Step 2:** Transfer the accumulated depreciation on the asset from the accumulated depreciation account to the disposal account:



### Illustration:

	Debit	Credit
Disposal account	X	
Non-current asset account (cost of the asset)		X
Accumulated depreciation account (or Allowance for depreciation account)	X	
Disposal account		X

The carrying amount of the asset is now in the disposal account.

**Step 3:** Record the disposal costs in the disposal account.



### Illustration:

	Debit	Credit
Disposal account (disposal expenses)	X	
Bank or Payables account		X

**Step 4:** Record the sale proceeds in the disposal account:



### Illustration:

	Debit	Credit
Bank or Receivables account	X	
Disposal account (sale proceeds)		X

**Step 5:** The balance on the disposal account is the gain or loss on disposal. This is transferred to the statement of comprehensive income.

**Example:**

A non-current asset cost Rs.82,000 when purchased. It was sold for Rs.53,000 when the accumulated depreciation was Rs.42,000. Disposal costs were Rs.2,000.

**Required**

Show the book-keeping entries to record the disposal.

**Answer****Disposal of asset account**

	Rs.		Rs.
Non-current asset account	82,000	Accumulated depreciation account	42,000
Disposal expenses (Bank)	2,000	Sales value (Receivables)	53,000
Gain on disposal (statement of comprehensive income)	11,000		
	95,000		95,000

**Non-current asset account**

	Rs.		Rs.
Opening balance	82,000	Disposal account	82,000

**Accumulated depreciation account**

	Rs.		Rs.
Disposal account	42,000	Opening balance	42,000

**Receivables account**

	Rs.		Rs.
Disposal account (sale value of disposal)	53,000		

**Bank account**

	Rs.		Rs.
		Disposal account (disposal expenses)	2,000

**Statement of comprehensive income**

	Rs.		Rs.
		Disposal account (gain on disposal)	11,000

Non-current asset accounts in the general ledger are usually maintained for a category of assets rather than for individual assets. This means that when a non-current asset is disposed of, there will be a closing balance to carry forward on the asset account and the accumulated depreciation account.

**Example:**

In the previous example, suppose that the balance on the non-current asset account before the disposal was Rs.500,000 and the balance of the accumulated depreciation account was Rs.180,000.

The accounting entries would be as follows:

**Property, plant and equipment account**

	Rs.		Rs.
Opening balance b/f	500,000	Disposal account	82,000
		Closing balance c/f	418,000
	500,000		500,000
Opening balance b/f	418,000		

**Accumulated depreciation account**

	Rs.		Rs.
Disposal account	42,000	Opening balance b/f	180,000
Closing balance c/f	138,000		180,000
	180,000	Opening balance b/f	138,000

**Practice question****5**

A motor vehicle cost Rs.80,000 two years ago. It has been depreciated by the reducing balance method at 25% each year. It has now been disposed of for Rs.41,000. Disposal costs were Rs.200.

The balance on the motor vehicles account before the disposal was Rs.720,000 and the balance on the accumulated depreciation of motor vehicles account was Rs.250,000.

Show the book-keeping entries to record the disposal.

### 5.3 Disposal of property, plant and equipment: part-exchange of an old asset

Sometimes, a supplier will agree to take an old asset in part-exchange for the sale of a new asset. This practice is quite common, for example, with motor vehicles. A business entity may buy a new motor vehicle from a car dealer, and the car dealer will take an old motor vehicle in part-exchange for the new one.

Disposals of assets in part-exchange for a new asset are accounted for in much the same way as disposals of property, plant and equipment for cash. The only difference is that:

- ❑ The disposal value of the old asset is the amount that the seller of the new asset allows in part-exchange for the new asset.
- ❑ The cost of the new asset is the full purchase price, but the double entry is partly to bank/payables (for the cash payment) and partly to the disposal account for the old asset (for the part-exchange value).



#### Example:

Entity X has several motor cars that are accounted for as property, plant and equipment.

As at 1 January Year 5, the cost of the entity's cars was Rs.200,000 and the accumulated depreciation was Rs.80,000.

On 2 January Year 5, Entity X bought a new car costing Rs.50,000.

The car dealer accepted a car owned by Entity X in part-exchange, and the part-exchange value of this old car was Rs.4,000.

This car originally cost Rs.30,000 and its accumulated depreciation is Rs.25,000.

#### Required

- (a) Calculate the gain or loss on disposal of the old car.
- (b) Show how the purchase of the new car and the disposal of the old car will be recorded in the ledger accounts of Entity X.



#### Answer

(a)

	Rs.	Rs.
Sale proceeds on disposal (part-exchange value)		4,000
Less disposal costs		0
Net disposal value		<u>4,000</u>
Asset at cost	30,000	
Less: Accumulated depreciation	<u>(25,000)</u>	
Carrying amount at date of disposal		<u>(5,000)</u>
Loss on disposal		<u>(1,000)</u>



Answer (b)

**Disposal of asset account**

	Rs.		Rs.
Motor vehicles account	30,000	Accumulated depreciation account	25,000
		Motor vehicles account (Trade-in value)	4,000
		Loss on disposal (statement of comprehensive income)	1,000
	30,000		30,000

**Motor vehicles account**

	Rs.		Rs.
<b>1 January</b>			
Opening balance	200,000	Disposal account	30,000
Bank (50,000 - 4,000)	46,000		
Disposal of asset account	4,000	Closing balance	220,000
	250,000		250,000
<b>2 January</b>			
Opening balance	220,000		

**Accumulated depreciation account**

	Rs.		Rs.
<b>1 January</b>			
Disposal account	25,000	Opening balance	80,000
Closing balance	55,000		
	80,000		80,000
<b>2 January</b>		Opening balance	55,000

**Bank account**

	Rs.		Rs.
		Motor vehicles account (Cash paid for new car)	46,000

**Statement of comprehensive income**

	Rs.		Rs.
Disposal account (Loss on disposal)	1,000		

**Practice question****6**

A company has several motor cars that are accounted for as non-current assets. As at 1 January Year 2, the cost of the cars was Rs.120,000 and the accumulated depreciation was Rs.64,000.

During January the company bought a new car costing Rs.31,000 and was given a part-exchange allowance against an old car of Rs.8,000. The car being part exchanged originally cost Rs.28,000 and its accumulated depreciation is Rs.18,000.

**Required**

- (a) Calculate the gain or loss on disposal of the old car.
- (b) Show how the purchase of the new car and the disposal of the old car will be recorded in the ledger accounts.

## 6 DISCLOSURE REQUIREMENTS OF IAS 16

### Section overview

- Disclosure requirements of IAS 16
- Accounting policies

### 6.1 Disclosure requirements of IAS 16

IAS 16 requires the following disclosures in the notes to the financial statements, for each major class of property, plant and equipment.

- The measurement bases used (cost or revaluation model);
- The depreciation methods used;
- The useful lives or depreciation rates used;
- Gross carrying amounts and the accumulated depreciation at the beginning and at the end of the period;
- A reconciliation between the opening and closing values for gross carrying amounts and accumulated depreciation, showing:
  - Additions during the year;
  - Disposals during the year;
  - Depreciation charge for the year;
  - Assets classified as held for sale in accordance with IFRS 5;
  - Acquisitions of assets through business combinations;
  - Impairment losses;
  - The effect of revaluations.

The following is an example of how a simple table for tangible non-current assets may be presented in a note to the financial statements.

**Illustration:**

	Property	Plant and equipment	Total
<b>Cost</b>	<b>Rs. m</b>	<b>Rs. m</b>	<b>Rs. m</b>
At the start of the year	7,200	2,100	9,300
Additions	920	340	1,260
Disposals	(260)	(170)	(430)
At the end of the year	7,860	2,270	10,130
 <b>Accumulated depreciation</b>			
At the start of the year	800	1,100	1,900
Depreciation expense	120	250	370
Accumulated depreciation on disposals	(55)	(130)	(185)
At the end of the year	865	1,220	2,085
 <b>Carrying amount</b>			
At the start of the year	6,400	1,000	7,400
At the end of the year	6,995	1,050	8,045

## 6.2 Accounting policies

IAS 1 requires the disclosure of accounting policies used that are relevant to an understanding of the financial statements. Property, plant and equipment often includes the largest numbers in the statement of financial position and results in significant expense in the statement of comprehensive income.

One of the learning outcomes in this area is that you be able to formulate accounting policies for property, plant and equipment.

There are many aspects of accounting policy for property plant and equipment. Below is a typical note which covers many of the possible areas.



### **Illustration: Accounting policy – Property, plant and equipment**

Property, plant and equipment comprises freehold and lease hold land and buildings, plant and machinery, fixtures and fittings, vehicles, office equipment and capital work in progress.

#### **Land and buildings**

Land and buildings comprise mainly factories, warehousing and offices.

Freehold land and buildings are shown at their fair value less accumulated depreciation. Valuations are performed with sufficient regularity to ensure that the fair value of a revalued asset does not differ materially from its carrying amount.

Increases in the carrying amount arising on revaluation of land and buildings are credited directly to the revaluation surplus in accordance with s235 Companies' Ordinance 1984.

Decreases that offset previous increases of the same asset are charged directly to the revaluation surplus. Any amounts not so covered are recognised in profit or loss for the period.

Depreciation is based on the carrying amount of the asset after the revaluation. The incremental depreciation is the difference between the depreciation based on historical cost and depreciation based on fair value. Each year this amount is transferred from the revaluation surplus to accumulated profits.

Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset, and the net amount is restated to the revalued amount of the asset.

When revalued assets are sold, the amounts included revaluation surplus in respect of that asset is transferred to accumulated profits.

Freehold land has an indefinite useful life and is not depreciated. Freehold buildings are depreciated on a straight-line basis over their useful economic lives over as shown below.

Leasehold land and buildings are all depreciated on a straight-line basis over the lease term.

#### **Other tangible non-current assets**

All other property, plant and equipment is carried at historical cost less accumulated depreciation and accumulated impairment losses.

Historical cost includes expenditure that is directly attributable to the acquisition of the items, the cost of replacing parts of the plant and equipment and borrowing costs capitalised in accordance with IAS 23; Borrowing costs.



### **Illustration: Accounting policy – Property, plant and equipment**

Depreciation is calculated using the straight-line method to allocate their cost or revalued amounts to their residual values over their estimated useful lives, as follows:

**Buildings 35-50 years**

**Machinery 5 to 15 years**

**Vehicles 3 years**

**Furniture, fittings and equipment 5 to 10 years**

**The residual values and useful lives of assets are reviewed on an annual basis and adjusted as appropriate.**

Note from the above that there are two important areas where policies should be explained to users of financial statements. These are:

- depreciation policy
- policy for subsequent measurement of property, plant and equipment.

#### **Depreciation policy**

The depreciable amount of an asset must be written off over its useful life. Formulating a policy in this area involves:

- estimating the useful lives of different categories of assets;
- estimating residual values; and
- choosing a method.

#### **Policy for subsequent measurement**

Formulating a policy in this area involves:

- deciding whether to fair value any assets
- identifying classes of assets so that the policy can be applied to all assets in that class;
- deciding on how to apply the IAS 16 guidance on frequency of revaluation;
- deciding how to change the carrying amount of the asset.

It is particularly important to explain the impact that s.235 of the Companies Ordinance 1984 has on the accounting treatment. Investors in Pakistan will understand this but international investors might otherwise assume that IAS 16 is being complied with unless the situation is explained.



**Illustration: Accounting policy**

Property, plant and equipment, except freehold land, are stated at cost less accumulated depreciation and any identified impairment loss.

Freehold land is stated at cost less any identified impairment loss.

Cost in relation to self-constructed assets includes direct cost of material, labour and applicable manufacturing overheads and borrowing costs on qualifying asset.

Depreciation is charged to income, unless it is included in the carrying amount of another asset, on straight line method whereby cost of an asset is written off over its estimated useful life at the rates given in note XX.

Residual value and the useful life of an asset are reviewed at least at each financial year-end.

Depreciation on additions is charged from the month in which an asset is acquired, while no depreciation is charged for the month in which the asset is disposed of.

## 7 QUESTION PROBLEMS

### Section overview

- Multiple assets
- Working backwards
- Correcting errors

### 7.1 Multiple assets

Exam questions on property, plant and equipment usually involve multiple assets with the need to keep track of additions and disposals in a period.

In any one year the charge for depreciation will be made up as follows:



#### Illustration: Make-up of depreciation charge

	<b>Rs.</b>
Depreciation of assets held for the whole year (these are assets held at the start less disposals)	X
Depreciation of assets sold in the year (up to the date of sale)	X
Depreciation of assets bought in year (from the date of purchase)	X
Depreciation charge for the year	<u>          </u> <u>          </u> X

It is often useful to construct a working to calculate the depreciation charge for different components of the asset base.


**Example: Depreciation of several assets (straight line)**

A business has entered into the following transactions involving plant and equipment over the last three years.

1 January 2013	Bought several items of plant and equipment for Rs. 800,000.
30 June 2014	Bought several items of plant and equipment for Rs. 500,000.
28 February 2015	Bought several items of plant and equipment for Rs. 240,000.
31 March 2015	Sold some of the items which it had purchased on 1 January 2013. These items had cost Rs. 300,000.

The company depreciates assets on a straight line basis at 10% per annum.

The depreciation in 2013, 2014 and 2015 can be calculated as follows:

	<b>Depreciation:</b>		
	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>2013 purchase (Rs. 800,000)</b>			
$800,000 \times 10\%$ (2013 and 2014)	80,000	80,000	
In 2015 this must be split:			
Assets retained:			
$500,000 \times 10\%$			50,000
Assets sold:			
$300,000 \times 10\% \times \frac{3}{12}$			7,500
			57,500
<b>2014 purchase (Rs. 500,000)</b>			
$500,000 \times 10\% \times \frac{6}{12}$		25,000	
$500,000 \times 10\%$			50,000
<b>2015 purchase (Rs. 200,000)</b>			
$240,000 \times 10\% \times \frac{10}{12}$			20,000
<b>Depreciation charge</b>	<b>80,000</b>	<b>105,000</b>	<b>127,500</b>
<b>Depreciation on the assets sold:</b>			
$300,000 \times 10\% \times 2.25 (2 + \frac{3}{12}) = \text{Rs. } 67,500$			

Examples are always more complicated when depreciation is calculated using the reducing balance method.

**Example: Depreciation of several assets (reducing balance)**

A business has entered into the following transactions involving plant and equipment over the last three years.

1 January 2013	Bought several items of plant and equipment for Rs. 800,000.
30 June 2014	Bought several items of plant and equipment for Rs. 500,000.
28 February 2015	Bought several items of plant and equipment for Rs. 240,000.
31 March 2015	Sold some of the items which it had purchased on 1 January 2013. These items had cost Rs. 300,000.

The company depreciates assets using 20% reducing balance.

The depreciation in 2013, 2014 and 2015 can be calculated as follows:

	<b>Depreciation:</b>		
	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>2013 purchase (Rs. 800,000)</b>			
800,000 × 20%	160,000		
(800,000 – 160,000) × 20%		128,000	
In 2015 the carrying amount of the asset (800,000 – 160,000 – 128,000 = 512,000) must be split:			
Assets retained (512,000 × <sup>500</sup> / <sub>800</sub> ):			64,000
320,000 × 20%			9,600
Assets sold: (512,000 × <sup>300</sup> / <sub>800</sub> ):			
192,000 × 20% × <sup>3</sup> / <sub>12</sub>			73,600
<b>2014 purchase (Rs. 500,000)</b>			
500,000 × 20% × <sup>6</sup> / <sub>12</sub>		50,000	
(500,000 – 50,000) × 20%			90,000
<b>2015 purchase (Rs. 200,000)</b>			
240,000 × 20% × <sup>10</sup> / <sub>12</sub>			40,000
<b>Depreciation charge</b>	<b>160,000</b>	<b>178,000</b>	<b>203,600</b>
<b>Depreciation on the assets sold:</b>		<b>Rs.</b>	
300,000 × 20%		60,000	
(300,000 – 60,000) × 20%		48,000	
(300,000 – 60,000 – 48,000) × 20% × <sup>3</sup> / <sub>12</sub>		9,600	
		<b>117,600</b>	

## 7.2 Working backwards

A question may require you to construct figures by working backwards from information provided. Such questions might provide information at the end of a period and ask you to construct the ledger accounts that resulted in the information. Alternatively, the question might reveal only one side of a double entry and require you to construct the other.

Solving such questions requires a strong understanding of the measurement rules for depreciation and of double entry principles.

Each question has different features. The following example illustrates some of these.



### Example

Accumulated depreciation			
	Rs.		Rs.
		1 January: Balance b/f	200,000
31 August: Disposal	30,667		
31 December Balance c/f	384,000	31 December Charge for the year	214,667
	<u>414,667</u>		<u>414,667</u>
Disposal			
	Rs.		Rs.
		31 August: Cash	75,000
31 August: Cost	100,000	31 August: Disposal	30,667
Profit on disposal	5,667		
	<u>105,667</u>		<u>105,667</u>

#### Further information:

Assets are depreciated at 20% reducing balance.

The accumulated depreciation at the start of the year represents depreciation charged on assets owned from the beginning of the previous period.

The assets disposed of were all owned at the start of the year.

There were additions this year on 31 March.

**Required:** Construct the cost account for this category of non-current assets

**Example**

**Step 1:** Draw the cost T account and fill in any easy detail (double entries that you know about from the other accounts, narrative for other entries etc.)

Cost	
Rs.	Rs.
1 January: Balance b/f	
31 March: Additions	
_____	31 August: Disposal      100,000
	31 December
	Balance c/f
_____	_____

You should now try to calculate the missing figures in order of difficulty

**Example**

**Step 2:** Calculate the opening balance.

The question tells us that the opening accumulated depreciation is that charged on assets owned from the beginning of the previous period.

If this statement is true, there cannot have been any additions or disposals last year.

Therefore the accumulated depreciation (Rs. 200,000) is 20% of the assets held at the start of last year and these were still held at the end of the year.

Grossing this up provides the cost of assets.

$$\text{Rs. } 200,000 \times \frac{100}{20} = \text{Rs. } 1,000,000.$$

Cost	
Rs.	Rs.
1 January: Balance b/f      1,000,000	
31 March: Additions	
_____	31 August: Disposal      100,000
	31 December
	Balance c/f
_____	_____

**Example****Step 3: Calculate the depreciation on additions.**

The question gives the depreciation charge for the year.

The total charge is the sum of depreciation on assets held for the whole year plus assets up to the date of disposal plus assets from the date of purchase.

The question gives the total and gives information which allows you to calculate the first two. Therefore the depreciation on assets from the date of purchase can be found as a balancing figure.

This can be grossed up to give the cost of the additions.

	Rs.
Depreciation on assets held for the whole year (1,000,000 – 100,000) × 80% × 20%	144,000
Depreciation on assets sold (1 January to 31 August) 100,000 × 80% × 20% × <sup>8</sup> / <sub>12</sub>	10,667
Depreciation on assets purchased (31 March to 31 December) – a balancing figure	60,000
<b>Total depreciation charge for the year</b>	<b>214,667</b>

**Step 4: Gross up the depreciation on additions to find the cost of additions**

Rs. 60,000 is  $20\% \times \frac{9}{12}$  of the cost.

But  $20\% \times \frac{9}{12} = 15\%$

Therefore the cost = Rs.60,000 ×  $\frac{100}{15}$  = Rs. 400,000

**Step 5: Complete the T account.**

Cost			
	Rs.		Rs.
1 January: Balance b/f	1,000,000		
31 March: Additions	400,000		
	1,400,000	31 August: Disposal	100,000
		31 December	
		Balance c/f	1,300,000
			1,400,000

### 7.3 Correcting errors

Questions often feature mistakes made in terms of a transaction incorrectly classified as capital or as repair.



#### Example: Error: Repair incorrectly capitalised

The balance on a business's plant account as at 31 December is as follows.

	Rs.
Cost	1,200,000
Accumulated depreciation	(500,000)
Carrying amount	<u>700,000</u>

The company has discovered that a repair which cost Rs. 200,000 was incorrectly capitalised on 31 July.

Depreciation is charged at 15% reducing balance.

#### Correction of the error:

The amount capitalised would have been depreciated so the amount must be removed from cost and the depreciation incorrectly charged must be removed.

The correcting journals are:

	Dr	Cr
Statement of comprehensive income: line item to which repairs are charged	200,000	
Plant – cost		200,000
<b>and</b>		
Accumulated depreciation ( $200,000 \times 15\% \times \frac{5}{12}$ )	12,500	
Statement of comprehensive income: Depreciation expense		12,500

The impact on the carrying amount of the plant is as follows:

	Before (Rs.)		After (Rs.)
Cost	1,200,000	(200,000)	1,000,000
Accumulated depreciation	(500,000)	12,500	(487,500)
Carrying amount	<u>700,000</u>		<u>512,500</u>

**Example: Errors: Asset incorrectly expensed**

The balance on a business's plant account as at 31 December is as follows.

	Rs.
Cost	1,200,000
Accumulated depreciation	(500,000)
Carrying amount	<u>700,000</u>

The company has discovered that on 31 July an amount of Rs. 200,000 was charged to the statement of comprehensive income but it should have been capitalised.

Depreciation is charged at 15% reducing balance.

**Correction of the error:**

The amount must be capitalised and depreciated.

The correcting journals are:

	Dr	Cr
Plant – cost	200,000	
Statement of comprehensive income: line item to which repairs are charged		200,000

**and**

Statement of comprehensive income:

Depreciation expense	12,500	
Accumulated depreciation ( $200,000 \times 15\% \times \frac{5}{12}$ )		12,500

The impact on the carrying amount of the plant is as follows:

	Before (Rs.)		After (Rs.)
Cost	1,200,000	200,000	1,400,000
Accumulated depreciation	<u>(500,000)</u>	(12,500)	<u>(512,500)</u>
Carrying amount	<u>700,000</u>		<u>887,500</u>

## SOLUTIONS TO PRACTICE QUESTIONS

**Solution****1**

Original depreciation =  $(150,000 - 30,000) / 10 = \text{Rs.}12,000$  per annum

Carrying amount at start of year 5 =  $150,000 - (12,000 \times 3) = \text{Rs.}114,000$

If the total useful life is anticipated to be 7 years then there are four years remaining.

Depreciation charge for year 5 =  $\text{Rs.}114,000 / 4 = \text{Rs.}28,500$

**Solution****2**

a		Building account	
	Rs.(000)		Rs.(000)
Balance b/d	1,000		
Revaluation surplus (Rs.2m – Rs. 1m)	1,000	Balance c/d	2,000
	2,000		2,000
Balance b/d	2,000		

b		Accumulated depreciation	
	Rs.(000)		Rs.(000)
Revaluation surplus	60	Balance b/d	60
	60		60

c		Revaluation surplus	
	Rs.(000)		Rs.(000)
<b>YEAR 1</b>		Building account	1,000
Balance c/d	1,060	Accumulated depreciation	60
	1,060	Balance b/d	1,060

**Solution****3**

Annual depreciation =  $\text{Rs.}(96,000 - 16,000)/5 \text{ years} = \text{Rs.}16,000$ .

Monthly depreciation =  $\text{Rs. } 16,000/12 = \text{Rs. } 1,333.33$ .

	Rs.	Rs.
Disposal value less disposal costs		68,000
Cost of the asset	96,000	
Accumulated depreciation at the time of disposal (27 months $\times$ Rs. 1,333.33)	(36,000)	
Carrying amount at the date of disposal		<u>60,000</u>
Gain on disposal		<u>8,000</u>

**Solutions****4**

Annual depreciation =  $\text{Rs.}(216,000 - 24,000)/8 \text{ years} = \text{Rs.}24,000$ .

	Rs.	Rs.
Disposal value		163,000
Less disposal costs		<u>(1,000)</u>
		162,000
Accumulated depreciation at the time of disposal		
Year to 31 December Year 1: (Rs.24,000 $\times$ 7/12)	14,000	
Years 2 and 3: (Rs.24,000 $\times$ 2 years)	48,000	
Year to 31 December Year 4: (Rs.24,000 $\times$ 8/12)	16,000	
	<u>78,000</u>	
Cost of the asset	216,000	
Carrying amount at the date of disposal		<u>138,000</u>
Gain on disposal		<u>24,000</u>

**Solution****5**

	Rs.	Rs.
Cost of the asset	80,000	
Year 1 depreciation (× 25%)	(20,000)	20,000
Carrying amount at end of Year 1	<u>60,000</u>	
Year 2 depreciation (× 25%)	(15,000)	<u>15,000</u>
Accumulated depreciation at date of disposal		<u>35,000</u>

**Disposal account**

	Rs.		Rs.
Motor vehicles account	80,000	Accumulated depreciation	35,000
Bank (disposal costs)	200	Receivables	41,000
		Statement of comprehensive income (loss on disposal)	<u>4,200</u>
	<u>80,200</u>		<u>80,200</u>

**b****Motor vehicles**

	Rs.		Rs.
Opening balance b/d	720,000	Disposal of asset account	80,000
		Closing balance c/d	<u>640,000</u>
	<u>720,000</u>		<u>720,000</u>
Opening balance b/d	640,000		

**c****Accumulated depreciation on motor vehicles**

	Rs.		Rs.
Disposal of asset account	35,000	Opening balance b/f	250,000
Closing balance c/d	<u>215,000</u>		<u>250,000</u>
	<u>250,000</u>	Opening balance b/d	215,000

**Solution****6**

	Rs.	Rs.
Sale proceeds on disposal (part-exchange value)		8,000
Asset at cost	28,000	
Less: Accumulated depreciation	<u>(18,000)</u>	
Carrying amount at date of disposal		<u>(10,000)</u>
Loss on disposal		<u>(2,000)</u>

**Disposal account**

	Rs.		Rs.
Motor vehicles account	28,000	Accumulated depreciation account	18,000
		Motor vehicles account (Trade-in value)	8,000
		Loss on disposal	<u>2,000</u>
	<u>28,000</u>		<u>28,000</u>

**b****Motor vehicles**

	Rs.		Rs.
Opening balance	120,000	Disposal account	28,000
Bank (31,000 - 8,000)	23,000		
Disposal of asset account	8,000	Closing balance	<u>123,000</u>
	<u>151,000</u>		<u>151,000</u>
Opening balance	151,000		

**c****Accumulated depreciation on motor vehicles**

	Rs.		Rs.
Disposal account	18,000	Opening balance	64,000
Closing balance	<u>46,000</u>		
	<u>64,000</u>	Opening balance	<u>64,000</u>
			46,000

## IAS 38: Intangible assets

### Contents

- 1 IAS 38: Intangible assets – Introduction
- 2 Internally-generated intangible assets
- 3 Intangible assets acquired in a business combination
- 4 Measurement after initial recognition
- 5 Disclosure requirements

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

**LO 2            Account for transactions relating to tangible and intangible assets including transactions relating to their common financing matters.**

LO2.1.1       Explain and apply the accounting treatment of property, plant and equipment and intangible assets.

LO2.1.2       Formulate accounting policies in respect of property, plant and equipment and intangible assets

# 1 IAS 38: INTANGIBLE ASSETS - INTRODUCTION

## Section overview

- Introduction
- Definition of an intangible asset
- Recognition criteria for intangible assets
- Separate acquisition
- Exchange transactions
- Granted by government
- Subsequent expenditure on intangible assets

### 1.1 Introduction

*IAS 38: Intangible assets* sets out rules on the recognition, measurement and disclosure of intangible assets.

IAS 38 establishes similar rules for intangible assets to those set out elsewhere (mainly in IAS 16) for tangible assets. It was developed from the viewpoint that an asset is an asset so there should be no real difference in how tangible and intangible assets are accounted for. However, there is an acknowledgement that it can be more difficult to identify the existence of an intangible asset so IAS 38 gives broader guidance on how to do this when an intangible asset is acquired through a variety of means.

IAS 38:

- requires intangible assets to be recognised in the financial statements if, and only if, specified criteria are met and explains how these are applied however an intangible asset is acquired.
  - A key issue with expenditure on 'intangible items' is whether it should be treated as an expense and included in full in profit or loss for the period in which incurred, or whether it should be capitalised and treated as a long-term asset.
  - IAS 38 sets out criteria to determine which of these treatments is appropriate in given circumstances.
- explains how to measure the carrying amount of intangibles assets when they are first recognised and how to measure them at subsequent reporting dates;
  - Most types of long-term intangible asset are 'amortised' over their expected useful life. (Amortisation of intangible assets is the equivalent of depreciation of tangible non-current assets.)
- sets out disclosure requirements for intangible assets in the financial statements.

## 1.2 Definition of an intangible asset



### Definitions

**An asset:** A resource controlled by the company as a result of past events and from which future economic benefits are expected to flow.

**Intangible asset:** An identifiable, non-monetary asset without physical substance'

An intangible asset is a type of asset. Therefore expenditure on an intangible item must satisfy both definitions before it can be considered to be an asset.

### Commentary on the definitions

#### Control

The existence of control is useful in deciding whether an intangible item meets the criteria for treatment as an asset.

Control means that a company has the power to obtain the future economic benefits flowing from the underlying resource and also can restrict the access of others to those benefits.

Control would usually arise where there are legal rights, for example legal rights over the use of patents or copyrights. Ownership of legal rights would indicate control over them. However, legal enforceability is not a necessary condition for control.

For tangible assets such as property, plant and equipment the asset physically exists and the company controls it. However, in the case of an intangible asset, control may be harder to achieve or prove.



#### Illustration: Team of skilled staff

A company might have a team of skilled staff and may be able to identify incremental staff skills leading to future economic benefits from training and expect that the staff will continue to make their skills available to the company.

However, staff could leave their employment at any time, taking with them the skills they have acquired through training. Therefore, a company usually has insufficient control over the expected future economic benefits for these items to meet the definition of an intangible asset.



#### Illustration: Customer lists

A company may have a portfolio of customers which it expects to continue to trade with the company. In the absence of legal rights to protect the relationship, the company usually has insufficient control over the expected economic benefits to meet the definition of an intangible asset.

However, exchange transactions for the same or similar non-contractual customer relationships provide evidence that the company is able to control those benefits in the absence of such legal rights.

Such exchange transactions also provide evidence that the customer relationship is separable so, thus meeting the intangible asset definition.

This means that a purchased customer list would usually be capitalised.

### Future economic benefits

These may include revenues and/or cost savings.

Evidence of the probability that economic benefits will flow to the company may come from:

- market research;
- feasibility studies; and,
- a business plan showing the technical, financial and other resources needed and how the company will obtain them.

### Need to be identifiable

An intangible asset must also be 'identifiable'. Intangibles, by their very nature, do not physically exist. It is therefore important that this 'identifiability test' is satisfied.

IAS 38 states that to be identifiable an intangible asset:

- must be separable; or
- must arise from contractual or other legal rights.

To be separable, the intangible must be capable of being separated or divided from the company, and sold, transferred, licensed, rented or exchanged.

Many typical intangibles such as patent rights, copyrights and purchased brands would meet this test, (although they might fail other recognition criteria for an intangible asset).

### Without physical substance

Non-physical form increases the difficulty of identifying the asset.

Certain intangible assets may be contained in or upon an article which has physical substance (e.g. floppy disc). Whether such assets are treated as tangible or intangible requires. This judgement is based on which element is the most significant.

- Computer software for a computer controlled machine tool that cannot operate without that specific software is an integral part of the related hardware and it is treated as property, plant and equipment. The same applies to the operating system of a computer.
- Computer software, other than the operating system, is an intangible asset. The same applies to licences, patents or motion picture films acquired or internally generated by the reporting company.

Identifiable assets that result from research and development activities are intangible assets because any physical element of those assets (for example, a prototype) is secondary to the knowledge that is the primary outcome of those activities.

## 1.3 Recognition criteria for intangible assets

### Introduction

If an intangible item satisfies the definitions it is not necessarily recognised in the financial statements. In order to be recognised it must satisfy the recognition criteria for intangible assets.

If an item meets the definitions of being an asset, and being intangible, certain recognition criteria must be applied to decide whether the item should be recognised as an intangible asset.

### Recognition

An intangible asset is recognised when it:

- complies with the definition of an intangible asset; and,
- meets the recognition criteria set out in the standard.

### Recognition criteria

An intangible asset must be recognised if (and only if):

- it is probable that future economic benefits specifically attributable to the asset will flow to the company; and,
- the cost of the asset can be measured reliably.

The probability of future economic benefits must be assessed using reasonable and supportable assumptions that represent management's best estimate of the set of economic conditions that will exist over the useful life of the asset.

These recognition criteria are broadly the same as those specified in IAS 16 for tangible non-current assets.

### Measurement

An intangible asset must be measured at cost when first recognised.

### Means of acquiring intangible assets

A company might obtain control over an intangible resource in a number of ways. Intangible assets might be:

- purchased separately;
- acquired in exchange for another asset;
- given to a company by way of a government grant.
- internally generated; or
- acquired in a business combination;

IAS 38 provides extra guidance on how the recognition criteria are to be applied and/or how the asset is to be measured in each circumstance.

## 1.4 Separate acquisition

### Recognition guidance

The probability recognition criterion is always satisfied for separately acquired intangible assets.

The price paid to acquire separately an intangible asset normally reflects expectations about the probability that the future economic benefits embodied in the asset will flow to the company. The effect of the probability is reflected in the cost of the asset.

Also the cost of a separately acquired intangible asset can usually be measured reliably especially when the purchase consideration is in the form of cash or other monetary assets.

### Cost guidance

Cost is determined according to the same principles applied in accounting for other assets.

The cost of a separately acquired intangible asset comprises:

- ❑ its purchase price, including any import duties and non-refundable purchase taxes, after deducting any trade discounts and rebates; and
- ❑ any directly attributable expenditure on preparing the asset for its intended use. For example:
  - costs of employee benefits (as defined in IAS 19, Employee Benefits) arising directly from bringing the asset to its working condition;
  - professional fees for legal services; and
  - costs of testing whether the asset is functioning properly.

The recognition of costs ceases when the intangible asset is in the condition necessary for it to be capable of operating in the manner intended by management.

Deferred payments are included at the cash price equivalent and the difference between this amount and the payments made are treated as interest.

## 1.5 Exchange transactions

An intangible asset may be acquired in exchange or part exchange for another intangible asset or another asset.

The cost of such items is measured at fair value unless:

- ❑ the exchange transaction lacks commercial substance; or,
- ❑ the fair value of neither the asset received nor the asset given up is reliably measurable.

If the acquired item is not measured at fair value it is measured at the carrying amount of the asset given up.

Note, that these rules are the same as those described for tangible assets in an earlier chapter.

## 1.6 Granted by government

A government transfers or allocates intangible assets such as airport landing rights, licences to operate radio or television stations, import licences or quotas or rights to access other restricted resources.

An intangible asset may be acquired free of charge, or for nominal consideration, by way of a government grant.

*IAS 20: Accounting for Government Grants and Disclosure of Government Assistance*, allows the intangible asset and the grant to be recorded at fair value initially or at a nominal amount plus any expenditure that is directly attributable to preparing the asset for its intended use.

## 1.7 Subsequent expenditure on intangible assets

Subsequent expenditure is only capitalised if it can be measured and attributed to an asset and enhances the value of the asset. This would rarely be the case:

- ❑ The nature of intangible assets is such that, in many cases, there are no additions to such an asset or replacements of part of it.
- ❑ Most subsequent expenditure is likely to maintain the expected future economic benefits embodied in an existing intangible asset rather than meet the definition of an intangible asset and the recognition criteria.
- ❑ Also it is often difficult to attribute subsequent expenditure directly to a particular intangible asset rather than to the business as a whole.

Maintenance expenditure is expensed.

## 2 INTERNALLY GENERATED INTANGIBLE ASSETS

### Section overview

- Internally-generated intangible items
- Research and development
- Accounting treatment of development costs

### 2.1 Internally-generated intangible items

An internally-generated intangible asset is an asset created by a company through its own efforts. (An internally-generated asset differs from an acquired asset that has been purchased from an external seller.) For example, a publishing company may build up legal copyrights by publishing books.

It can sometimes be difficult for a company to assess whether an internally-generated asset qualifies for recognition as an asset in the financial statements because:

- it is not identifiable: or
- its cost cannot be determined reliably.

#### Recognition prohibited

IAS 38 prohibits the recognition of the following internally-generated intangible items:

- goodwill
- brands
- mastheads (Note: a masthead is a recognisable title, usually in a distinctive typographical form, appearing at the top of an item. An example is a newspaper masthead on the front page of a daily newspaper)
- publishing titles
- customer lists.

Recognition of these items as intangible assets when they are generated internally is prohibited because the internal costs of producing these items cannot be distinguished separately from the costs of developing and operating the business as a whole.

Note that any of these items would be recognised if they were purchased separately.

#### Other internally generated intangibles

IAS 38 provides further guidance on how to assess whether other internally generated intangibles assets meet the criteria for recognition.

## 2.2 Research and development

The term 'research and development' is commonly used to describe work on the innovation, design, development and testing of new products, processes and systems.

Assessment of whether an internally generated intangible asset meets the criteria for recognition requires a company to classify the generation of the asset into:

- a research phase; and
- a development phase.

If the research phase cannot be distinguished from the development phase the expenditure on the project is all treated as that incurred on the research phase.

### Research phase



#### Definition: Research

Research is original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding.

Examples of research activities include:

- Activities aimed at obtaining new knowledge.
- The search for and evaluation of applications of knowledge obtained from research.
- The search for alternative materials, products or processes.
- The formulation and testing of possible alternatives for new materials, products or processes.

Research costs cannot be an intangible asset. Expenditure on research should be recognised as an expense as it is incurred and included in profit or loss for the period.

### Development phase



#### Definition: Development

Development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use.

Examples of development activities include:

- The design, construction and testing of pre-production prototypes and models.
- The design of tools involving new technology.
- The construction and operation of a pilot plant that is not large enough for economic commercial production.
- The design, construction and testing of new materials, products or processes.

### 2.3 Accounting treatment of development costs

Development costs are capitalised when they meet certain further criteria. (These comprise more detailed guidance on whether it is probable that future economic benefits from the asset will flow to the entity and whether the cost can be measured reliably).

Development costs must be recognised as an intangible asset, but only if all the following conditions can be demonstrated.

- It is technically feasible to complete the development project.
- The company intends to complete the development of the asset and then use or sell it.
- The asset that is being developed is capable of being used or sold.
- Future economic benefits can be generated. This might be proved by the existence of a market for the asset's output or the usefulness of the asset within the company itself.
- Resources are available to complete the development project.
- The development expenditure can be measured reliably (for example, via costing records).

If any one of these conditions is not met, the development expenditure must be treated in the same way as research costs and recognised in full as an expense when it is incurred.

Only expenditure incurred after all the conditions have been met can be capitalised.

Once such expenditure has been written off as an expense, it cannot subsequently be reinstated as an intangible asset.



#### **Example:**

Company Q has undertaken the development of a new product. Total costs to date have been Rs. 800,000. All of the conditions for recognising the development costs as an intangible asset have now been met.

However, Rs. 200,000 of the Rs. 800,000 was spent before it became clear that the project was technically feasible, could be resourced and the developed product would be saleable and profitable.

#### **Development costs.**

The Rs. 200,000 incurred before all of the conditions for recognising the development costs as an intangible asset were met must be written off as an expense.

The remaining Rs. 600,000 should be capitalised and recognised as an intangible asset (development costs).

### Initial measurement

The cost of an internally generated intangible asset is the sum of expenditure incurred from the date when the intangible asset first meets the recognition criteria for such assets.

Expenditure recognised as an expense in previous annual financial statements or interim financial reports may not be capitalised.

The cost of an internally generated intangible asset comprises all expenditure that can be directly attributed, and is necessary to creating, producing, and preparing the asset for it to be capable of operating in the manner intended by management.

Where applicable cost includes:

- expenditure on materials and services used or consumed;
- the salaries, wages and other employment related costs of personnel directly engaged in generating the asset; and
- any expenditure that is directly attributable to generating the asset.

In addition, IAS 23 specifies criteria for the recognition of interest as an element of the cost of an internally generated intangible asset. The IAS 23 guidance was covered in the previous chapter.

Costs that are not components of cost of an internally generated intangible asset include:

- selling and administration overhead costs;
- initial operating losses incurred;
- costs that have previously been expensed, (e.g., during a research phase) must not be reinstated; and,
- training expenditure.

### 3 INTANGIBLE ASSETS ACQUIRED IN A BUSINESS COMBINATION

#### Section overview

- Recognition guidance
- Cost guidance
- In-process research and development

This section relates to intangible assets acquired when a company (the acquirer) buys a controlling interest in another company (the acquiree). The section largely relates to the recognition of intangibles in the consolidated financial statements of the parent.

#### 3.1 Recognition guidance

Any intangible asset identified in a business combination will be recognised as both recognition criteria are deemed to be recognised.

The probability recognition criterion always considered to be satisfied for intangible assets acquired in business combinations. This is because the fair value of an intangible asset reflects expectations about the probability that the expected future economic benefits embodied in the asset will flow to the company. In other words, the entity expects there to be an inflow of economic benefits.

The reliable measurement criterion is always considered to be satisfied for intangible assets acquired in business combinations. If an asset acquired in a business combination is separable or arises from contractual or other legal rights, sufficient information exists to measure reliably the fair value of the asset.

#### Commentary

This means that an intangible asset that was not recognised in the financial statements of the new subsidiary might be recognised in the consolidated financial statements.



#### Illustration:

Company X buys 100% of Company Y.

Company Y owns a famous brand that it launched several years ago.

#### Analysis

The brand is not recognised in Company Y's financial statements (IAS 38 prohibits the recognition of internally generated brands).

From the Company X group viewpoint the brand is a purchased asset. Part of the consideration paid by Company X to buy Company Y was to buy the brand and it should be recognised in the consolidated financial statements.

### Examples of intangible assets

The following are all items that would meet the definition of an intangible asset if acquired in a business combination.

- ❑ Market related intangibles
  - Trademarks, trade names, service marks, collective marks and certification marks;
  - Internet domain names;
  - Newspaper mastheads; and
  - Non-competition agreements
- ❑ Customer related intangibles
  - Customer lists;
  - Order or production backlog;
  - Customer contracts and the related customer relationships; and
- ❑ Artistic related intangibles
  - Plays, operas and ballets;
  - Books, magazines, newspapers and other literary works;
  - Musical works (compositions, song lyrics and advertising jingles);
  - Pictures and photographs; and
  - Video and audio visual material:
  - Music videos; and
  - Television programmes
- ❑ Contract based intangibles
  - Licensing and royalty agreements;
  - Construction permits;
  - Franchise agreements
  - Operating and broadcasting rights;
  - Use rights such as drilling, water, air, mineral, timber-cutting and route authorities;
- ❑ Technology based intangibles
  - Patented and unpatented technology;
  - Computer software and databases; and
  - Trade secrets (secret formulas, processes, recipes)

### 3.2 Cost guidance

If an intangible asset is acquired in a business combination, its cost is the fair value at the acquisition date.

If cost cannot be measured reliably then the asset will be subsumed within goodwill.

### 3.3 In-process research and development

Another similar example involves in-process research and development

The acquiree might have a research and development project in process. Furthermore, it might not recognise an asset for the project because the recognition criteria for internally generated intangible assets have not been met.

However, the acquirer would recognise the in-process research and development as an asset in the consolidated financial statements as long as it:

- meets the definition of an asset; and
- is identifiable, i.e. is separable or arises from contractual or other legal rights.



#### **Illustration:**

**Company X buys 100% of Company Y.**

Company Y has spent Rs. 600,000 on a research and development project. This amount has all been expensed as the IAS 38 criteria for capitalising costs incurred in the development phase of a project have not been met. Company Y has knowhow as the result of the project.

Company X estimates the fair value of Company Y's knowhow which has arisen as a result of this project to be Rs. 500,000.

#### **Analysis**

The in-process research and development is not recognised in Company Y's financial statements (IAS 38 prohibits the recognition of internally generated brands).

From the Company X group viewpoint the in-process research and development is a purchased asset. Part of the consideration paid by Company X to buy Company Y was to buy the knowhow resulting from the project and it should be recognised in the consolidated financial statements at its fair value of Rs. 500,000.

#### **Subsequent expenditure on an acquired in-process research and development project**

Expenditure incurred on an in-process research or development project acquired separately or in a business combination and recognised as an intangible asset is accounted for in the usual way by applying the IAS 38 recognition criteria.

This means that further expenditure on such a project would not be capitalised unless the criteria for the recognition of internally generated intangible assets were met.



**Illustration:**

Continuing the previous example. Company X owns 100% of Company Y and has recognised an intangible asset of Rs. 500,000 as a result of the acquisition of the company.

Company Y has spent a further Rs. 150,000 on the research and development project since the date of acquisition. This amount has all been expensed as the IAS 38 criteria for capitalising costs incurred in the development phase of a project have not been met.

**Analysis**

The Rs. 150,000 expenditure is not recognised in Company Y's financial statements (IAS 38 prohibits the recognition of internally generated brands).

From the Company X group viewpoint, further work on the in-process research and development project is research and the expenditure of Rs. 150,000 must be expensed.

## 4 MEASUREMENT AFTER RECOGNITION

### Section overview

- Choice of policy
- Revaluation model
- Amortisation of intangible assets
- Disposals of intangible assets

### 4.1 Choice of policy

Intangible assets are recognised at cost when first acquired.

IAS 38 allows a business to choose one of two measurement models as its accounting policy for property, intangible assets after acquisition. The same model should be applied to all assets in the same class.

The two measurement models for intangible assets after acquisition are:

- cost model (i.e. cost less accumulated depreciation); and
- revaluation model (i.e. revalued amount less accumulated depreciation since the most recent revaluation).

#### Class of assets

The same model should be applied to all assets in the same class. A class of intangible assets is a grouping of assets of a similar nature and use in an entity's operations. Examples of separate classes may include:

- brand names;
- mastheads and publishing titles;
- computer software;
- licences and franchises;
- copyrights, patents and other industrial property rights, service and operating rights;
- recipes, formulae, models, designs and prototypes; and
- intangible assets under development.

#### Cost model

An intangible asset is carried at its cost less any accumulated amortisation and any accumulated impairment losses after initial recognition.

## 4.2 Revaluation model

Intangible assets can be revalued according to the same rules as those applied to the revaluation of property, plant and equipment. These were explained in detail in the previous chapter so will be covered in less detail here.

An intangible asset is carried at a revalued amount, (its fair value at the date of the revaluation less any subsequent accumulated amortisation and any accumulated impairment losses).

This is only allowed if the fair value can be determined by reference to an active market in that type of intangible asset.



### **Definition: Active market**

An active market is a market in which all the following conditions exist:

- (a) the items traded in the market are homogeneous;
- (b) willing buyers and sellers can normally be found at any time; and
- (c) prices are available to the public.

Active markets for intangible assets are rare. Very few companies revalue intangible assets in practice.

The requirement that intangible assets can only be revalued with reference to an active market is a key difference between the IAS 16 revaluation rules for property, plant and equipment and the IAS 38 revaluation rules for intangible assets.

An active market for an intangible asset might disappear. If the fair value of a revalued intangible asset can no longer be measured by reference to an active market the carrying amount of the asset going forward is its revalued amount at the date of the last revaluation less any subsequent accumulated amortisation and impairment losses.

### **Frequency of revaluations**

Revaluations must be made with sufficient regularity so that the carrying amount does not differ materially from its fair value at the reporting date.

The frequency of revaluations should depend on the volatility in the value of the assets concerned. When the value of assets is subject to significant changes (high volatility), annual revaluations may be necessary.

However, such frequent revaluations are unnecessary for items subject to only insignificant changes in fair value. In such cases it may be necessary to revalue the item only every three or five years.

### Changing the carrying amount of the asset

When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is treated in one of the following ways:

Method 1: Restate accumulated depreciation proportionately with the change in the gross carrying amount of the asset so that the carrying amount of the asset after revaluation equals its revalued amount.

Method 2:

- ❑ **Step 1:** Transfer the accumulated depreciation to the asset account. The result of this is that the balance on the asset account is now the carrying amount of the asset and the accumulated depreciation account in respect of this asset is zero.
- ❑ **Step 2:** Change the balance on the asset account to the revalued amount.

### Accounting for the revaluation

The revaluation is carried out according to the same principles applied in accounting for other assets.

Again there is a conflict between IFRS and the Companies' Ordinance 1984. The two sets of rules are summarised below:

	Companies' Ordinance 1984	IAS 38
Upwards revaluations	Recognised directly in an account outside equity called revaluation surplus.	Recognised in other comprehensive income and accumulated in equity under the heading of revaluation surplus.
However:	An increase is recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.	an increase is recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.
Downward revaluations	Recognised in profit or loss.	Recognised in profit or loss.
However:	A decrease is recognised in directly in the revaluation surplus to the extent of any credit balance in the revaluation surplus in respect of that asset	A decrease is recognised in other comprehensive income to the extent of any credit balance in the revaluation surplus in respect of that asset thus reducing the amount accumulated in equity under the heading of revaluation surplus.

### Realisation of the revaluation surplus

Most intangible assets eventually disappear from the statement of financial position either by becoming fully amortised or because the company sells them.

If nothing were done this would mean that there was a revaluation surplus on the face of the statement of financial position that related to an asset that was no longer owned.

- ❑ IAS 38 allows (but does not require) the transfer of a revaluation surplus to retained earnings when the asset to which it relates is derecognised (realised).
- ❑ Section 235 Companies Ordinance 1984 requires this.

This might happen over several years as the asset is depreciated or at a point in time when the asset is sold.

Revaluation of an asset causes an increase in the annual depreciation charge. The difference is known as excess depreciation (or incremental depreciation):

Excess depreciation is the difference between:

- ❑ the depreciation charge on the re-valued amount of the asset, and
- ❑ the depreciation that would have been charged on historical cost.

Each year a business might make a transfer from the revaluation surplus to the retained profits equal to the amount of the excess depreciation.

### 4.3 Amortisation of intangible assets

A company must assess whether the useful life of an intangible asset is:

- ❑ finite: or
- ❑ indefinite.

If the useful life of an intangible asset is assessed as being finite the company must assess its useful life.

An intangible asset is assessed as having an indefinite useful life when (based on an analysis of all of the relevant factors) there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows.

#### Intangibles with a finite useful life

The depreciable amount of an intangible asset with a finite useful life is allocated on a systematic basis over its useful life.

Amortisation begins when the asset is available for use, i.e. when it is in the location and condition necessary for it to be capable of operating in the manner intended by management.

Amortisation ends at the earlier of the date that the asset is classified as held for sale in accordance with IFRS 5 and the date that the asset is derecognised.

The amortisation method used must reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity. If that pattern cannot be determined reliably, the straight-line method must be used.

The residual value of an intangible asset must be assumed to be zero unless:

- ❑ there is a commitment by a third party to purchase the asset at the end of its useful life; or
- ❑ there is an active market for the asset and:
  - residual value can be determined by reference to that market; and
  - it is probable that such a market will exist at the end of the asset's useful life.

The amortisation period and the amortisation method must be reviewed at least at each financial year-end.

- ❑ Where there is a change in the useful life, the carrying amount (cost minus accumulated depreciation) of the asset at the date of change is written off over the (revised) remaining useful life of the asset.
- ❑ Where there is a change in the depreciation method used, this is a change in accounting estimate. A change of accounting estimate is applied from the time of the change, and is not applied retrospectively. The carrying amount (cost minus accumulated depreciation) of the asset at the date of the change is written off over the remaining useful life of the asset.

#### **Intangibles with an indefinite useful life**

Where the useful life is assessed as indefinite:

- ❑ the intangible asset should not be amortised; but
- ❑ impairment reviews should be carried out annually (and even more frequently if there are any indications of impairment).

The useful life of an intangible asset that is not being amortised must be reviewed each period to determine whether events and circumstances continue to support an indefinite useful life assessment for that asset.

If they do not, the change in the useful life assessment from indefinite to finite is accounted for as a change in an accounting estimate in accordance with IAS 8. This means that the carrying amount at the date of the change is amortised over the estimated useful life from that date.

#### **4.4 Disposals of intangible assets**

The rules for de-recognition of intangible assets (accounting for their 'disposal') are the same as for property, plant and equipment under IAS 16. There is a gain or loss on disposal equal to the difference between the net disposal proceeds and the carrying value of the asset at the time of disposal.

## 5 DISCLOSURE REQUIREMENTS

### Section overview

- Disclosure requirements
- Accounting policies

### 5.1 Disclosure requirements

In the financial statements, disclosures should be made separately for each class of intangible asset. (Within each class, disclosures must also be made by internally-generated intangibles and other intangibles, where both are recognised.)

Most of the disclosure requirements are the same as for tangible non-current assets in IAS 16. The only additional disclosure requirements are set out below.

- Whether the useful lives of the assets are finite or indefinite.
- If the useful lives are finite, the useful lives or amortisation rates used.
- If the useful lives are indefinite, the carrying amount of the asset and the reasons supporting the assessment that the asset has an indefinite useful life.



#### Example:

An example is shown below of a note to the financial statement with disclosures about intangible assets

	Internally-generated development costs	Software licences	Goodwill	Total
	Rs. m	Rs. m	Rs. m	Rs. m
<b>Cost</b>				
At the start of the year	290	64	900	1,254
Additions	60	14	-	74
Additions through business combinations	-	-	20	20
Disposals	(30)	(4)	-	(34)
At the end of the year	<u>320</u>	<u>74</u>	<u>920</u>	<u>1,314</u>
<b>Accumulated depreciation and impairment losses</b>				
At the start of the year	140	31	120	291
Amortisation expense	25	10	-	35
Impairment losses	-	-	15	15
Accumulated amortisation on disposals	10	2	-	12
At the end of the year	<u>175</u>	<u>43</u>	<u>135</u>	<u>353</u>
<b>Net carrying amount</b>				
At the start of the year	<u>150</u>	<u>33</u>	<u>780</u>	<u>963</u>
At the end of the year	<u>145</u>	<u>31</u>	<u>785</u>	<u>961</u>

- ❑ For any intangible asset that is individually material to the financial statements, the following disclosure is required:
  - a description
  - its carrying amount
  - the remaining amortisation period.
- ❑ The total amount of research and development expenditure written off (as an expense) during the period must also be disclosed.

## 5.2 Accounting policies

IAS 1 requires the disclosure of accounting policies used that are relevant to an understanding of the financial statements. Intangible assets might be among the largest numbers in the statement of financial position and result in significant expense in the statement of profit or loss.

One of the learning outcomes in this area is that you be able to formulate accounting policies for intangible assets.

There are several areas that are important to explain to users of financial statements.

### Amortisation policy

The depreciable amount of an intangible asset must be written off over its useful life.

Formulating a policy in this area involves estimating the useful lives of different categories of intangible assets.

Under the guidance in IAS 38 the estimated residual values of an asset would usually be zero and the straight line method would usually be used.

### Other explanations:

This is not so much about choosing a policy as explaining situations to users:

- ❑ Development expenditure: Does the company have any?
- ❑ Intangible assets acquired in business combinations in the period.
- ❑ Whether the company has intangible assets assessed as having an indefinite useful life.

Below is a typical note which covers many of the possible areas of accounting policy for intangible assets.



**Illustration: Accounting policy – Intangible assets**

The intangible assets of the group comprise patents, licences and computer software.

The group accounts for all intangible assets at historical cost less accumulated amortisation and accumulated impairment losses.

**Computer software**

Development costs that are directly attributable to the design and testing of identifiable and unique software products controlled by the group are recognised as intangible assets when the following criteria are met:

- a. it is technically feasible to complete the software product so that it will be available for use;
- b. management intends to complete the software product and use or sell it;
- c. there is an ability to use or sell the software product;
- d. it can be demonstrated how the software product will generate probable future economic benefits;
- e. adequate technical, financial and other resources to complete the development and to use or sell the software product are available; and
- f. the expenditure attributable to the software product during its development can be reliably measured.

Directly attributable costs that are capitalised as part of the software product include the software development employee costs and an appropriate portion of relevant overheads.

Development expenditures that do not meet these criteria are recognised as an expense as incurred. Costs associated with maintaining computer software programmes are recognised as an expense as incurred.

**Useful lives**

Depreciation is calculated using the straight-line method to allocate their cost or revalued amounts to their residual values over their estimated useful lives, as follows:

Patents: 25 30 years

Licenses 5 to15 years

Computer software 3 years

All intangible assets are estimated as having a zero residual value.

## IAS 17: Leases

### Contents

- 1 Introduction and definitions
- 2 Lease classification
- 3 Accounting for a finance lease: Lessee accounting
- 4 Accounting for a finance lease: Lessor accounting
- 5 Accounting for an operating lease
- 6 Sale and leaseback transactions
- 7 Impact on presentation

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

**LO 2            Account for transactions relating to tangible and intangible assets including transactions relating to their common financing matters.**

LO2.2.1:        Describe the method of determining a lease type i.e. an operating or finance lease.

LO2.2.2:        Prepare journal entries and present extracts of financial statements in respect of lessee accounting, lessor accounting, and sale and lease back arrangements after making necessary calculations.

LO2.2.3:        Formulate accounting policies in respect of different lease transactions.

LO2.2.4:        Analyse the effect of different leasing transactions on the presentation of financial statements.

## 1 INTRODUCTION AND DEFINITIONS

### Section overview

- Leases
- Types of lessor
- Inception and commencement
- Defined periods
- Residual values
- Minimum lease payments
- Interest rate implicit in the lease
- Other definitions

### 1.1 Leases

IAS 17 prescribes the accounting treatment of leased assets in the financial statements of lessees and lessors.



#### Definition: Lease

**Lease:** An agreement whereby the lessor conveys to the lessee in return for a payment or series of payments the right to use an asset for an agreed period of time.

A lease is a way of obtaining a use of an asset, such as a machine, without purchasing it outright. The company that owns the asset (the lessor) allows another party (the lessee) to use the asset for a specified period of time in return for a series of rental payments.

#### Types of lease

IAS 17 identifies two types of lease.



#### Definitions

**A finance lease** is a lease that transfers substantially all the risks and rewards incidental to ownership of an asset. Title may or may not eventually be transferred.

**An operating lease** is a lease other than a finance lease.

The identification of a lease as a finance lease or an operating lease is crucial as it determines how a lease is accounted for by the lessor and the lessee.

This is explained in more detail in later sections.

## 1.2 Types of lessors

Companies might be lessors as a result of a variety of business models.

### Finance companies (often banks and their subsidiaries)

Finance companies provide finance for the purchase of assets. In addition they might finance the use of assets through leases.



#### Illustration:

A manufacturing company might need a new major asset.

The manufacturing company would approach the finance company who, would buy the asset and then lease it out to the manufacturing company.

Finance companies are often associated with finance leases but they also fund large operating leases. Many airlines have use of aircraft through operating leases through finance companies.

### Hire companies

These companies own a stock of capital assets which they will lease out for varying periods.

They include:

- tool hire companies;
- plant hire companies; and
- car hire companies

Hire companies are usually involved in operating leases.

### Manufacturer/dealer lessors

Some companies make or buy assets to sell. They may offer to lease the asset out as an alternative to outright sale.

Many motor vehicle manufacturers and dealers do this. Such leases would usually be finance leases (but not necessarily).

### Property companies

Many companies own properties which they lease out to others. These companies might apply *IAS 40: Investment Properties* to these assets. This is outside the scope of your syllabus but is mentioned for completeness.

### 1.3 Inception and commencement



#### Definitions: Inception of the lease

The inception of the lease is the earlier of the date of the lease agreement and the date of commitment by the parties to the principal provisions of the lease.

As at this date:

- (a) a lease is classified as either an operating or a finance lease; and
- (b) in the case of a finance lease, the amounts to be recognised at the commencement of the lease term are determined.

The type of lease in a contract (finance or operating) is identified at the date of inception. This is where the parties to the lease contract commit to the terms of the contract.



#### Definition: Commencement of a lease

The commencement of the lease term is the date from which the lessee is entitled to exercise its right to use the leased asset. It is the date of initial recognition of the lease (ie the recognition of the assets, liabilities, income or expenses resulting from the lease, as appropriate).

The accounting treatment required is applied to a lease at the date of commencement. This is the date that a lessee starts to use the asset or, at least, is entitled to start to use the asset.



#### Illustration:

The Rawalpindi Railway Company has entered a contract to lease new rolling stock from Siemens AG.

The contract was signed on 31 December 2015.

The rolling stock will be delivered late in 2016 and be available for use on 1 January 2017.

31 December 2015 is the date of inception – At this point the parties to the contract are able to identify the type of lease.

1 January 2017 is the date of commencement – The IAS 17 accounting treatment is applied from this point.

A lease agreement may allow for an adjustment to the terms of the lease contract during the period between the inception of the lease and the commencement of the lease term. Such adjustments might be to take account of unexpected changes in costs (for example the lessor's costs of making the asset that is the subject of the lease).

In such cases the effect of any such changes is deemed to have taken place at the inception of the lease.

## 1.4 Defined periods

IAS 17 refers to different periods when describing its rules.



### Definition: Lease term

The lease term is the non-cancellable period for which the lessee has contracted to lease the asset together with any further terms for which the lessee has the option to continue to lease the asset, with or without further payment, when at the inception of the lease it is reasonably certain that the lessee will exercise the option.

A lease may be split into a primary period followed by an option to extend the lease for a further period.

In some cases, the lessee might be able to exercise such an option with a small rental or even for no rental at all. If such an option exists and it is reasonably certain that the lessee will exercise the option, the second period is part of the lease term.



### Illustration:

Mirpur Khas Construction (MKC) are about to lease an earth digging machine from another company.

Machines of this type usually last for 20 years.

The lease is for an initial period of 10 years at a rental of Rs. 1,000,000 per annum. The contract allows MKC to extend the lease for a further 10 years after the initial period at a cost of Rs. 10 per annum.

### Analysis

It would seem very likely that MKC would continue to lease the asset beyond the initial lease term. The term of this lease is 20 years.

At first sight it seems very strange that a lessor would be willing to lease its asset out for the second 10 year period at so low a rent. However, the payments have been set with this in mind. The payment of Rs. 1,000,000 per annum over the first 10 years compensates the lessor for the cash price of the asset and provides the lessor with a mark-up.



### Definitions: Economic and useful life

Economic life is either:

- (a) the period over which an asset is expected to be economically usable by one or more users; or
- (b) the number of production or similar units expected to be obtained from the asset by one or more users.

Useful life is the estimated remaining period, from the commencement of the lease term, without limitation by the lease term, over which the economic benefits embodied in the asset are expected to be consumed by the entity.

Economic life relates to the life of the asset whereas useful life relates to the period that a party will obtain benefits from that asset.

**Illustration:**

On 1 January 2016 the Gwadar Port Authority lease a dredger for 6 months.

The dredger is 5 years old on that date. Ships of this kind are usually able to provide 50 years' service.

The dredger has an economic life of 45 years.

On the 1 January 2016 the dredger will have a useful life of 6 months for the Gwadar Port Authority.

## 1.5 Residual values

When a company that owns an asset leases it to another party they have two interests in that asset:

- It gives them a right to receive a series of rentals over the lease term; and
- They own the asset at the end of the lease.

The value of the asset at the end of the lease is called its residual value. This figure might be guaranteed by the lessee. This means that if the asset is not worth the amount guaranteed the lessee must pay the lessor the shortfall.

On the other hand the residual value might not be guaranteed.

**Definitions: Guaranteed and unguaranteed residual value**

Guaranteed residual value is:

- (a) for a lessee, that part of the residual value that is guaranteed by the lessee or by a party related to the lessee (the amount of the guarantee being the maximum amount that could, in any event, become payable); and
- (b) for a lessor, that part of the residual value that is guaranteed by the lessee or by a third party unrelated to the lessor that is financially capable of discharging the obligations under the guarantee.

Unguaranteed residual value is that portion of the residual value of the leased asset, the realisation of which by the lessor is not assured or is guaranteed solely by a party related to the lessor.

The guaranteed and unguaranteed residual values might influence the classification of a lease and its measurement.

## 1.6 Minimum lease payments

The definitions in this section are not easy to understand. You will need to work through them carefully.

In essence, the term **minimum lease payments** refers to the payments that a lessee expects to make over a lease term or to the receipts that a lessor expects over the economic life of the asset.

In a straight forward example the minimum lease payments from the lessee's point of view will be the same as the minimum lease payments from the lessor's point of view.



### Illustration:

Company A has an asset with an economic life of 10 years.

Company A leases the asset to Company B for 10 years at Rs. 100,000 per annum.

There is no expected residual value.

The minimum lease payments from the lessor's view (Company A) are 10 receipts of Rs. 100,000 per annum.

The minimum lease payments from the lessee's view (Company B) are 10 payments of Rs. 100,000 per annum.

Many leases in practice are like the lease in the above illustration. However, there are other leases where this is not the case. The definition of minimum lease payments takes that into account.



### Definition: Minimum lease payments

Minimum lease payments are the payments over the lease term that the lessee is or can be required to make, excluding contingent rent, costs for services and taxes to be paid by and reimbursed to the lessor, together with:

- (a) for a lessee, any amounts guaranteed by the lessee or by a party related to the lessee; or
- (b) for a lessor, any residual value guaranteed to the lessor by:
  - (i) the lessee;
  - (ii) a party related to the lessee; or
  - (iii) a third party unrelated to the lessor that is financially capable of discharging the obligations under the guarantee.

However, if the lessee has an option to purchase the asset at a price that is expected to be sufficiently lower than fair value at the date the option becomes exercisable for it to be reasonably certain, at the inception of the lease, that the option will be exercised, the minimum lease payments comprise the minimum payments payable over the lease term to the expected date of exercise of this purchase option and the payment required to exercise it.



### Example: Minimum lease payments

A finance company has purchased an asset and will lease it out in a series of leases as follows:

The first lease is to Company A for a period of 5 years at an annual rental of Rs.10,000.

After the end of the lease to Company A the asset will be leased to Company B for 1 year at a rental of Rs.10,000. Company B is a party related to Company A.

After the end of the lease to Company B the asset will be leased to Company C for 1 year at a rental of Rs.10,000. Company C is not related to Companies A and B.

### Minimum lease payments

The minimum lease payments from the point of view of Company A and from the point of view of the lessor are as follows:

Years	Company A's MLPs	Lessor's MLPs
1 to 5	10,000	10,000
6	10,000	10,000
7		10,000

As you will see later the minimum lease payments can be important in deciding whether a lease is a finance lease or an operating lease and they enter into the measurement of finance leases.

Minimum lease payments are also important in calculating the interest rate implicit in a lease.

## 1.7 Interest rate implicit in the lease



### Definition: Interest rate implicit in the lease

The interest rate implicit in the lease is the discount rate that, at the inception of the lease, causes the aggregate present value of (a) the minimum lease payments and (b) the unguaranteed residual value to be equal to the sum of (i) the fair value of the leased asset and (ii) any initial direct costs of the lessor.

The interest rate implicit in the lease is the IRR of the cash flows from the lessor's viewpoint. It is the rate that equates the future cash inflows for the lessor to the amount that the lessor invested in the asset.



### Example: Interest rate implicit in the lease

A finance company has purchased an asset for Rs. 50,000 and will lease it out in a series of leases as follows:

The first lease is to Company A for a period of 5 years at an annual rental of Rs.10,000.

After the end of the lease to Company A the asset will be leased to Company B for 1 year at a rental of Rs.10,000. Company B is a party related to Company A.

After the end of the lease to Company B the asset will be leased to Company C for 1 year at a rental of Rs.10,000. Company C is not related to Companies A and B.

At the end of this lease the asset is expected to have an unguaranteed residual value of Rs. 2,573.

The interest rate implicit in the lease is 10%.

#### Proof

Time	Narrative	Lessor's cash flows	Discount factor (10%)	Present value
0	Fair value of the asset	(50,000)	1	(50,000)
1 to 7	Lessor's MLPs	10,000	4.868	48,680
7	Unguaranteed residual value	2,573	0.513	1,320
				50,000
				nil

The interest rate implicit in the lease (its IRR) was given in the above example. In an exam question you might have to calculate it in the usual way.

### Initial direct costs

The definition of interest rate implicit in the lease makes reference to incremental initial direct costs.



#### Definition: Initial direct costs

Initial direct costs are incremental costs that are directly attributable to negotiating and arranging a lease, except for such costs incurred by manufacturer or dealer lessors.

The accounting treatment for initial direct costs will be explained later.

### Lessee's incremental borrowing rate of interest

The interest rate implicit in the lease might be important in deciding whether a lease is a finance lease or an operating lease.

It is calculated from the lessor's viewpoint. Sometimes the lessee might not be able to ascertain the interest rate implicit in the lease. In that case it would use the lessee's incremental borrowing cost instead.



#### Definition: Lessee's incremental borrowing rate of interest

The lessee's incremental borrowing rate of interest is the rate of interest the lessee would have to pay on a similar lease or, if that is not determinable, the rate that, at the inception of the lease, the lessee would incur to borrow over a similar term, and with a similar security, the funds necessary to purchase the asset.

## 1.8 Other definitions



#### Definition: Non-cancellable lease

A non-cancellable lease is a lease that is cancellable only:

- (a) upon the occurrence of some remote contingency;
- (b) with the permission of the lessor;
- (c) if the lessee enters into a new lease for the same or an equivalent asset with the same lessor; or
- (d) upon payment by the lessee of such an additional amount that, at inception of the lease, continuation of the lease is reasonably certain.

Further definitions important to finance lessor accounting will be provided in that section.

## 2 LEASE CLASSIFICATION

### Section overview

- Finance leases and operating leases
- Identifying a finance lease
- Commentary on finance lease indicators
- Leases of land and buildings

### 2.1 Finance leases and operating leases

IAS 17 describes two types of lease (with each type being accounted for in a different way):

- finance leases; and
- operating leases.

The definitions of each type are repeated here for convenience.



#### Definitions

**A finance lease is a lease that transfers substantially all the risks and rewards incidental to ownership of an asset. Title may or may not eventually be transferred.**

**An operating lease is a lease other than a finance lease.**

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership.

Risks may be represented by the possibility of losses from:

- idle capacity;
- technological obsolescence;
- variations in return caused by changes in economic conditions.

Rewards may be represented by the expectation of;

- profitable use of the asset over its economic life;
- gains from increases in value or profits on disposal.

#### Substance over form

Whether a lease is a finance lease or an operating lease depends on the substance of the transaction rather than the form of the contract.

The legal form of a finance lease is that the lessor is the legal owner of the leased asset.

The economic substance of a finance lease is that the lessee has all the benefits and costs associated with ownership of the asset. The finance lessee is in the same position as it would have been if it had borrowed money to buy the asset itself. That is why such leases are called finance leases; they provide finance for the use of an asset.

## 2.2 Identifying a finance lease

The following situations (individually or in combination) would normally lead to a lease being classified as a finance lease:

- ❑ At the end of the term of the lease, the legal ownership of the asset will be transferred from the lessor to the lessee, under the terms of the lease agreement;
- ❑ The lessee has the option, at a future date, to purchase the asset from the lessor, and the agreed purchase price is substantially lower than the expected fair value of the asset at the date the option to buy can be exercised. (In this situation, it is therefore probable that the lessee will exercise the option to buy the asset);
- ❑ The term of the lease is for a major part of the expected economic life of the asset;
- ❑ At the inception of the lease, the present value of all the future lease payments amounts to substantially all of the fair value of the leased asset, or more;
- ❑ The leased asset is of such a specialised nature that it can only be used by the lessee (without the need for a major modification);
- ❑ If the lessee can cancel the lease, the lessor's losses associated with the cancellation are borne by the lessee;
- ❑ Gains or losses from the fluctuation in the fair value of the residual accrue to the lessee (for example, in the form of a rent rebate equalling most of the sales proceeds at the end of the lease); and
- ❑ The lessee has the ability to continue the lease for a secondary period at a rent that is substantially lower than market rent.

In all these situations, it can normally be concluded that substantially all the risks and rewards incidental to ownership are transferred to the lessee.

These indicators are not always conclusive. Classification should always be based on the substance of the agreement taking account of all information.

Leases are classified at the inception of the lease. Sometimes a lessee and lessor agree to change the provisions of a lease and the changes might be of a sort that would have changed the lease classification if the new terms had been in effect at the inception of the lease. In these cases the revised agreement is regarded as a new agreement over its term.

However, changes in estimates (for example, changes in estimates of the economic life or of the residual value of the leased property), or changes in circumstances (for example, default by the lessee), do not give rise to a new classification of a lease for accounting purposes.

## 2.3 Commentary on finance lease indicators

It is not always obvious why the above circumstances indicate that a lease is a finance lease. This section provides an explanation on some of these.

To understand these it is useful to think of the terms from the lessor's viewpoint.

### Bargain purchase option

If a lease includes a term whereby the lessee can buy the leased asset at a bargain price at the end of the lease that lease is a finance lease.

If the lessor includes this term in the lease the lessor would expect the lessor to take advantage of it. Therefore the lessor knows that it needs to make sure to recover the cost of the asset together with any related interest during the lease term. The rentals and final sale price are set at a level which allows it to do this.

Therefore, the lessee will pay the full cash price of the asset together with related finance expense over the lease term.

- The lessee would only do this if it had access to the risks and benefits of ownership.
- In substance, this is just like borrowing the cash and buying the asset.

Therefore, the lease is a finance lease.

### Lease is for a major part of the expected economic life of the asset.

If the lessor includes this term in the lease the lessor knows that when the asset is given back to it at the end of the lease, the asset will only have a small value.

Therefore the lessor knows that it needs to make sure to recover the cost of the asset together with any related interest during the lease term. The rentals are set at a level which allows it to do this.

Therefore, the lessee will pay the full cash price of the asset together with related finance expense over the lease term.

- The lessee would only do this if it had access to the risks and benefits of ownership.
- In substance, this is just like borrowing the cash and buying the asset.

Therefore, the lease is a finance lease.

### Specialised nature of the asset

If the lessor includes this term in the lease the lessor knows that when the lease comes to an end it will be unable to lease the asset on to another party.

Therefore the lessor knows that it needs to make sure to recover the cost of the asset together with any related interest during the lease term. The rentals are set at a level which allows it to do this.

Therefore, the lessee will pay the full cash price of the asset together with related finance expense over the lease term.

- The lessee would only do this if it had access to the risks and benefits of ownership.
- In substance, this is just like borrowing the cash and buying the asset.

Therefore, the lease is a finance lease.

### PV of future lease payments amounts to substantially all of the fair value of the leased asset

A lease is a finance lease if at the inception of the lease, the present value of all the future lease payments amounts to at least substantially all of the fair value of the leased asset if not all of it. (The discount rate to be used in calculating the present value of the minimum lease payments is the interest rate implicit in the lease).

In this case the lessee is paying the full cash price of the asset together with related finance expense over the lease term.



#### Example: PV of future lease payments

A finance company has purchased an asset to lease out to a manufacturing company.

The asset cost for Rs. 500,000 and has an economic life of 10 years.

The lease is for 9 years at an annual rental (in arrears) of Rs. 85,000 per annum.

The interest rate implicit in the lease is 10%.

#### Analysis: Lessor's view

Time	Narrative	Cash flows	Discount factor (10%)	Present value
1 to 9	Lessor's MLPs	85,000	5.759	489,515

This is amounts to substantially all (97.9% = 500,000/489,515) of the fair value of the asset.

This lease is a finance lease (also note that the lease is for the major part of the expected economic life of the asset which is another finance lease indicator).

#### Analysis: Lessee's view

Time	Narrative	Cash flows	Discount factor (10%)	Present value
1 to 9	Lessee's MLPs	85,000	5.759	489,515

This is amounts to substantially all (97.9% = 500,000/489,515) of the fair value of the asset.

This lease is a finance lease (also note that the lease is for the major part of the expected economic life of the asset which is another finance lease indicator).

In the above example the lessee and the lessor have the same view of the lease. This is not necessarily the case.



#### Example: PV of future lease payments

A finance company has purchased an asset for Rs. 50,000 and will lease it out in a series of leases as follows:

The first lease is to Company A for a period of 4 years at an annual rental of Rs.10,000.

After the end of the lease to Company A the asset will be leased to Company B for 3 years at a rental of Rs.10,000. Company B is not related to Company A.

At the end of this lease the asset is expected to have an unguaranteed residual value of Rs. 2,573.

The Interest rate implicit in the lease is 10%.

#### Analysis: Lessor's view

Time	Narrative	Cash flows	Discount factor (10%)	Present value
1 to 7	Lessor's MLPs	10,000	4.868	48,680

This is 97.4% ( $48,680/50,000 \times 100$ ) of the fair value of the asset.

Most would agree that this was substantially all of the fair value of the asset (though IAS 17 does not give a numerical benchmark).

This lease is a finance lease.

#### Analysis: Company A's view

Time	Narrative	Cash flows	Discount factor (10%)	Present value
1 to 4	Lessor's MLPs	10,000	3.170	31,700

This is 63.4% ( $31,700/50,000 \times 100$ ) of the fair value of the asset.

Most would agree that this is not substantially all of the fair value of the asset (though IAS 17 does not give a numerical benchmark).

This lease is an operating lease.

**Practice question****1**

Jhang Construction has leased a cement lorry.

The cash price of the lorry would be Rs. 3,000,000.

The lease is for 6 years at an annual rental (in arrears) of Rs. 600,000. The asset is believed to have an economic life of 7 years.

The interest rate implicit in the lease is 7%.

Jhang Construction is responsible for maintaining and insuring the asset.

State with reasons the kind of lease Jhang has entered into.

**2.4 Leases of land and buildings**

A property lease usually includes both land and buildings. Each element should be classified separately. In other words, a property lease is viewed as a lease of land and a different lease of the building.

Leases of land and buildings are classified as operating or finance leases in the same way as leases of other assets.

**Land element**

An important consideration is that land normally has an indefinite economic life. This means that the lease term will not normally be for a major part of the life of the asset and the asset will have a significant value at the end of the lease. This implies that the land element of the lease will usually be an operating lease.

This is not always the case. In some parts of the world a property lease might be very long (say 999 years). In a case like this the unguaranteed residual value might be very large but in present value terms is negligible, leading the present value of the minimum lease payments to be substantially all of the fair value of the asset at the inception of the lease. Such a lease could be a finance lease.

**Building element**

The building is classified as a finance lease or as an operating lease according to the guidance set out and explained in sections 2.2 and 2.3 above.

**Splitting the payments**

It is necessary to split the rental payments for the land and building into the rental for the land and the rental for the building.

The minimum lease payments are allocated between the land and the buildings elements in proportion to the relative fair values of the leasehold interests in the land element and buildings element of the lease at the inception of the lease.

The relative fair value of the leasehold interests is from the point of view of the lessee. This means that the relative fair value of the leasehold interests is not the same as the relative fair value of the land and the building.

**Illustration:**

A company leases a property for Rs. 450,000 per annum (in arrears).

The lease is for 10 years and the useful life of the building is 5 years.

	<b>Land (Rs.)</b>	<b>Building (Rs.)</b>
Fair value	2,000,000	500,000
Fair value of leasehold interest	1,000,000	500,000

The rentals are allocated between the land and buildings in the ratio of 1,000,000 to 500,000 or 2 to 1

	<b>Rs.</b>
Rental for land ( $\frac{2}{3} \times 450,000$ )	300,000
Rental for building ( $\frac{1}{3} \times 450,000$ )	150,000

If this cannot be done the entire lease must be classified as a finance lease unless it is clear that both elements are operating leases, in which case the entire lease is classified as an operating lease.

If the land element is immaterial, the land and buildings may be treated as a single unit for the purpose of lease classification. In such a case, the economic life of the building is regarded as the economic life of the entire leased asset.

### 3 ACCOUNTING FOR A FINANCE LEASE: LESSEE ACCOUNTING

#### Section overview

- Substance over form
- Finance lease accounting: Initial recognition
- Finance lease accounting: Subsequent measurement of the asset
- Finance lease accounting: Subsequent measurement of the liability
- Calculating and allocating finance charges (interest)
- Current and non-current elements of the finance lease liability
- Lease payments made in advance
- Disclosure

#### 3.1 Substance over form

An earlier section explained that whether a lease is a finance lease or an operating lease depends on the substance of the contract rather than its form.

The economic substance of a finance lease is that the lessee in effect has all the benefits and costs associated with ownership of the asset. In substance it is as if the lessee borrowed money to buy the asset.

This is the basis of the accounting treatment required for finance leases in the books of the lessee.

Similarly, the lessor no longer has the benefits and costs associated with ownership. The lessor should not account for the asset in its books. In substance, the lessor has lent money to another party to enable them to buy the asset. The lessor accounts for a receivable in its books being the right to receive a future flow of rentals.

#### 3.2 Finance lease accounting: Initial recognition

A finance lease is capitalised at the commencement of the lease term. This involves the recognition of the asset that is subject to the lease and a liability for the future lease payments.

The asset and liability are recognised at the commencement of the lease at the lower of:

- the fair value of the asset (the cash price if purchased outright); and
- the present value of the minimum lease payments.

The present value of the minimum lease payments is discounted using the interest rate implicit in the lease. If it is not practicable to determine this, the lessee's incremental borrowing rate must be used.

The liability is the capital amount (the principal) that the lessee will have to pay back to the lessor over the term of the lease.

**Illustration: Double entry on initial recognition of a finance lease**

(Assumes that the leased asset is an item of property, plant and equipment)

	Debit	Credit
Property, plant and machinery – (at cost)	X	
Liabilities: finance lease obligations		X

Initial direct costs are often incurred in connection with specific leasing activities, such as negotiating and securing leasing arrangements.

Any initial direct costs of the lessee are added to the amount recognised as an asset.

**Illustration:**

	Debit	Credit
Property, plant and machinery – (at cost)	X	
Cash/bank		X

**Example:**

Jhang Construction enters into a 6 year finance lease of a machine on 1 January Year 1.

The fair value of the machine at the commencement of the lease was Rs. 80,000 and Jhang Construction incurred initial direct costs of Rs. 2,000 when arranging the lease.

**Double entry:**

	Debit	Credit
Property, plant and machinery – (at cost)	80,000	
Liabilities: finance lease obligations		80,000
Property, plant and machinery – (at cost)	2,000	
Cash/bank		2,000

### 3.3 Finance lease accounting: Subsequent measurement of the asset

A finance lease gives rise to depreciation expense for depreciable assets as well as finance expense for each accounting period.

The depreciation policy for depreciable leased assets must be consistent with that for similar owned assets and is calculated in accordance with *IAS 16: Property, Plant and Equipment* and *IAS 38: Intangible Assets*.

If there is no reasonable certainty that the lessee will obtain ownership by the end of the lease, the asset is depreciated over the shorter of:

- its expected useful life; and
- the term of the lease.



#### Illustration:

	Debit	Credit
Statement of profit or loss (depreciation expense)	X	
Accumulated depreciation		X



#### Example:

Jhang Construction enters into a 6 year finance lease of a machine on 1 January Year 1.

The fair value of the machine at the commencement of the lease was Rs. 80,000 and Jhang Construction incurred initial direct costs of Rs. 2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is Rs. 8,000.

The estimated useful life of the asset is 5 years.

Jhang Construction has incurred initial direct costs of Rs. 2,000.

The accounting policy for similar owned machines is to depreciate them over their useful life on a straight line basis.

#### Annual depreciation charge:

Initial cost:	Rs.
Fair value of the machine	80,000
Initial direct costs	2,000
	82,000
Residual value	(8,000)
Depreciable amount	74,000
Useful life (shorter of the lease term and the useful life)	5 years
Annual depreciation charge	14,800

The leased asset is included in the statement of financial position at its carrying amount (cost less accumulated depreciation) in the same way as similar assets.

**Example:**

	Year 1	Year 2	Year 3	Year 4	Year 5
	Rs.	Rs.	Rs.	Rs.	Rs.
Cost	82,000	82,000	82,000	82,000	82,000
<b>Accumulated depreciation:</b>					
Brought forward	nil	14,800	29,600	44,400	59,200
Charge for the year	14,800	14,800	14,800	14,800	14,800
Carried forward	14,800	29,600	44,400	59,200	74,000
Carrying amount	67,200	52,400	37,600	22,800	8,000

The asset is depreciated down to a carrying amount at the end of the asset's useful life that is the estimated residual value

### 3.4 Finance lease accounting: Subsequent measurement of the liability

During each year, the lessee makes one or more lease payments. The payment is recorded in the ledger account as follows.

**Illustration:**

	Debit	Credit
Liabilities: Finance lease obligations	X	
Cash/bank		X

A finance lease liability is measured in the same way as any other liability. The balance at any point in time is as follows:

**Illustration:**

	Rs.
Amount borrowed at the start of the lease (the amount recognised on initial recognition of the lease)	X
Plus: Interest accrued	X
Minus: Repayments (lease payments or rentals)	(X)
Repayment of loan principal	(X)
Amount owed now.	X

In effect, each lease payment consists of two elements:

- a finance charge (interest charge) on the liability to the lessor, and
- a partial repayment of the liability (the finance lease obligation).

The finance charge is treated as a finance cost in profit or loss for the period. The partial repayment of the lease obligation reduces the amount of the liability that remains unpaid.

### Finance charge

The total rental payments over the life of the lease will be more than the amount initially recognised as a liability. The difference is finance charge.

The total finance charge that arises over the life of the lease is the difference between the amount borrowed and the sum of all payments.



#### Illustration: Total finance charge

	Rs.
Lessee's minimum lease payments (sum of all payments made by the lessee to the lessor)	X
Amount on initial recognition	(X)
Total finance charge	<u>X</u>



#### Example: Total finance charge

Jhang Construction enters into a 6 year finance lease of a machine on 1 January Year 1.

The fair value of the machine at the commencement of the lease was Rs. 80,000 and Jhang Construction incurred initial direct costs of Rs. 2,000 when arranging the lease.

The annual lease payments are Rs.18,000, payable at the end of each year.

The estimated residual value of the asset at the end of the lease is Rs. 8,000 and Jhang Construction has guaranteed this amount.

The interest rate implicit in the lease is 11.176751%.

#### Total finance charge

	Rs.
Lessee's minimum lease payments:	
Annual rentals (6 × 18,000)	108,000
Guaranteed residual value	8,000
	<u>116,000</u>
Amount on initial recognition	(80,000)
Total finance charge (interest)	<u>36,000</u>

The finance charge (interest) is recognised over the life of the lease by adding a periodic charge to the liability for the finance lease obligation with the other side of the entry as an expense in profit or loss for the year.



#### Illustration:

	Debit	Credit
Statement of profit or loss: interest expense	X	
Liabilities: Finance lease obligations		X

### 3.5 Calculating and allocating finance charges (interest)

The total finance charge for a leased asset is allocated “so as to provide a constant rate of charge on the outstanding obligation”.

This means that as the lease liability decreases at each year-end, the interest charge for the next year will be lower than it was for the previous year.

The method implied by the IAS 17 guidance is to use an interest rate to allocate the interest. This method is called the actuarial method. (The sum of digits method usually gives an acceptable approximation to the actuarial method).

Questions in your exam are likely to require the use of an interest rate (which you may have to calculate as the interest rate implicit in the lease).

#### Actuarial method

The **actuarial method** uses discounting arithmetic to establish the interest rate that is implicit in the lease. This interest rate is then applied to the opening balance of the lease liability at the start of each period, in order to calculate the finance charge.



#### Example:

Jhang Construction enters into a 6 year finance lease of a machine on 1 January Year 1.

The fair value of the machine at the commencement of the lease was Rs. 80,000 and Jhang Construction incurred initial direct costs of Rs. 2,000 when arranging the lease.

The annual lease payments are Rs.18,000, payable at the end of each year.

The estimated residual value of the asset at the end of the lease is Rs. 8,000 and Jhang Construction has guaranteed this amount.

The interest rate implicit in the lease is 11.176751%.

#### Finance lease liability:

Year	Opening liability	Interest (11.176751%)	Lease payments	Closing liability
1	80,000	8,941	(18,000)	70,941
2	70,941	7,929	(18,000)	60,870
3	60,870	6,803	(18,000)	49,674
4	49,674	5,552	(18,000)	37,226
5	37,226	4,161	(18,000)	23,386
6	23,386	2,614	(26,000)	0
		36,000		

The interest expense is calculated by multiplying the opening liability by 11.176751% in each year (so as to provide a constant rate of charge on the outstanding obligation).

The finance lease obligation consists of the capital balance outstanding. This can be shown as follows:



**Example:**

**Finance lease liability:**

Year	Opening balance	Lease payments	Interest	Capital repayments	Closing balance
1	80,000	(18,000)	8,941	(9,059)	70,941
2	70,941	(18,000)	7,929	(10,071)	60,870
3	60,870	(18,000)	6,803	(11,197)	49,674
4	49,674	(18,000)	5,552	(12,448)	37,226
5	37,226	(18,000)	4,161	(13,839)	23,386
6	23,386	(26,000)	2,614	(23,386)	0

Tables like those above showing the opening liability plus interest expense less cash payment to give the closing liability are called **amortisation tables**. They can also be prepared for receivables, in which case they would show the opening receivable plus interest income less cash receipts to give the closing receivable.

**The final payment**

In the above example the final payment by the lessee is Rs. 26,000. This is in fact made up of two amounts, the final rental of Rs. 18,000 and the guaranteed residual value of Rs. 8,000.

It is worth considering the payment in respect of the guaranteed residual value in a little more detail.

At the end of the lease the asset that is the subject of the lease is transferred back to the lessor. It has been depreciated down to its estimated residual value of Rs. 8,000.

The transfer is recorded as follows:



**Example: Final payment in respect of the guaranteed residual value**

	Debit	Credit
Liabilities: Finance lease obligations	8,000	
Asset held under finance lease		8,000

In other words the Rs. 8,000 part of the final year payment to the lessor of Rs. 26,000 is not cash but the transfer of the asset.

If the asset is worth less than Rs. 8,000 the lessee must make good any shortfall. In this case the asset is written down to its value at the date of the transfer (as agreed between the lessee and the lessor) and the lessee will pay cash to the lessor to compensate for any difference.

**Example:**

Continuing the above example.

The asset has a carrying amount of Rs. 8,000 at the end of the lease but is only worth Rs. 5,000.

The lessee would make the following double entries.

	Debit	Credit
<b>Write down the asset</b>		
Statement of profit or loss	3,000	
Asset held under finance lease		3,000
<b>Pay the lessor the guaranteed residual value</b>		
Liabilities: Finance lease obligations	8,000	
Asset held under finance lease		5,000
Cash/bank		3,000

### 3.6 Current and non-current elements of the finance lease liability

The total liability must be divided between:

- the current liability (amount payable within the next 12 months), and
- the non-current liability.

The easy way to do it is to use the tables to identify the current liability or the non-current liability and then find the other as a balancing figure.

**Example: Split of current and non-current liability at the end of year 1**

Year	Opening balance	Lease payments	Interest	Capital repayments	Closing balance
1	80,000	(18,000)	8,941	(9,059)	70,941
2	70,941	(18,000)	7,929	(10,071)	60,870
				↑	↑
				This is the current liability	This is the non-current liability
<b>Liability:</b>				<b>Rs.</b>	
Current liability				10,071	
Non-current liability				60,870	
Total liability (for proof)				<u>70,941</u>	

### 3.7 Lease payments made in advance

When the lease payments for a finance lease are made at the start of each period instead of the end of the period, the total finance charge is the same (because neither the amount borrowed nor the total rentals have changed) but the interest must be recognised over a shorter period. This is because the liability is paid off one period earlier.

This means that the interest rate used for payments in advance will be bigger than that used for the same payments in arrears.

Also note that when the lease payments for a finance lease are made at the **start** of each period, the opening liability for the finance lease obligation is reduced by the lease payment at the beginning of the year, and the interest charge must be applied to the remaining balance.



#### Example:

Jhang Construction enters into a 6 year finance lease of a machine on 1 January Year 1.

The fair value of the machine at the commencement of the lease was Rs. 80,000 and Jhang Construction incurred initial direct costs of Rs. 2,000 when arranging the lease.

The annual lease payments are Rs.18,000, payable at the start of each year.

The estimated residual value of the asset at the end of the lease is Rs. 8,000 and Jhang Construction has guaranteed this amount.

The interest rate implicit in the lease is 16.1434%.

#### Finance lease liability:

(Note: "Year 0" is the first day of year 1. It would be better to think of it as time 0).

Year	Opening liability	Lease payments	Liability after day 1 payment	Interest at 16.1434%	Closing liability
0	80,000	(18,000)	62,000	10,009	72,009
1	72,009	(18,000)	54,009	8,719	62,728
2	62,728	(18,000)	44,728	7,221	51,948
3	51,948	(18,000)	33,948	5,480	39,429
4	39,429	(18,000)	21,429	3,459	24,888
5	24,888	(18,000)	6,888	1,112	8,000
6	8,000	(8,000)	0		
				36,000	

The interest expense is calculated by multiplying the opening liability by 16.1434% in each year (so as to provide a constant rate of charge on the outstanding obligation).

In the above example the first payment of Rs. 18,000 is made on the first day of the lease term. Therefore it does not include any interest and is a repayment of capital.

The year 1 interest of Rs. 10,009 is recognised at the end of year 1 (31 December Year 1). It is paid the next day by the payment of Rs.18,000 made on 1 January Year 2.

The closing liability at the end of year 1 is made up of the interest accrued in year 1 and an amount of capital which will be paid off in year 2.

This can be shown for all of the years below.



**Example:**

**Schedule to show repayment of capital:**

Year	Opening balance	Lease payments	Interest	Capital repayments	Closing balance
1	80,000	(18,000)	-	(18,000)	62,000
2	62,000	(18,000)	10,009	(7,991)	54,009
3	51,948	(18,000)	8,719	(9,281)	44,728
4	39,429	(18,000)	7,221	(10,779)	33,948
5	24,888	(18,000)	5,480	(12,520)	21,429
6 (start)	8,000	(18,000)	3,459	(14,541)	6,888
6 (end)	6,888	(8,000)	1,112	(6,888)	0

**Current and non-current liability**

If payments are made annually in advance, the next payment is a current liability. Therefore in the above example the Rs. 18,000 paid on 1 January Year 2 is a current liability.

However, this is made up of two elements, interest of Rs 10,009 and a capital repayment of Rs. 7,991. It is common practice in Pakistan to show these separately.

This means that the closing liability at the end of year 1 as identified on the previous page (Rs. 72,009) is made up of three parts:

- the interest recognised in year 1 but unpaid at the year end (Rs. 10,009);
- the current element of the capital owed on the lease (Rs. 7,991); and
- the non-current element of the capital owed on the lease (Rs. 54,009).

**Example:**

Year	Opening balance	Lease payments	Interest	Capital repayments	Closing balance
1	80,000	(18,000)	-	(18,000)	62,000
2	62,000	(18,000)	10,009	(7,991)	54,009

**Liability:****Current liabilities**

Interest expense

10,009

Current part of finance lease liability

7,991

**Non-current liability**

Non-current part of finance lease liability

54,009

Total finance lease liability (for proof)

62,000

Total liability (for proof)

72,009

**Rs.****Practice question****2**

The fair value of an asset, leased under a finance lease commencing on 1 January Year 1 is Rs.10,000.

The lease is for three years with payments of Rs.4,021 annually on 1 January Year 1, Year 2 and Year 3.

The interest rate implicit in the lease is 22.25%.

**Required**

Complete the lease payment table for all three years 1 to 3, and calculate the current liability and the non-current liability at 31 December Year 1 under the actuarial method.

### 3.8 Disclosures

Finance lessees must disclose the following:

- ❑ the net carrying amount at the end of the reporting period for each class of asset;
- ❑ a reconciliation between the total of future minimum lease payments at the end of the reporting period, and their present value (note that the present value of the minimum lease payments is the total finance lease liability as at the reporting date);
- ❑ the total of future minimum lease payments at the end of the reporting period, and their present value, for each of the following periods:
  - not later than one year;
  - later than one year and not later than five years;
  - later than five years.



#### Example: Finance lessee disclosures

Using the example used in section 3.4 to show the disclosures as at the end of the first year.

Minimum lease payments	Gross Rs.	PV Rs.
No later than 1 year	18,000	16,190
Later than 1 year and no later than 5 year (4 × 18,000 + 8,000)	80,000	54,751
Later than 5 years	nil	nil
	98,000	70,491
Less finance charge that relates to future periods (36,000 – 8,941) <sup>1</sup>	(27,059)	
Present value of finance lease liabilities (the total finance lease liability)	70,941	70,491

<sup>1</sup> The finance charge that relates to future periods is the total finance charge less the finance charge already expensed.

#### Working

	Gross (Rs.)	Discount factor (11.18%)	Present value (Rs.)
1 year's time	18,000	0.8995	16,190
2 years' time	18,000	0.8090	14,563
3 years' time	18,000	0.7277	13,099
4 years' time	18,000	0.6546	11,782
5 years' time	26,000	0.5887	15,307
	80,000		54,751
	98,000		70,941

Finance lessees must also disclose the following:

- ❑ contingent rents recognised as an expense in the period;
- ❑ the total of future minimum sublease payments expected to be received under non-cancellable subleases at the end of the reporting period;
- ❑ a general description of the lessee's material leasing arrangements including, but not limited to, the following:
  - the basis on which contingent rent payable is determined;
  - the existence and terms of renewal or purchase options and escalation clauses; and
  - restrictions imposed by lease arrangements, such as those concerning dividends, additional debt, and further leasing.



#### **Definition: Contingent rent**

Contingent rent is that portion of the lease payments that is not fixed in amount but is based on the future amount of a factor that changes other than with the passage of time (e.g. percentage of future sales, amount of future use, future price indices, future market rates of interest).



#### **Practice questions**

**3**

A Ltd leased an asset from B Plc for Rs. 250,000 per annum in arrears for 4 years. B Plc incurred initial direct costs of Rs. 26,650 and estimated the residual value of the asset at the end of the lease term to be Rs. 50,000.

The lease started on the first day of A Ltd's accounting period.

The fair value of the asset at the start of the lease was Rs. 800,000.

**Required:**

- a) Demonstrate that the interest rate implicit in the lease is 10%
- b) What is the finance lease liability on initial recognition?
- c) Estimate the total finance charge that A Ltd must recognise over the life of the lease.
- d) Construct an amortisation table to show the interest expense each year and the lease liability at each year-end over the life of the lease.
- e) Prepare the journals necessary to record the finance lease liability in the first year of the lease.
- f) Identify the current finance lease liability and non-current finance lease liability that would appear in A Ltd's financial statements at the end of the first year.
- g) Prepare the required reconciliation of total minimum lease payments at the end of the their present value in both forms (i.e. showing the gross flows less the finance charge that relates to future periods and also showing the present value of future rentals).

## 4 ACCOUNTING FOR A FINANCE LEASE: LESSOR ACCOUNTING

### Section overview

- Definitions
- Finance lease accounting
- Finance lease accounting – alternative double entry
- Manufacturer/dealer leases
- Finance lessor disclosures

### 4.1 Definitions

The lessor does not record the leased asset in his own financial statements because he has transferred the risks and rewards of ownership of the physical leased asset to the lessee. Instead, he records the amount due to him under the terms of the finance lease as a receivable.

The receivable is described as the net investment in the lease.



#### Definitions: Gross and net investment in the lease

Gross investment in the lease is the aggregate of:

- (a) the minimum lease payments receivable by the lessor under a finance lease, and
- (b) any unguaranteed residual value accruing to the lessor.

Net investment in the lease is the gross investment in the lease discounted at the interest rate implicit in the lease.

An earlier section explained that the interest rate implicit in the lease is the discount rate that, at the inception of the lease, causes:

- the aggregate present value of the minimum lease payments and the unguaranteed residual value; to be equal to
- the sum of the fair value of the leased asset and any initial direct costs of the lessor.

Therefore the net investment in the lease is the sum of the fair value of the asset plus the initial direct costs.

### 4.2 Finance lease accounting

Many of the entries to be made in the ledger accounts of the lessor are a 'mirror image' of those made by the lessee in respect of his lease liability.

	Lessee	Lessor
Initial recognition	Finance lease payable	Finance lease receivable (net investment in the lease)
Subsequent measurement	Finance cost	Finance income
Pattern of recognition	So as to provide a constant periodic rate of charge on the outstanding obligation	So as to provide a constant periodic rate of return on the net investment in the lease.

### Initial recognition

The lessor records a receivable for the capital amount owed by the lessee. This should be stated at the amount of the 'net investment in the lease'. The net investment in the lease is the fair value of the asset.



#### Illustration: Double entry on Initial recognition of a finance lease

	Debit	Credit
Net investment in the lease	X	
Cash/bank (or payable)		X

For finance leases other than those involving manufacturer or dealer lessors, initial direct costs are included in the initial measurement of the finance lease receivable and reduce the amount of income recognised over the lease term.

This is because they reduce the total finance income which is the difference between all future payments and the receivable initially recognised.

Initial direct costs of manufacturer or dealer lessors in connection with negotiating and arranging a lease are excluded from the definition of initial direct costs. As a result, they are excluded from the net investment in the lease.

The treatment of similar costs incurred by manufacturers and dealers is explained later.

### Subsequent measurement of the receivable

During each year, the lessor receives payments from the lessor. Each receipt is recorded in the ledger account as follows.



#### Illustration: Double entry for rental receipt

	Debit	Credit
Cash/bank	X	
Net investment in the lease		X

A finance lease receivable (net investment in the lease) is measured in the same way as any other financial asset. The balance at any point in time is as follows:



#### Illustration: Finance lease receivable (net investment in lease)

	Rs.
Amount loaned at the start of the lease (the amount recognised on initial recognition of the lease)	X
Plus: Interest accrued	X
Minus: Repayments (lease payments or rentals)	(X)
Repayment of loan principal	(X)
Amount owed to the lessor now.	<u>X</u>

In effect, each lease receipt consists of two elements:

- finance income on the receivable; and
- a partial repayment of the receivable (net investment in the lease).

The finance charge is recognised as income in profit or loss for the period. The partial repayment of the lease receivable reduces the amount owed to the lessor.

### Finance income

The total rental receipts over the life of the lease will be more than the amount initially recognised as a receivable. The difference is finance income.

The total finance income that arises over the life of the lease is the difference between the amount invested in the lease (the amount loaned plus the initial direct costs) and the sum of all receipts.



#### Illustration: Total finance income

	Rs.
Lessor's minimum lease payments	X
Initial direct costs	X
	<hr/>
	X
Amount on initial recognition	(X)
	<hr/>
Total finance income	<u>X</u>



#### Example: Total finance income

Sialkot Finance agreed to lease a machine to Jhang Construction commencing on 1 January Year 1.

The lease was a 6 year finance lease of a machine on 1 January Year 1 with annual lease payments of Rs.18,000, payable in arrears.

The fair value of the machine at the commencement of the lease was Rs. 80,000 and Sialkot Finance incurred initial direct costs of Rs. 2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is Rs. 10,000. The lessee has guaranteed an amount of Rs. 8,000.

The interest rate implicit in the lease is 10.798%.

#### Total finance income

	Rs.
Net investment in lease	
Annual rentals (6 × 18,000)	108,000
Guaranteed residual value	8,000
Unguaranteed residual value	2,000
	<hr/>
	118,000
Amount on initial recognition	(80,000)
Initial direct costs	(2,000)
	<hr/>
	(82,000)
	<hr/>
Total finance income	<u>36,000</u>

The finance income is recognised over the life of the lease by adding a periodic return to the net investment in the lease with the other side of the entry as income in profit or loss for the year.


**Illustration: Double entry for recognition of finance income**

	Debit	Credit
Net investment in the lease	X	
Statement of profit or loss: finance income		X

**Calculating and allocating finance income**

Finance income is recognised so as to give a constant periodic rate of return on the lessor's net investment in the finance lease.


**Example: Interest rate implicit in lease**

Sialkot Finance agreed to lease a machine to Jhang Construction commencing on 1 January Year 1.

The lease was a 6 year finance lease of a machine on 1 January Year 1 with annual lease payments of Rs.18,000, payable in arrears.

The fair value of the machine at the commencement of the lease was Rs. 80,000 and Sialkot Finance incurred initial direct costs of Rs. 2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is Rs. 10,000. The lessee has guaranteed an amount of Rs. 9,000.

The interest rate implicit in the lease is 10.798%.

**Proof that interest rate implicit in the lease is 10.798%**

Year	Narrative	Cash flow	Discount factor (10.798%)	Present value
1 to 6	Annual rentals	18,000	4.2553	76,595
6	Guaranteed residual value	9,000	0.54052	4,865
6	Unguaranteed residual value	1,000	0.54052	540
				82,000
	Fair value of the asset			80,000
	Initial direct costs			2,000
				82,000



### Example: Finance lessor accounting

Sialkot Finance agreed to lease a machine to Jhang Construction commencing on 1 January Year 1.

The lease was a 6 year finance lease of a machine on 1 January Year 1 with annual lease payments of Rs.18,000, payable in arrears.

The fair value of the machine at the commencement of the lease was Rs. 80,000 and Sialkot Finance incurred initial direct costs of Rs. 2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is Rs. 8,000 and the lessee has guaranteed this amount.

The interest rate implicit in the lease is 10.798%.

#### Net investment in the lease

Year	Opening net investment	Interest (10.798%)	Lease receipts	Closing net investment
1	82,000	8,854	(18,000)	72,854
2	72,854	7,867	(18,000)	62,721
3	62,721	6,773	(18,000)	51,494
4	51,494	5,560	(18,000)	39,054
5	39,054	4,217	(18,000)	25,271
6	25,271	2,729	(27,000)	1,000
		<u>36,000</u>		

The interest income is calculated by multiplying the opening receivable by 10.798% in each year (so as to provide a constant rate of return on the net investment in the lease).

The final balance on the account is the unguaranteed residual value.

The double entries in the first year would be as follows:

	Debit	Credit
<b>Start of year 1:</b>		
Net investment in the lease	82,000	
Cash (or payable)		82,000
<b>Being the initial recognition of the net investment in the lease</b>		
<b>End of year 1</b>		
Net investment in the lease	8,854	
Finance income (statement of profit or loss)		8,854
<b>Being the recognition of finance income</b>		
Cash	18,000	
Net investment in the lease		18,000
<b>Being the receipt of the year 1 rental</b>		

### 4.3 Finance lease accounting – alternative double entry

There is an alternative approach to finance lessor double entry. Instead of recognising “net investment in a lease” as an asset, a company could recognise the “gross investment in a lease” as an asset and “unearned finance income” as a liability. The balances on these two accounts would be netted off to give the net investment in a lease at each reporting date.



#### Illustration: Double entry on Initial recognition of a finance lease

	Debit	Credit
Gross investment in the lease	X	
Unearned finance income		X
Cash/bank (or payable)		X

The rental receipts reduce the “gross investment in the lease”. In addition, the interest income in the period is transferred from the unearned finance income account to the statement of profit or loss.



#### Illustration: Double entry on receipt date

	Debit	Credit
Cash	X	
Gross investment in the lease		X
Unearned finance income	X	
Statement of profit or loss		X

It is still necessary to construct an amortisation table in order to identify the interest income.


**Example: Finance lessor accounting – alternative double entry**

Facts as before (key points reproduced for your convenience)

Lease commences on 1 January Year 1.

The lease was a 6 year finance lease of a machine on 1 January Year 1 with annual lease payments of Rs.18,000, payable in arrears.

The fair value of the machine at the commencement of the lease was Rs. 80,000 and the lessor incurred initial direct costs of Rs. 2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is Rs. 8,000 and the lessee has guaranteed this amount.

The interest rate implicit in the lease is 10.798%.

**Gross investment in the lease**

	Rs.
Annual rentals (6 × 18,000)	108,000
Guaranteed residual value	9,000
Unguaranteed residual value	1,000
	118,000
Amount on initial recognition	(80,000)
Initial direct costs	(2,000)
	(82,000)
Total finance income	36,000

The double entry at the start of the lease would be as follows:

	Debit	Credit
<b>Start of year 1</b>		
Lease receivable (gross investment in the lease)	118,000	
Unearned finance income		36,000
Cash (or payable)		82,000
<b>Being the initial recognition of the lease</b>		
<b>End of year 1</b>		
Cash	18,000	
Lease receivable (gross investment in the lease)		18,000
<b>Being the receipt of the year 1 rental</b>		
Unearned finance income	8,854	
Finance income (statement of profit or loss) W		8,854
<b>Being the recognition of finance income</b>		


**Example: Finance lessor accounting – alternative double entry (continued)**
**Working: Amortisation table (only first two years shown)**

Year	Opening net investment	Interest (10.798%)	Lease receipts	Closing net investment
1	82,000	8,854	(18,000)	72,854
2	72,854	7,867	(18,000)	62,721

The net investment in the lease is found by netting the unearned finance income against the lease receivable (gross investment in the lease) at each point in time.

The following table shows the balance on the two accounts at the start and at each year end and the resulting net figures.

Year	Finance lease receivable	Unearned finance income	Net investment in the lease
0	118,000	36,000	82,000
	(18,000)	(8,854)	
1	100,000	27,146	72,854
	(18,000)	(7,867)	
2	82,000	19,279	62,721
	(18,000)	(6,773)	
3	64,000	12,506	51,494
	(18,000)	(5,560)	
4	46,000	6,946	39,054
	(18,000)	(4,217)	
5	28,000	2,729	25,271
	(27,000)	(2,729)	
6	1,000	–	1,000

Note that the net investment in the lease is the same as before.

**Practice questions****4**

A Ltd leased an asset from B Plc (the lessor) for Rs. 250,000 per annum in arrears for 4 years. B Plc incurred initial direct costs of Rs. 26,650 and estimated the residual value of the asset at the end of the lease term to be Rs. 50,000.

The fair value of the asset at the start of the lease was Rs. 800,000.

**Required:**

- a) What is the net investment in the lease on initial recognition.
- b) Calculate the total finance income that B Plc must recognise over the life of the lease.
- c) Construct an amortisation table to show the interest income each year and the net investment in the lease at each year-end over the life of the lease.
- d) Prepare the journals necessary to record the finance lease in the first year of the lease (assuming that B Plc uses a single account to record the net investment in the lease).
- e) Prepare the journals necessary to record the finance lease in the first year of the lease (assuming that B Plc uses two accounts (being the gross investment in the lease and unearned finance income) to record the net investment in the lease).

#### 4.4 Manufacturer/dealer leases

Manufacturers or dealers often offer to customers the choice of either buying or leasing an asset. A finance lease of an asset by a manufacturer or dealer lessor gives rise to two types of income:

- ❑ profit or loss equivalent to the profit or loss resulting from an outright sale of the asset being leased, at normal selling prices, reflecting any applicable volume or trade discounts; and
- ❑ finance income over the lease term.

##### Revenue

The sales revenue recognised at the commencement of the lease term is the lower of:

- ❑ the fair value of the asset; and
- ❑ the present value of the lessor's minimum lease payments at a market rate of interest.

##### Cost of sale

The cost of sale recognised at the commencement of the lease term is the carrying amount of the leased asset less the present value of the unguaranteed residual value.

The deduction of the present value of the unguaranteed residual value recognises that this part of the asset is not being sold. This amount is transferred to the lease receivable. The balance on the lease receivable is then the present value of the amounts which the lessor will collect off the lessee plus the present value of the unguaranteed residual value. This is the net investment in the lease as defined in section 4.1.

Costs incurred by manufacturer or dealer lessors in connection with negotiating and arranging a lease must be recognised as an expense when the selling profit is recognised.

##### Profit or loss on the sale

The difference between the sales revenue and the cost of sale is the selling profit or loss. Profit or loss on these transactions is recognised in accordance with the policy followed for recognising profit on outright sales.

The manufacturer or dealer might offer artificially low rates of interest on the finance transaction. In such cases the selling profit is restricted to that which would apply if a market rate of interest were charged.

**Example: Manufacturer or dealer leases**

Multan Motors is a car dealer.

It sells cars and offers a certain model for sale by lease.

The following information is relevant:

Price of the car in a cash sale	Rs. 2,000,000
Cost of the car	Rs. 1,500,000

Finance option:

Annual rental	Rs. 804,230
Lease term	3 years
Interest rate	10%
Estimated residual value	nil
Lessor's cost of setting up the lease	Rs. 20,000

Discount factor	
t1 to t3 @ 10%	2.486852 (written as 2.487)

<b>Working: Revenue:</b>	Rs.
Fair value of the asset	2,000,000
Present value of the minimum lease payments (if lower)	
$804,230 \times 2.487$	2,000,000

Multan Motors will recognise a profit on the sale as follows:

	Rs.
Revenue (PV of MLPs)	2,000,000
Cost of sale	(1,500,000)
Profit on sale	500,000

The double entry to achieve this is shown below.

**Initial double entry:**

	Debit	Credit
<b>Revenue</b>		
Lease receivable (Net investment in the lease)	2,000,000	
Statement of profit or loss		2,000,000
<b>Cost of sale</b>		
Statement of profit or loss	1,500,000	
Asset (Inventory)		1,500,000
<b>Cost of setting up the lease</b>		
Statement of profit or loss	20,000	
Cash/bank		20,000


**Example: Manufacturer or dealer lease (continued)**
**Net investment in the lease (over its life):**

Year	Opening net investment	Interest (10%)	Lease receipts	Closing net investment
1	2,000,000	200,000	(804,230)	1,395,770
2	1,395,770	139,577	(804,230)	731,117
3	731,117	73,113	(804,230)	nil

The interest income is calculated by multiplying the opening receivable by 10% in each year (so as to provide a constant rate of return on the net investment in the lease).

**Summary of double entry in year 1:**

	Bank	Inventory	Net investment in the lease	Profit or loss
B/f		1,500,000 <sup>Dr</sup>		
Revenue			2,000,000 <sup>Dr</sup>	2,000,000 <sup>Cr</sup>
Cost of sales		(1,500,000) <sup>Cr</sup>		(1,500,000) <sup>Dr</sup>
Set up cost	(20,000) <sup>Cr</sup>			(20,000) <sup>Dr</sup>
Profit on sale				480,000 <sup>Cr</sup>
Lease income			200,000 <sup>Dr</sup>	200,000 <sup>Cr</sup>
Lease rental	804,230 <sup>Dr</sup>		(804,230) <sup>Cr</sup>	
			<u>1,395,770<sup>Dr</sup></u>	<u>680,000<sup>Cr</sup></u>


**Example: Manufacturer or dealer leases with unguaranteed residual value**

The following information is relevant:

Price of the car in a cash sale	Rs. 2,000,000
Cost of the car	Rs. 1,500,000
<b>Finance option:</b>	
Annual rental	Rs. 764,018
Lease term	3 years
Interest rate	10%
Estimated residual value	Rs. 133,100
Lessor's cost of setting up the lease	Rs. 20,000

**Discount factors:**

t3 @ 10%	0.7513148 (written as 0.751)
t1 to t3 @ 10%	2.486852 (written as 2.487)

**Workings**

<b>W1: Revenue</b>	Rs.
Fair value of the asset	2,000,000
Present value of the minimum lease payments (if lower)	
764,018 × 2.487	1,900,000

<b>W2: Present value of the unguaranteed residual value</b>	Rs.
Present value of the minimum lease payments	
133,156 × 0.751	100,000

**Initial double entry:**

	Debit	Credit
<b>Revenue</b>		
Lease receivable (Net investment in the lease)	1,900,000	
Statement of profit or loss		1,900,000
<b>Cost of sale</b>		
Statement of profit or loss	1,400,000	
Asset (Inventory)		1,400,000
<b>Transfer</b>		
Lease receivable (Net investment in the lease)	100,000	
Asset (Inventory)		100,000
<b>Cost of setting up the lease</b>		
Statement of profit or loss	20,000	
Cash/bank		20,000


**Example: Manufacturer or dealer lease (continued)**
**Net investment in the lease (over its life):**

Year	Opening net investment	Interest (10%)	Lease receipts	Closing net investment
1	1,900,000 100,000			
	2,000,000	200,000	(764,018)	1,435,982
2	1,435,982	143,598	(764,018)	815,562
3	815,562	81,556	(764,018)	133,100

The interest income is calculated by multiplying the opening receivable by 10% in each year (so as to provide a constant rate of return on the net investment in the lease).

The balance on the account at the end of the lease term is the unguaranteed residual value.

**Summary of double entry in year 1:**

	Bank	Inventory	Net investment in the lease	Profit or loss
B/f		1,500,000 <sup>Dr</sup>		
Revenue			1,900,000 <sup>Dr</sup>	1,900,000 <sup>Cr</sup>
Cost of sales		(1,400,000) <sup>Cr</sup>		(1,400,000) <sup>Dr</sup>
Set up cost	(20,000) <sup>Cr</sup>			(20,000) <sup>Dr</sup>
Profit on sale				480,000 <sup>Cr</sup>
Transfer		(100,000) <sup>Cr</sup>	100,000 <sup>Dr</sup>	
Lease income			200,000 <sup>Dr</sup>	200,000 <sup>Cr</sup>
Lease rental	764,018 <sup>Dr</sup>		(764,018) <sup>Cr</sup>	
			<u>1,435,982<sup>Dr</sup></u>	<u>680,000<sup>Cr</sup></u>

**Practice questions****5**

B Plc makes and sells printing presses (with a useful life of 4 years) for a cash price of Rs. 792,500 each.

B Plc offers an alternative arrangement whereby it will lease a press to a customer for Rs. 250,000 per annum in arrears for 4 years.

B Plc incurs initial direct costs of Rs. 30,000 on the leasing arrangements. It costs B Plc Rs. 500,000 to make each printing press.

**Required:**

- a) Demonstrate that the interest rate implicit in the lease is 10%
- b) Calculate the profit that B Plc will recognise when it supplies a printing press under the lease arrangement.
- c) Calculate the total finance income that B Plc must recognise over the life of the lease.
- d) Construct an amortisation table to show the interest income each year and the net investment in the lease at each year-end over the life of the lease.
- e) Prepare the journals necessary to record the finance lease in the first year of the lease (assuming that B Plc uses a single account to record the net investment in the lease).

**4.5 Finance lessor disclosures**

A finance lessor must disclose the following:

- a reconciliation between the gross investment in the lease at the end of the reporting period, and the present value of minimum lease payments receivable at the end of the reporting period;
- the gross investment in the lease and the present value of minimum lease payments receivable at the end of the reporting period, for each of the following periods:
  - not later than one year;
  - later than one year and not later than five years;
  - later than five years;
- unearned finance income;
- the unguaranteed residual values accruing to the benefit of the lessor;
- the accumulated allowance for uncollectible minimum lease payments receivable;
- contingent rents recognised as income in the period;
- a general description of the lessor's material leasing arrangements.

**Definitions: Unearned finance income**

Unearned finance income is the difference between:

- (a) the gross investment in the lease, and
- (b) the net investment in the lease.

## 5 ACCOUNTING FOR AN OPERATING LEASE

### Section overview

- Operating leases in the financial statements of the lessee
- Operating lessee disclosures
- Operating leases in the financial statements of the lessor
- Operating lessor disclosures

### 5.1 Operating leases in the financial statements of the lessee

An operating lease is accounted for in a different way from a finance lease. The leased asset is not owned 'in substance' by the lessee. The lease arrangement is similar to a rental agreement for the hire of the asset.

IAS 17 **Leases** states that the total payments made by the lessee under an operating lease should be recognised as an expense, and apportioned between financial periods on a straight-line basis. (If another rational basis is more appropriate then that may be used).

Any difference between amounts charged as an expense for a financial period and amounts of lease rental actually paid during the period will result in an accrual or prepayment in the statement of financial position.



#### Example:

Under a four-year operating lease agreement, Entity F pays a non-returnable deposit of Rs.50,000 and then four years' rental of Rs.50,000 per annum on the first day of each year.

#### Required

- (a) Calculate the annual expense for the operating lease for each of the four years.
- (b) Calculate the asset or liability in the statement of financial position at the end of Year 1 and at the end of Year 2.



#### Answer

- (a) Total lease payments = Rs.50,000 + (Rs.50,000 × 4 years) = Rs.250,000  
Annual charge for the lease (annual expense) = Rs.250,000 ÷ 4 years = Rs.62,500.

<b>Statement of financial position at end of Year 1</b>	<b>Rs.</b>
Lease payments in Year 1 (Rs.50,000 + Rs.50,000)	100,000
Charged as an expense in Year 1	(62,500)
Prepayment: asset at end of Year 1	37,500

- (b) **Statement of financial position at end of Year 2**

	<b>Rs.</b>
Balance b/f from Year 1 (prepayment)	37,500
Lease payment in Year 2	50,000
	87,500
Charged as an expense in Year 2	(62,500)
Prepayment: asset at end of Year 2	25,000

## 5.2 Operating lessee disclosures

Operating lessees must disclose the following:

- ❑ the total of future minimum lease payments under non-cancellable operating leases for each of the following periods:
  - not later than one year;
  - later than one year and not later than five years;
  - later than five years;
- ❑ the total of future minimum sublease payments expected to be received under non-cancellable subleases at the end of the reporting period;
- ❑ lease and sublease payments recognised as an expense in the period, with separate amounts for minimum lease payments, contingent rents, and sublease payments;
- ❑ a general description of the lessee's significant leasing arrangements including, but not limited to, the following:
  - the basis on which contingent rent payable is determined;
  - the existence and terms of renewal or purchase options and escalation clauses; and
  - restrictions imposed by lease arrangements, such as those concerning dividends, additional debt and further leasing.

## 5.3 Operating leases in the financial statements of the lessor

Because the lessor has **not** transferred the risks and rewards of ownership of the physical asset to the lessee, the lessor shows the leased asset as a non-current asset in its statement of financial position.

It will be shown in an appropriate category of **property, plant and equipment** at its carrying value (cost/valuation minus accumulated depreciation).

In respect of the leased asset, the lessor's annual statement of profit or loss will include:

- ❑ depreciation on the asset as an expense, and
- ❑ rental income (as for the lessee, this is usually calculated on a straight-line basis).

Lease income from operating leases is recognised in income on a straight-line basis over the lease term, unless another systematic basis is more representative of the time pattern in which use benefit derived from the leased asset is diminished.

Initial direct costs incurred by lessors in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised as an expense over the lease term on the same basis as the lease income.

The depreciation policy for depreciable leased assets must be consistent with the lessor's normal depreciation policy for similar assets, and calculated in accordance with IAS 16 and IAS 38.

**Manufacturer/dealer leases**

A manufacturer or dealer lessor must not recognise any selling profit on entering into an operating lease. It is not the equivalent of a sale as the risks and benefits of ownership do not pass.

**5.4 Operating lessor disclosures**

Operating lessors must disclose the following:

- the future minimum lease payments under non-cancellable operating leases in the aggregate and for each of the following periods:
  - not later than one year;
  - later than one year and not later than five years;
  - later than five years.
- total contingent rents recognised as income in the period.
- a general description of the lessor's leasing arrangements.

## 6 SALE AND LEASEBACK TRANSACTIONS

### Section overview

- Sale and leaseback transactions
- Sale and finance leaseback (finance lease)
- Sale and operating leaseback (operating lease)

### 6.1 Sale and leaseback transactions

Sale and leaseback transactions involve one entity selling an asset, normally to a bank or finance company, and then immediately leasing it back. The main purpose is to allow the entity to release cash that is 'tied up' in the asset, whilst retaining use of the asset.

For example, a company may own an office building that it uses for its administrative operations. It may decide to sell and lease back the building, to raise cash. By selling the building, it raises cash. By leasing back the building, it retains the use of the building for its operational activities.

The leaseback could be arranged either as a finance lease or an operating lease, and this will affect the accounting treatment of the transaction.

### 6.2 Sale and finance leaseback (finance lease)

Before the transaction the owner has the risks and rewards of ownership. The owner sells the asset and then leases it back under a finance lease. The owner has retained the risks and rewards of ownership. In substance this is not a sale so profit should not be recognised. The accounting treatment is as follows.

There are two stages, the disposal (sale) and the finance leaseback:

- **The sale.**
  - On disposal, the asset should be removed from the seller's statement of financial position.
  - Any surplus from the sale in excess of the carrying amount should be deferred and amortised over the term (life) of the lease.
- **The leaseback.** The normal finance lease rules are then applied, to reintroduce the asset to the statement of financial position of the lessee at its fair value, and to establish a leasing obligation.


**Example: Sale and finance leaseback**

In 20X6 a company sold an asset and leased it back under a finance lease. The asset had a carrying value of Rs. 70,000 and was sold for its market value of Rs. 120,000.

At the date of sale it had a remaining life of five years and was leased back for the whole of this period at a rental of Rs. 28,000 per annum in arrears.

	Debit	Credit
	Rs.	Rs.
<b>The sale</b>		
Cash	120,000	
Asset		70,000
Deferred income		50,000
<b>The leaseback</b>		
Asset	120,000	
Lease obligation		120,000


**Practice questions**
**6**

X Ltd sold a specialised machine and leased it back on 01.01.2015.

The machine had a carrying amount of Rs.117,600 at the date of the transaction and a remaining useful life of 5 years.

The sale was at fair value which was Rs. 167,600.

The lease was for a period of 5 years with annual rentals in arrears of Rs. 50,000. The interest rate implicit in the lease was 15%.

**Required:**

- a) Show the journals necessary to record the sale and lease back transaction on 01.01.2015.
- b) Show the other journals necessary to account for the lease in the year-end 31.12.2015.

### 6.3 Sale and operating leaseback (operating lease)

Again, there are two stages to the transaction, the sale and the operating leaseback. The substance and legal form of the transaction are the same. The asset has been sold by the lessee (known as the seller/lessee) and the risks and rewards have been permanently transferred to the lessor as the leaseback is an operating lease in nature.

On sale, the asset should be removed from the seller/lessee's statement of financial position.

- ❑ The gain or loss on disposal should be recognised in profit or loss. (See below for details of how the gain is calculated).
- ❑ The normal operating lease rules are then applied to account for the rental payments.

IAS 17 outlines three treatments for accounting for the profit on the sale of the asset, depending on whether the asset was sold for its fair value, for less than fair value or for more than fair value.

#### Sale at fair value

This is just a normal sale. If an asset is sold at fair value, the gain or loss on disposal is recognised immediately in profit or loss in the usual way.



#### Example: Sale and operating leaseback – Sale at fair value

In early 20X7 a company sold an asset for Rs.1.5 million and leased it back under a five-year operating lease.

The asset had a carrying value of Rs.1 million.

	<b>Debit</b>	<b>Credit</b>
	Rs.	Rs.
Cash	1,500,000	
Asset		1,000,000
Statement of profit or loss		500,000

**Sale at less than fair value**

If an asset is sold at less than fair value, the gain or loss on disposal is recognised immediately in profit or loss.

However, if the sale makes a loss and this is compensated for by future lease payments at below market price, the loss should not be recognised immediately, but deferred and then released to profit or loss over the expected period of use (the lease period).

**Example: Sale and operating leaseback – Sale below fair value**

In early 20X7 a company sold an asset for Rs.1.5 million and leased it back under a five-year operating lease.

The asset had a carrying value of Rs.2 million and a remaining useful life of ten years.

	<b>Debit</b>	<b>Credit</b>
	Rs.	Rs.
Cash	1,500,000	
Asset		2,000,000
Statement of profit or loss	500,000	

**Example: Sale and operating leaseback – Sale below fair value compensated by lower future rentals**

In early 20X7 a company sold an asset for Rs.1.5 million and leased it back under a five-year operating lease.

The asset had a carrying value of Rs.2 million and a remaining useful life of ten years.

The company accepted an offer below the fair value of the asset because it was able to negotiate rentals at below the market rate in compensation.

	<b>Debit</b>	<b>Credit</b>
	Rs.	Rs.
Cash	1,500,000	
Asset		2,000,000
Deferred loss (on the statement of financial position)	500,000	

The deferred loss amortised in proportion to the lease payments over the period for which the asset is expected to be used.

### Sale at more than fair value

If an asset is sold at more than fair value, the normal gain or loss on disposal (based on the difference between the carrying amount and fair value) is recognised immediately in profit or loss.

The excess profit (based on the difference between the fair value and actual sale value) should be deferred and released to profit or loss over the expected period of use (the lease period).



#### Example: Sale and operating leaseback – Sale above fair value

In early 20X7 a company sold an asset for Rs.1.5 million and leased it back under a five-year operating lease.

The asset had a carrying value of Rs.1 million and a remaining useful life of ten years.

The fair value of the asset at the date of sale was Rs.1.2 million.

	<b>Debit</b>	<b>Credit</b>
	Rs.	Rs.
Cash	1,500,000	
Asset		1,000,000
Statement of profit or loss (Normal profit of Rs.1.2m – Rs.1m)		200,000
Cr Deferred income (Excess profit: this is Rs.1.5m – Rs.1.2m)		300,000

Note: The deferred income will be released to profit or loss over the lease term of 5 years.



### Practice questions

7

#### Required:

For each of the cases below:

- Show the journals necessary to record the sale and lease back transaction on 01.01.2015.
- Show the other journals necessary to account for the lease in the year-end 31.12.2015.

#### Case 1

On 01.01.2015 a company entered into a sale and lease back transaction involving an asset with a carrying amount of Rs. 150,000 and a fair value of Rs. 200,000.

The following information is relevant:

Lease type:	Operating lease
Sales price:	Rs. 200,000
Annual rental	Rs. 50,000

#### Case 2

On 01.01.2015 a company entered into a sale and lease back transaction involving an asset with a carrying amount of Rs. 150,000 and a fair value of Rs. 200,000.

The following information is relevant:

Lease type:	Operating lease
Sales price:	Rs. 230,000
Annual rental	Rs. 50,000

#### Case 3

On 01.01.2015 a company entered into a sale and lease back transaction involving an asset with a carrying amount of Rs. 150,000 and a fair value of Rs. 200,000.

The following information is relevant:

Lease type:	Operating lease
Sales price:	Rs. 180,000.
Annual rental	Rs. 50,000

#### Case 4

On 01.01.2015 a company entered into a sale and lease back transaction involving an asset with a carrying amount of Rs. 150,000 and a fair value of Rs. 200,000.

The following information is relevant:

Lease type:	Operating lease
Sales price:	Rs. 140,000
Annual rental (set to compensate for the low sales value)	Rs. 40,000

## 7 IMPACT ON PRESENTATION

### Section overview

- The effect of classifying a lease incorrectly

#### 7.1 The effect of classifying a lease incorrectly

If a finance lease is treated as an operating lease, the financial statements do not fairly present the financial position of the entity:

- ❑ The leased asset is not recognised in the statement of financial position, even though the substance of the lease is that the entity owns it.
- ❑ The liability for the lease payments is not recognised in the statement of financial position.

Therefore both assets and liabilities are understated. The lease becomes a form of 'off balance sheet finance', hidden from the users of the financial statements. The entity's (lessee's) liabilities can appear to be much lower than they actually are.

Classifying a lease incorrectly affects the numbers in the financial statements.

An example seen earlier in the chapter is used to illustrate this.

**Example:**

The fair value of an asset, leased under a finance lease commencing on 1 January Year 1 is Rs.12,886.

The lease is for three years with payments of Rs.5,000 annually in arrears on 31 December Year 1, Year 2 and Year 3. The interest rate implicit in the lease is 8%.

Finance lease liability (given again for your convenience)

Year	Opening balance	Interest (8%)	Lease payment	Closing balance
1	12,886	1,031	(5,000)	8,917
2	8,917	713	(5,000)	4,630
3	4,630	370	(5,000)	-
		2,114		

The numbers that would appear in the financial statements for year 1 if the lease were treated as finance lease or as an operating lease are shown below:

	Finance lease	Operating lease
<b>Statement of financial position</b>	<b>Rs.</b>	
<b>Non-current asset</b>		
Asset held under finance lease (12,886 - (1/3 of 12,866= 4,289))	8,597	-
<b>Liability:</b>	<b>Rs.</b>	
Non-current liability	4,630	-
Current liability	4,287	-
<b>Total liability</b>	<b>8,917</b>	<b>-</b>
<b>Statement of profit or loss</b>		
Depreciation charge (1/3 of 12,866)	4,289	-
Finance charge	1,013	-
Rental	-	5,000
	<b>5,302</b>	<b>5,000</b>

## SOLUTIONS TO PRACTICE QUESTIONS

### Solution

**1**

The lease is a finance lease.

#### Reasons

The lease is for a major part of the life of the asset (6 out of 7 years).

Jhang Construction must ensure the asset. It is exposed to one of the major risks of ownership of the asset (its loss).

The present value of the minimum lease payments is 95.3%

$(4.767 \times 600,000 / 3,000,000)$  of the fair value of the asset at the inception of the lease.

### Solution

**2**

	Rs.
Total lease payments (3 × Rs.4,021)	12,063
Minus: Cash price of the asset	<u>(10,000)</u>
Total finance charge	<u>2,063</u>

#### Actuarial method

Year ended 31 December	Opening balance	Lease payment	Capital outstanding	Interest at 22.25%	Closing balance
	Rs.	Rs.	Rs.	Rs.	Rs.
Year 1	10,000	(4,021)	5,979	1,330	7,309
Year 2	7,309	(4,021)	3,288	733	4,021
Year 3	4,021	(4,021)	-	-	-

The year-end liability at the end of Year 1 is Rs.7,309 in total.

- The non-current liability is the liability at the start of the next year after deducting the first payment (Rs.3,288).
- The current liability is the payment in year 2 less any interest contained in it that has not yet accrued.

	Rs.
Current liability, end of Year 1	4,021
Non-current liability, end of Year 1	<u>3,288</u>
Total liability, end of Year 1	<u>7,309</u>

## Solutions

3

- a) The interest rate implicit in the lease is the discount rate that, at the inception of the lease, causes the aggregate present value of (a) the minimum lease payments and (b) the unguaranteed residual value to be equal to the sum of (i) the fair value of the leased asset and (ii) any initial direct costs of the lessor.

The interest rate implicit in the lease can be shown to be 10% as follows:

Year	Narrative	Cash flow	Discount factor (10%)	Present value
1 to 4	Annual rentals	250,000	3.170	792,500
4	Unguaranteed residual value	50,000	0.683	34,150
				<u>826,650</u>
	Fair value of the asset			800,000
	Initial direct costs			26,650
				<u>826,650</u>

- b) A Ltd would recognise a finance lease liability of Rs. 792,500 on initial recognition. (This is the present value of the lessee's minimum lease payments).

- c) Total finance charge (also see part d)

Lessee's minimum lease payments:	Rs.
Annual rentals (4 × 250,000)	1,000,000
Amount on initial recognition	(792,500)
Total finance charge (interest)	<u>207,500</u>

- d) Amortisation table

Year	Opening liability	Interest (10%)	Lease payment	Closing liability
1	792,500	79,250	(250,000)	621,750
2	621,750	62,175	(250,000)	433,925
3	433,925	43,393	(250,000)	227,318
4	227,318	22,683	(250,000)	nil
		<u>207,500</u>		

(The interest payment in year 4 has been adjusted for rounding of Rs. 49 as follows: Rs. 22,732 - Rs. 49 = Rs. 22,683).

<b>Solutions</b>			<b>3</b>
<b>e) The double entry in year one would be as follows:</b>			
<b>Start of year 1</b>	<b>Debit</b>	<b>Credit</b>	
Asset held under finance lease	792,500		
Finance lease liability		792,500	
<b>Being the initial recognition of the lease</b>			
<b>End of year 1</b>			
Lease liability	250,000		
Cash		250,000	
<b>Being the payment of the year 1 rental</b>			
Finance charge (statement of profit or loss)	79,250		
Finance lease liability		79,250	
<b>Being the recognition of finance charge for the year</b>			
<b>f) Year-end liability</b>			
		<b>Rs.</b>	
Current (Rs.250,000 – 62,175)		187,825	
Non-current (balancing figure)		433,925	
Total liability (see part d)		<u>621,750</u>	
<b>g) Reconciliation of MLPs in the future to their present value</b>			
<b>Minimum lease payments</b>	<b>Gross</b>	<b>PV</b>	
	<b>Rs.</b>	<b>Rs.</b>	
No later than 1 year	250,000	227,273	<b>W1</b>
Later than 1 year and no later than 5 year	500,000	394,477	<b>W2</b>
Later than 5 years	nil	nil	
	<u>750,000</u>	<u>621,750</u>	
Less finance charge that relates to future periods (207,500 – 79,250) <sup>1</sup>	<u>(128,250)</u>		
Present value of finance lease liabilities (the total finance lease liability)	<u>621,750</u>	<u>621,750</u>	
<b>W1: PV of year 2 rental as at the end of year 1</b>			
	<b>Gross (Rs.)</b>	<b>Discount factor (10%)</b>	<b>PV (Rs.)</b>
1 year's time	250,000	0.909	227,273
The year 3 and 4 rentals as at the end of year one have been found as a balancing figure.			

**Solutions****4****a) Net investment in the lease on initial recognition**

Fair value of the asset	800,000
Initial direct costs	26,650
	<u>826,650</u>

**b) Total finance income (also see part c)**

Lessor's minimum lease payments:	Rs.
Annual rentals (4 × 250,000)	1,000,000
Unguaranteed residual value	50,000
	<u>1,050,000</u>
Amount on initial recognition	(826,650)
Total finance income	<u>223,350</u>

**c) Amortisation table**

Year	Opening net investment	Interest (10%)	Lease receipts	Closing net investment
1	826,650	82,665	(250,000)	659,315
2	659,315	65,932	(250,000)	475,247
3	475,247	47,525	(250,000)	272,772
4	272,772	27,228	(250,000)	50,000
		<u>223,350</u>		

*(The interest income in year 4 has been adjusted for rounding of Rs. 49 as follows: Rs. 27,277 – Rs. 49 = Rs. 27,228).*

**d) The double entry in year one would be as follows:**

<b>Start of year 1</b>	Debit	Credit
Net investment in the lease	826,650	
Cash (or payable)		826,650
<b>Being the initial recognition of the lease</b>		
<b>End of year 1</b>		
Cash	250,000	
Net investment in the lease		250,000
<b>Being the receipt of the year 1 rental</b>		
Net investment in the lease	82,665	
Finance income (statement of profit or loss) (see c)		82,665
<b>Being the recognition of finance income</b>		

<b>Solutions</b>	<b>4</b>	
<b>e) The double entry in year one would be as follows:</b>		
<b>Start of year 1</b>	<b>Debit</b>	<b>Credit</b>
Lease receivable (gross investment in the lease)	1,050,000	
Unearned finance income		223,350
Cash (or payable)		826,650
<b>Being the initial recognition of the lease</b>		
<b>End of year 1</b>		
Cash	250,000	
Lease receivable (gross investment in the lease)		250,000
<b>Being the receipt of the year 1 rental</b>		
Unearned finance income	82,665	
Finance income (statement of profit or loss) (see c)		82,665
<b>Being the recognition of finance income</b>		

## Solutions

5

- a) The interest rate implicit in the lease is the discount rate that, at the inception of the lease, causes the aggregate present value of (a) the minimum lease payments and (b) the unguaranteed residual value to be equal to the sum of (i) the fair value of the leased asset and (ii) any initial direct costs of the lessor.

However, costs incurred by a manufacturer or dealer in connection with negotiating and arranging a lease are excluded from the definition of initial direct costs.

The interest rate implicit in the lease can be shown to be 10% as follows:

Year	Narrative	Cash flow	Discount factor (10%)	Present value
1 to 4	Annual rentals	250,000	3.170	<u>792,500</u>
	Fair value of the asset			<u><u>792,500</u></u>

- b) Profit recognised on finance lease sale

	Rs.
Revenue	792,500
Cost of sale	(500,000)
Cost of setting up the lease	(30,000)
Total finance income	<u>262,500</u>

- c) Total finance income (also see part d)

	Rs.
Lessor's minimum lease payments:	
Annual rentals ( $4 \times 250,000$ )	1,000,000
Amount on initial recognition	(792,500)
Total finance charge (interest)	<u>207,500</u>

- d) Amortisation table

Year	Opening net investment	Interest (10%)	Lease receipts	Closing net investment
1	792,500	79,250	(250,000)	621,750
2	621,750	62,175	(250,000)	433,925
3	433,925	43,393	(250,000)	227,318
4	227,318	22,683	(250,000)	nil
		<u>207,500</u>		

(The interest income in year 4 has been adjusted for rounding of Rs. 49 as follows: Rs. 22,732 - Rs. 49 = Rs. 22,683).

<b>Solutions</b>			<b>5</b>
<b>e)</b>	The double entry in year one would be as follows:		
<b>Start of year 1</b>	<b>Debit</b>	<b>Credit</b>	
Net investment in the lease	792,500		
Revenue (Statement of profit or loss)		792,500	
<b>Being the initial recognition of the lease sale</b>			
Cost of sales (Statement of profit or loss)	500,000		
Inventory		500,000	
<b>Being the recognition of the cost of the printing press sold</b>			
Lease set-up expense (Statement of profit or loss)	30,000		
Cash/bank		30,000	
<b>Being the initial recognition of the lease</b>			
<b>End of year 1</b>			
Cash	250,000		
Net investment in the lease		250,000	
<b>Being the receipt of the year 1 rental</b>			
Net investment in the lease	79,250		
Finance income (statement of profit or loss) (see d)		79,250	
<b>Being the recognition of finance income</b>			

<b>Solutions</b>		<b>6</b>	
<b>a) Double entry to record sale and leaseback</b>			
	Debit		Credit
Cash	167,600		
Non-current asset		117,600	
Deferred income		50,000	
<b>Being the sale of the asset</b>			
Asset held under finance lease	167,600		
Finance lease liability		167,600	
<b>Being the lease back of the asset</b>			
<b>b) Double entry to record lease accounting</b>			
Finance lease expense (Statement of profit or loss) (15% of 167,600)	25,140		
Finance lease liability		25,140	
<b>Being the recognition of finance cost of the finance lease</b>			
Deferred income	10,000		
Statement of profit or loss ( 50,000 ÷ 5 years)		10,000	
<b>Being the release of deferred profit arising on sale and finance leaseback transaction</b>			
Depreciation expense (Statement of profit or loss) (167,600 ÷ 5 years)	33,520		
Accumulated depreciation		33,520	
<b>Being the recognition of depreciation of asset held under finance lease</b>			

<b>Solutions</b>		<b>7</b>
<b>Double entries record sale and leaseback transactions</b>		
<b>Case 1: Sale at fair value</b>		
	Debit	Credit
Cash	200,000	
Non-current asset		150,000
Profit on disposal (statement of profit or loss)		50,000
<b>Being the sale of the asset</b>		
Lease rental expense (statement of profit or loss)	50,000	
Cash		50,000
<b>Being the recognition of lease rental paid</b>		
<b>Case 2: Sale at above fair value</b>		
	Debit	Credit
Cash	230,000	
Non-current asset		150,000
Profit on disposal (statement of profit or loss)		50,000
Deferred income (statement of financial position)		30,000
<b>Being the sale of the asset</b>		
Lease rental expense (statement of profit or loss)	50,000	
Cash		50,000
<b>Being the recognition of lease rental paid</b>		
Deferred income	6,000	
Statement of profit or loss ( $30,000 \div 5$ years)		6,000
<b>Being the release of deferred profit on disposal on a straight line basis over the life of the lease</b>		
<b>Case 3: Sale below fair value leading to a profit</b>		
Cash	180,000	
Non-current asset		150,000
Profit on disposal (statement of profit or loss)		30,000
<b>Being the sale of the asset</b>		
Lease rental expense (statement of profit or loss)	50,000	
Cash		50,000
<b>Being the recognition of lease rental paid</b>		

\*

<b>Solutions</b>		<b>7</b>
<b>Double entries record sale and leaseback transactions</b>		
<b>Case 4: Sale below fair value leading to a loss compensated by lower future rentals</b>		
	Debit	Credit
Cash	140,000	
Non-current asset		150,000
Loss on disposal (statement of financial position)	10,000	
<b>Being the sale of the asset</b>		
Lease rental expense (statement of profit or loss)	40,000	
Cash		40,000
<b>Being the recognition of lease rental paid</b>		
Statement of profit or loss ( 10,000 ÷ 5 years)	2,000	
Statement of profit or loss ( 50,000 ÷ 5 years)		2,000
<b>Being the recognition of deferred loss on disposal on a straight line basis over the life of the lease</b>		



# IAS 37: Provisions, contingent liabilities and contingent assets and IAS 10: Events after the reporting period

## Contents

- 1 Provisions: Recognition
- 2 Provisions: Measurement
- 3 Provisions: Double entry and disclosure
- 4 Guidance on specific provisions
- 5 Contingent liabilities and contingent assets
- 6 Events after the reporting period: IAS 10

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

- LO 3            Understand the implication of contingencies; changes in accounting policies and estimates; errors and events occurring after reporting period.**
- LO3.1.1:        Define liability, provision, contingent liability and contingent asset and describe their accounting treatment.
- LO3.1.2:        Distinguish between provisions, contingent liabilities or contingent assets.
- LO3.1.3:        Understand and apply the recognition and de-recognition criteria for provisions.
- LO3.1.4:        Calculate/ measure provisions such as warranties/guarantees, restructuring, onerous contracts, environmental and similar provisions, provisions for future repairs or refurbishments.
- LO3.1.5:        Account for changes in provisions.
- LO3.1.6:        Disclosure requirements for provisions.
- LO3.3.1         Explain using examples events after the reporting period, adjusting events, and non-adjusting events.
- LO3.3.2         Understand and analyse using examples IFRS guidance on the recognition, measurement and disclosure of adjusting events and non-adjusting events.
- LO3.3.3         Understand and analyse using examples, going concern issues arising after the end of the reporting period.

## 1 PROVISIONS: RECOGNITION

### Section overview

- Introduction
- Recognition criteria for provisions
- Present obligation
- Obligation arising out of a past event
- Probable outflow of economic benefits

### 1.1 Introduction

The first five sections of this chapter explain rules set out in *IAS 37: Provisions, contingent liabilities and contingent assets*.

The sixth section is another topic, *IAS 10: Events after the reporting period*.



#### Definition

Provisions are liabilities of uncertain timing or amount.

A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits.

An obligating event is an event that creates a legal or constructive obligation that results in an enterprise having no realistic alternative to settling that obligation.

Provisions differ from other liabilities because there is uncertainty about the timing or amount of the future cash flows required to settle the liability.

Accruals are liabilities to pay for goods or services that have been received or supplied but not yet invoiced. There is often a degree of estimation in the measurement of accruals but any inherent uncertainty is much less than for provisions.

IAS 37 applies to all provisions and contingencies apart from those covered by the specific requirements of other standards.

In some countries the term “provision” is also used to describe the reduction in the value of an asset. For example accountants might talk of provision for depreciation, provision for doubtful debts and so on. These “provisions” are not covered by this standard which is only about provisions that are liabilities.

#### Major accounting issues

There are three issues to address in accounting for provisions::

- whether or not a provision should be recognised;
- how to measure a provision that is recognised; and
- what is the double entry on initial recognition of a provision and how is it remeasured on subsequent reporting dates.

## 1.2 Recognition criteria for provisions

A provision should be recognised when:

- ❑ a company has a present obligation (legal or constructive) as a result of a past event;
- ❑ it is probable that an outflow of economic benefits will be required to settle the obligation; and
- ❑ a reliable estimate can be made of the amount of the obligation.

If one of these conditions is not met then a provision cannot be recognised.

## 1.3 Present obligation

An obligation must exist in order for a provision to be recognised.

An obligation may be legal or constructive.

- ❑ A **legal obligation** is one arising from a contract, or some other aspect of the law.
- ❑ A **constructive obligation** is one arising from the company's actions, whereby
  - through established past practice, published policies, or a specific current statement, the company has indicated to other parties that it will accept certain responsibilities; and
  - as a result, the company has created a valid expectation that it will discharge those responsibilities.



### Example: Constructive obligation

A clothing retailer has a policy of taking back items of clothing that customers have purchased, and refunding the purchase price, simply because the purchaser has changed his or her mind about the item.

The retailer does not have a legal obligation to do this under the consumer protection legislation that applies in the jurisdiction in which it operates.

If this is the usual practice of a particular retailer, and the retailer's policy is well-known or has been made known to customers, then a constructive obligation exists whenever a sale is made.

A provision would be recognised for sales returns subject to the other two criteria being satisfied.

In most cases it will be clear that a past event has given rise to a present obligation. However, in rare cases this may not be the case. In these cases, the past event is deemed to give rise to a present obligation if it is more likely than not that a present obligation exists at the end of the reporting period. This determination must be based on all available evidence,

## 1.4 Obligation arising out of a past event

A past event that leads to a present obligation is called an obligating event. For this to be the case it is necessary that the company has no realistic alternative to settling the obligation created by the event.

This is the case only:

- ❑ where the settlement of the obligation can be enforced by law; or
- ❑ in the case of a constructive obligation, where the event (which may be an action of the company) creates valid expectations in other parties that the company will discharge the obligation.

The event leading to the obligation must be **past**, and must have occurred before the end of the reporting period when the provision is first recognised. No provision is made for costs that may be incurred in the future but where no obligation yet exists.



### Illustration:

A company is planning a reorganisation. These plans are in an early stage.

There is no obligation (legal or constructive) to undertake the reorganisation. The company cannot create a provision for reorganisation costs.

Only obligations arising from past events that exist independently of a company's future actions are recognised as provisions.



### Example:

Shan Properties owns a series of high rise modern office blocks in several major cities in Pakistan.

The government introduces legislation that requires toughened safety glass to be fitted in all windows on floors above the ground floor. The legislation only applies initially to new buildings but all buildings will have to comply within 5 years.

### Analysis:

There is no obligating event.

Even though Shan Properties will have to comply within 5 years it can avoid the future expenditure by its future actions, for example by selling the buildings. There is no present obligation for that future expenditure and no provision is recognised.



### Example:

Jhang Energy Company operates in a country where there is no environmental legislation. Its operations cause pollution in this country.

Jhang Energy Company has a widely published policy in which it undertakes to clean up all contamination that it causes and it has a record of honouring this published policy.

### Analysis:

There is an obligating event. Jhang Energy Company has a constructive obligation which will lead to an outflow of resources embodying economic benefits regardless of the future actions of the company. A provision would be recognised for the clean-up subject to the other two criteria being satisfied.

An obligation always involves another party to whom the obligation is owed.

However, it is not necessary to know the identity of that party. It is perfectly possible to have an obligation to the public at large or to a group of people.



**Example:**

Shekhupura Household Appliances Corporation gives warranties at the time of sale to purchasers of its products. Under the terms of the sale contract the company undertakes to make good any manufacturing defects that become apparent within three years from the date of sale.

In the period it has sold 250,000 appliances and estimates that about 2% will prove faulty.

**Analysis:**

There is an obligating event being the sale of an item with the promise to repair it as necessary. The fact that Shekhupura Household Appliances Corporation does not know which of its customers will seek repairs in the future is irrelevant to the existence of the obligation.

A provision would be recognised for the future repairs subject to the other two criteria being satisfied.

Note that the estimate that only 2% will be faulty is irrelevant in terms of recognising a provision. However, it would be important when it came to measuring the size of the provisions. This is covered in the next section.

An obligation always involves a commitment to another party. Therefore, a management decision does not give rise to a constructive obligation unless it has been communicated before the end of the reporting period to those affected by it in a sufficiently specific manner to raise a valid expectation in them that the company will discharge its responsibilities.



**Example:**

On 13 December Kasur Engineering decided to close a factory. The closure will lead to 100 redundancies at a significant cost to the company.

At 31 December no news of this plan had been communicated to the workforce.

**Analysis:**

There is no obligating event. This will only come into existence when communication of the decision and its consequences are communicated to the workforce.

An event may not give rise to an obligation immediately but may do so at a later date due to a change in circumstances. These include:

- changes in the law; or
- where an act of the company (for example, a sufficiently specific public statement) gives rise to a constructive obligation.

If details of a proposed new law have yet to be finalised, an obligation arises only when the legislation is virtually certain to be enacted as drafted.

## 1.5 Probable outflow of economic benefits

The outflow of benefits must be probable. 'Probable' is defined by IAS 37 as 'more likely than not to occur'.



**Illustration:**

A company may have given a guarantee but may not expect to have to honour it. No provision arises because a payment under the guarantee is not probable.

More likely than not implies a greater than 50% chance but be careful to think about this in the right way.



**Example:**

Shekhupura Household Appliances Corporation gives warranties at the time of sale to purchasers of its products. Under the terms of the sale contract the company undertakes to make good any manufacturing defects that become apparent within three years from the date of sale.

In the period it has sold 250,000 appliances and estimates that about 2% will prove faulty.

**Analysis:**

The outflow of benefits is probable. It is more likely than not that 2% will be faulty. (In other words there is more than a 50% chance that 2% of items will prove to be faulty).

## 2 PROVISIONS: MEASUREMENT

### Section overview

- Introduction
- Uncertainties
- Time value
- Future events
- Reimbursements

### 2.1 Introduction

The amount recognised as a provision must be the best estimate, as at the end of the reporting period, of the future expenditure required to settle the obligation. This is the amount that the company would have to pay to settle the obligation at this date. It is the amount that the company would have to pay a third party to take the obligation off its hands.

The estimates of the outcome and financial effect of an obligation are made by management based on judgement and experience of similar transactions and perhaps reports from independent experts.

Risks and uncertainties should be taken into account in reaching the best estimate. Events after the reporting period will provide useful evidence. (Events after the reporting period are dealt with in more detail later.)

### 2.2 Uncertainties

Uncertainties about the amount to be recognised as a provision are dealt with by various means according to the circumstances.

In measuring a single obligation, the best estimate of the liability may be the most likely outcome. However, other possible outcomes should be considered. If there are other possibilities which are mostly higher or mostly lower than the most likely outcome, then the best estimate will be a higher or lower amount.

**Example:**

Gujrat Prefabricators Limited (GPL) has won a contract to provide temporary accommodation for workers involved in building a new airport. The contract involves the erection of accommodation blocks on a public park and two years later the removal of the blocks and the reinstatement of the site.

The blocks have been built and it is now GPL's year-end.

GPL estimates that the task of removing the blocks and reinstating the park to its present condition might be complex, resulting in costs with a present value of Rs. 2,000,000, or straightforward, resulting in costs with a present value of Rs. 1,300,000.

GPL estimates that there is a 60% chance of the job being straightforward.

Should a provision be recognised and if so at what value?

**Analysis****Should a provision be recognised?**

Is there a present obligation as a result of a past event?	Yes. A present obligation arises due to the existence of a contractual term and the building of the block.
Is it probable that there will be an outflow of economic benefits to settle the obligation?	Yes. This is certain.
Can a reliable estimate be made of the amount of the obligation?	Yes. Data is available.

A provision should be recognised.

**How should the provision be measured? (What is the best estimate of expenditure required to settle the obligation?)**

The most likely outcome is that the job will be straightforward. In this case the provision would be recognised at Rs. 1,300,000.

However there is a significant chance that the job will be complex so perhaps GPL should measure the liability at the higher amount. This may sound a little vague but in practice this comes down to a matter of judgement.

When there is a large population of potential obligations (for example, a provision for multiple claims under guarantees) the obligation should be estimated by calculating an expected value of the cost of the future obligations. This is done by weighting all possible outcomes by their associated probabilities.



**Example:**

Sahiwal Manufacturing has sold 10,000 units in the year. Sales accrued evenly over the year.

It estimates that for every 100 items sold, 20 will require small repairs at a cost of Rs. 100, 10 will require substantial repairs at a cost of Rs. 400 each and 5 will require major repairs or replacement at a cost of Rs. 800 each.

On average the need for a repair becomes apparent 6 months after a sale.

What is the closing provision?

A provision will be required for the sales in the second six months of the year as presumably the repairs necessary in respect of the sales in the first six months have been completed by the year end.

Sales accrue evenly, therefore, the sales in the second six months are 5,000 units ( $\frac{6}{12} \times 10,000$ ).

Repair	Number	Cost per repair (Rs.)	Total (Rs.)
Small	$20\% \times 5,000 = 1,000$	100	100,000
Substantial	$10\% \times 5,000 = 500$	400	200,000
Major	$5\% \times 5,000 = 250$	800	200,000
<b>Provision</b>			<b>500,000</b>

Note that this would be reduced by the repairs already made by the year end

### 2.3 Time value

Where the effect of the time value of money is material, a provision is measured at the present value of the expenditures expected to be required to settle the obligation.

The discount rate used should be a pre-tax rate (or rates) that reflect(s) current market assessments of the time value of money and the risks specific to the liability.

The need to discount is often found when accounting for decommissioning liabilities.

**Example:**

Gujrat Prefabricators Limited (GPL) has won a contract to provide temporary accommodation for workers involved in building a new airport. The contract involves the erection of accommodation blocks on a public park and two years later the removal of the blocks and the reinstatement of the site.

The blocks have been built and it is now 31 December 2015 (GPL's year-end).

GPL estimates that in two years it will have to pay Rs. 2,000,000 to remove the blocks and reinstate the site.

The pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the liability is 10%.

The provision that should be recognised at 31 December 2015 is as follows:

$$\text{Rs. } 2,000,000 \times \frac{1}{(1.1)^2} = \text{Rs. } 1,652,893$$

## 2.4 Future events

Expected future events may be important in measuring provisions. For example, a company may believe that the cost of cleaning up a site at the end of its life will be reduced by future changes in technology.

The measurement of an obligation must take expected future changes into account where there is sufficient objective evidence that they will occur. In such cases the measurement of the provision should be based on the reasonable expectations of technically qualified, objective observers, taking account of all available evidence as to the technology that will be available at the time of the clean-up.

This means that a company might include expected cost reductions associated with increased experience in applying existing technology or the expected cost of applying existing technology to a larger or more complex clean-up operation than has previously been carried out.

One future event might be the effect of possible new legislation.

The measurement process should take this into account when there is sufficient objective evidence that the legislation is virtually certain to be enacted.

In practice, the proceeds of the sale of an asset in the future might be used to pay for an event for which a provision is recognised today. However, gains from the expected disposal of assets must not be taken into account in measuring a provision.

## 2.5 Reimbursements

In some cases, a part or all of a company's provision may be recoverable from a third party. For example, a company paying out to a customer under the terms of a guarantee may itself be able to claim money back from one of its own suppliers.

IAS 37 requires that such a reimbursement:

- ❑ should only be recognised where receipt is virtually certain; and
- ❑ should be treated as a separate asset in the statement of financial position (i.e. not netted off against the provision) at an amount no greater than that of the provision.

However, IAS 37 allows the expense relating to a provision to be presented net of the amount recognised for a reimbursement in the statement of profit or loss.

### 3 PROVISIONS: DOUBLE ENTRY AND DISCLOSURES

#### Section overview

- Introduction
- Measurement on initial recognition
- Use of provisions
- Subsequent measurement
- Disclosures about provisions

#### 3.1 Introduction

IAS 37 is about the recognition and measurement of provisions which are of course a credit balance. It gives little guidance on the recognition of the debit entry on initial recognition of a provision saying that whether an expense or asset is recognised is left to guidance in other standards.

#### 3.2 Measurement on initial recognition

In most cases the debit entry that arises when a provision is recognised is an expense. There is one important case where it is capitalised as an asset (on recognition of a decommissioning liability) and this is discussed later.



##### Illustration: Usual double entry on initial recognition of a provision

	Debit	Credit
Profit or loss (expense)	X	
Provision		X

#### 3.3 Use of provisions

A provision is set up to recognise an expense (usually) that exists at the reporting date. When the expense is paid the following double entry is used:



##### Illustration: Using a provision.

	Debit	Credit
Provision	X	
Cash		X

If the provision is more than the amount needed to settle the liability the balance is released as a credit back through the income statement.

If the provision is insufficient to settle the liability an extra expense is recognised.

IAS 37 also states that a provision may be used only for expenditures for which the provision was originally recognised.

**Example:**

A company has created a provision of Rs.300,000 for the cost of warranties and guarantees.

The company now finds that it will probably has to pay Rs.250,000 to settle a legal dispute.

It cannot use the warranties provision for the costs of the legal dispute. An extra Rs. 250,000 expense must be recognised.

### 3.4 Subsequent measurement

Each provision must be reviewed at the end of each reporting period. This might result in derecognition of a provision that no longer meets the recognition criteria or in the re-measurement of a provision. An increase in a provision would result in the recognition of a further expense or a reduction in expense as the previously recognised provision is reduced through a credit to profit or loss.

**Illustration: Subsequent re-measurement of provisions.**

	Debit	Credit
<b>Derecognition of a provision that is no longer needed.</b>		
Provision	X	
Income statement		X
<b>Increase in a provision:</b>		
Profit or loss (expense)	X	
Provision		X
<b>Decrease in a provision:</b>		
Provision	X	
Profit or loss		X

**Example:****31 December 2014**

A company was sued by a customer in the year ended 31 December 2014.

Legal advice is that the customer is virtually certain to win the case as several similar cases have already been decided in the favour of the injured parties.

At 31 December 2014, the company's lawyer was of the opinion that, the cost of the settlement would be Rs.1,000,000.

A provision is recognised in the amount of Rs.1,000,000 as follows (reducing profit for the year by that amount) .

	Debit (Rs.)	Credit (Rs.)
Expenses	1,000,000	
Provision		1,000,000

**31 December 2015**

The claim has still not been settled. The lawyer now advises that the claim will probably be settled in the customer's favour at Rs.1,200,000.

The provision is increased to Rs.1,200,000 as follows.

	Debit (Rs.)	Credit (Rs.)
Expenses	200,000	
Provision		200,000

**31 December 2016**

The claim has still not been settled. The lawyer now believes that the claim will be settled at Rs.900,000.

The provision is reduced to Rs.900,000 as follows.

	Debit (Rs.)	Credit (Rs.)
Provision	300,000	
Expenses		300,000

The reduction in the provision increases profit in the year and the provision in the statement of financial position is adjusted down to the revised estimate of Rs.900,000.

**31 December 2016**

The claim is settled for Rs.950,000. On settlement, the double entry in the ledger accounts will be:

	Debit (Rs.)	Credit (Rs.)
Expenses	50,000	
Provision	900,000	
Cash		950,000

The charge against profit on settlement of the legal claim is Rs.50,000.

The provision no longer exists. The total amount charged against profit over the four years was the final settlement figure of Rs.950,000.

When a provision is included in the statement of financial position at a discounted value (at present value) the amount of the provision will increase over time, to reflect the passage of time. In other words, as time passes the amount of the discount gets smaller, so the reported provision increases. This increase in value is included in **borrowing costs** for the period.

### 3.5 Disclosures about provisions

IAS 37 requires the following disclosures about provisions in notes to the financial statements.

For each class of provision:

- the opening and closing balances and movements in the provision during the year;
- a brief description of:
  - the nature of the obligation;
  - the expected timing of any settlement; and
  - an indication of the uncertainties surrounding the amount and timing of any settlement.

## 4 GUIDANCE ON SPECIFIC PROVISIONS

### Section overview

- Onerous contracts
- Future operating losses
- Restructuring
- Decommissioning liabilities and similar provisions
- Future repairs to assets

IAS 37 explains how its rules apply in given circumstances. Some of the guidance is in the body of the standard and some in an appendix to the standard.

### 4.1 Onerous contracts



#### Definition

An onerous contract is a contract where the unavoidable costs of fulfilling/completing the contract now exceed the benefits to be received (the contract revenue).

A provision should be made for the additional unavoidable costs of an onerous contract. (The 'additional unavoidable costs' are the amount by which costs that cannot be avoided are expected to exceed the benefits).

The example in IAS 37 relates to an operating lease.



#### Example:

On 31 December 2015, Company H is half way through an eight year operating lease on its factory when it moves to a new factory due to an expansion of demand for its products.

It cannot cancel the lease or sub-let the factory and there is no prospect of being able to sub-let it.

Annual lease payments are Rs.60,000.

#### Analysis

A present legal obligation exists as a result of a past event (the signing of the lease).

An outflow of resources is probable. (These are the rentals for the remainder of the term of the lease, which cannot be avoided.)

The amount can be measured reliably (Rs.60,000 × 4 years, discounted to a present value).

The discounted value of the future lease payments for four years may therefore be recognised as a provision.

Other circumstances that might lead to the recognition of a provision in respect of an onerous contract relate to supply contracts.

**Example:**

Nawabsha Clothing has a contract to buy 300 metres of silk from a supplier each month for Rs.3,000 per metre.

Nawabsha Clothing had a contract with a Dubai retailer to sell each dress for Rs. 5,000 but this retailer has fallen into administration and the administrators have cancelled the contract as they were entitled to do under one of its clauses.

Nawabsha Clothing cannot sell the dresses to any other customer.

The contract to buy the silk can be cancelled with three months' notice.

**Analysis**

The company can cancel the contract but must pay for the next three months deliveries:

Cost (300m × Rs. 3,000 × 3 months)	Rs. 2,700,000
------------------------------------	---------------

A provision should be recognised for this amount.

## 4.2 Future operating losses

A company may forecast that it will make a substantial operating loss in the next year or several years. If so, its directors might want to 'take all the bad news' immediately, and create a provision for the future losses.

Provisions cannot be made for future operating losses. This is because they arise from future events, not past events.

## 4.3 Restructuring

A company may plan to restructure a significant part of its operations. Examples of restructuring are:

- the sale or termination of a line of business
- the closure of business operations in a country or geographical region, or relocation of operations from one region or country to another
- major changes in management structure, such as the removal of an entire 'layer' of management from the management hierarchy
- fundamental reorganisations changing the nature and focus of the company's operations.

A provision is recognised for the future restructuring costs only if a present obligation exists.

A constructive obligation to restructure arises only when a company:

- has a detailed formal plan for the restructuring identifying at least:
  - the business or part of a business concerned;
  - the principal locations affected;
  - the location, function, and approximate number of employees who will be compensated for terminating their services;
  - the expenditures that will be undertaken; and
  - when the plan will be implemented; and
- has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

A restructuring decision made before the end of the reporting period does not give rise to a constructive obligation unless the company has:

- started to implement the plan; or
- announced the main features of the plan to those affected by it in a sufficiently specific manner to raise a valid expectation in them that the restructuring will occur.

A company might start to implement a restructuring plan, or announces its main features to those affected, after the reporting period but before the financial statements are authorised for issue.

Disclosure is required *under IAS 10 Events after the Reporting Period* if the restructuring is material (see section 6 of this chapter).

A restructuring provision must only include the direct expenditures arising from the restructuring. These are those that are both:

- necessarily entailed by the restructuring; and
- not associated with the ongoing activities of the company.

A restructuring provision would not include costs that are associated with ongoing activities such as:

- retraining or relocating continuing staff;
- marketing; or
- investment in new systems etc.

#### 4.4 Decommissioning liabilities and similar provisions

A company may be required to 'clean up' a location where it has been working when production ceases.

This is often the case in industries where companies are only granted licenses to operate on condition that they undertake to perform future clean-up operations.

Such industries include, oil and gas, mining and nuclear power.

For example, a company that operates an oil rig may have to repair the damage it has caused to the sea bed once the oil has all been extracted.

The normal rules apply for the recognition of a provision: a company recognises a provision only where it has an obligation to rectify environmental damage as a result of a past event.

A company has an obligation to 'clean-up' a site if:

- it is required to do so by law (a legal obligation); or
- its actions have created a constructive obligation to do so.

A constructive obligation might exist if (for example) a company has actually promised to decontaminate a site or if it has adopted environmentally friendly policies and has made the public aware of this.

##### Accounting for a provision for a decommissioning liability

IAS 16 Property, plant and equipment identifies the initial estimate of the costs of dismantling and removing an item and restoring the site upon which it is located as part of the cost of an asset.

Future clean-up costs often occur many years in the future so any provision recognised is usually discounted to its present value.



##### Illustration: Initial recognition of a provision for a decommissioning liability

	Debit	Credit
Non-current asset	X	
Provision		X

The asset is depreciated over its useful life in the same way as other non-current assets.

The provision is remeasured at each reporting date. If there has been no change in the estimates (i.e. the future cash cost, the timing of the expenditure and the discount rate) the provision will increase each year because the payment of the cash becomes one year closer. This increase is described as being due to the unwinding of the discount.

The amount due to the unwinding of the discount must be expensed.

**Example: Deferred consideration**

A company has constructed an oil rig which became operational on 1 January 2015.

The company has contracted to remove the oil rig and all associated infrastructure and to restore the site to repair any environmental damage to the site on completion of drilling activity. This is estimated to be at a cost of Rs.8,000,000 in 10 years' time.

The pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability is 10%.

**1 January 2015 – Initial measurement**

$$\text{Rs. } 8,000,000 \times \frac{1}{(1.1)^{10}} = \text{Rs. } 3,084,346$$

	Debit	Credit
Asset	3,084,346	
Provision		3,084,346

**31 December 2015**

The provision is remeasured as:

$$\text{Rs. } 8,000,000 \times \frac{1}{(1.1)^9} = \text{Rs. } 3,392,781$$

Provision:	Rs.
Balance b/f	3,084,346
Interest expense (the unwinding of the discount)	308,435
Balance c/f	3,392,781

The asset is depreciated (say on a straight line)

Asset:	Rs.
Cost	8,000,000
Depreciation (Rs. 8,000,000/10 years)	(800,000)
Carrying amount	7,200,000

**Double entry:**

	Debit	Credit
Profit or loss (interest expense)	308,435	
Provision		308,435
Profit or loss (depreciation expense)	800,000	
Accumulated depreciation		800,000

A provision for making good environmental damage might be recognised both on when an asset is installed and then increased as the asset is used.

**Example:**

A company is about to begin to operate a coal mine. At the end of the reporting period, the mineshaft has been prepared and all the necessary equipment has been constructed and is in place, but no coal has yet been extracted.

Under local law, the company is obliged to rectify all damage to the site once the mining operation has been completed (this is expected to be several years from now).

Management estimates that 20% of the eventual costs of performing this work will relate to plugging the mine and removing the equipment and various buildings and the remaining 80% will relate to restoring the damage caused by the actual extraction of coal.

**Analysis**

The company has a legal obligation to rectify the environmental damage caused by the actual digging of the mineshaft and construction of the site. An outflow of economic benefits is probable.

Therefore the company should recognise a provision for the best estimate of removing the equipment and rectifying other damage which has occurred to date. This is expected to be about 20% of the total cost of restoring the site.

Because no coal has yet been extracted, the company has no obligation to rectify any damage caused by mining. No provision can be recognised for this part of the expenditure (estimated at about 80% of the total).

#### 4.5 Future repairs to assets

Some assets need to be repaired or to have parts replaced at intervals during their lives.

For example, suppose that a furnace has a lining that has to be replaced every five years. If the lining is not replaced, the furnace will break down.

Before IAS 37 was issued, companies would often recognise provisions for the cost of future repairs or replacement parts. These might be built up in instalments over the life of the asset or the relevant part of the asset.

IAS 37 effectively prohibits this treatment. The reasoning behind this is that a company almost always has an alternative to incurring the expenditure, even if it is required by law (for example, for safety reasons). For example, the company which has to replace the lining of its furnace could sell the furnace or stop using it, although this is unlikely in practice.

IAS 37 states that a provision cannot be recognised for the cost of future repairs or replacement parts unless the company has an obligation to incur the expenditure, which is unlikely. The obligating event is normally the actual repair or purchase of the replacement part.

Instead of recognising a provision, a company should capitalise expenditure incurred on replacement of an asset and depreciate this cost over its useful life. This is the period until the part needs to be replaced again. For example, the cost of replacing the furnace lining should be capitalised, so that the furnace lining is a non-current asset; the cost should then be depreciated over five years. (Note: *IAS 16: Property, plant and equipment* states that where an asset has two or more parts with different useful lives, each part should be depreciated separately.)

Normal repair costs, however, are expenses that should be included in profit or loss as incurred.

## 5 CONTINGENT LIABILITIES AND CONTINGENT ASSETS

### Section overview

- Definitions
- Recognising contingent liabilities or contingent assets
- Disclosures about contingent liabilities and contingent assets
- Summary: liabilities, provisions, contingent liabilities and contingent assets

### 5.1 Definitions

‘Contingent’ means ‘dependent on something else happening’.

#### Contingent liability

A contingent liability is one that does not exist at the reporting date but may do so in the future or it is a liability that exists at the reporting date but cannot be recognised because it fails one of the IAS 37 recognition criteria.



#### Definition: Contingent liability

A contingent liability is either of the following:

A contingent liability is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

OR

A contingent liability is a present obligation that arises from past events but is not recognised because it is not probable that an outflow of economic benefits will be required to settle the obligation or the amount of the obligation cannot be measured with sufficient reliability.

IAS 37 makes a distinction between:

- provisions – which are recognised as liabilities (assuming that a reliable estimate can be made) because they are present obligations and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligations; and
- contingent liabilities – which are not recognised as liabilities because they are either:
  - possible obligations;
  - present obligations that do not meet the recognition criteria for provisions because either:
    - it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or
    - a sufficiently reliable estimate of the amount of the obligation cannot be made).

**Example:**

Company G is involved in a legal dispute with a customer, who is making a claim against Company G for losses it has suffered as a consequence of a breach of contract.

If Company G's lawyers believe that the likelihood of the claim succeeding is **possible** rather than **probable**, then the claim should be treated as a contingent liability and not as a provision.

**Contingent asset****Definition: Contingent asset**

A contingent asset is a possible asset that arises from past events whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

An example of a contingent asset might be a possible gain arising from an outstanding legal action against a third party. The existence of the asset (the money receivable) will only be confirmed by the outcome of the legal dispute.

**5.2 Recognising contingent liabilities or contingent assets**

Contingent liabilities and contingent assets **are not recognised** in the financial statements.

In some circumstances, information about the existence of a contingent asset or a contingent liability should be **disclosed** in the notes to the financial statements.

- Contingent liabilities** should be disclosed unless the possibility of any outflow in settlement is remote (the meaning of 'remote' is not defined in IAS 37).
- Contingent assets** should be **disclosed only if** an inflow in settlement is **probable**. 'Probable' is defined by IAS 37 as 'more likely than not'. (And if an inflow is certain, the item is an actual asset that should be recognised in the statement of financial position.)

**5.3 Disclosures about contingent liabilities and contingent assets**

Where disclosure of a contingent liability or a contingent asset is appropriate, the following disclosures are required:

- A brief description of the nature of the contingent liability/asset
- Where practicable:
  - an estimate of its financial effect
  - an indication of the uncertainties.
- For contingent liabilities, the possibility of any reimbursement.

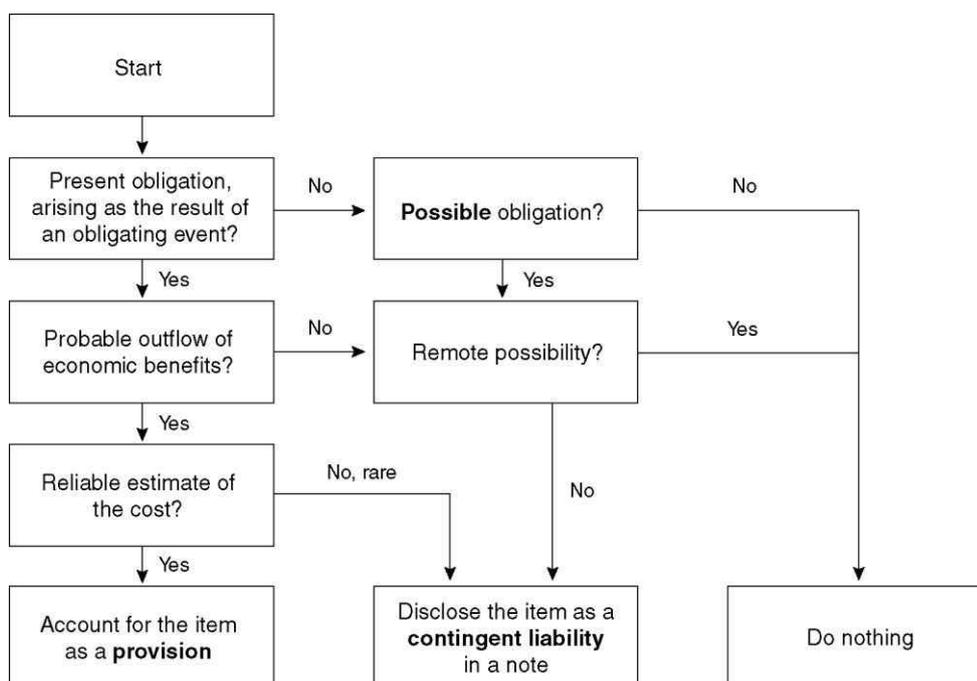
## 5.4 Summary: liabilities, provisions, contingent liabilities and contingent assets

The following table provides a summary of the rules about whether items should be treated as liabilities, provisions, contingent liabilities or contingent assets.

Criteria	Provision	Contingent liability	Contingent liability	Contingent asset
Present obligation/ asset arising from past events?	Yes	Yes	No (but may come into existence in the future)	Only a possible asset
Will settlement result in outflow/ inflow of economic benefits?	Probable outflow – and a reliable estimate <b>can</b> be made of the obligation	Not probable outflow – or a reliable estimate <b>cannot</b> be made of the obligation	Outflow to be confirmed by uncertain future events	Inflow to be confirmed by uncertain future events
Treatment in the financial statements	Recognise a provision	Disclose as a contingent liability (unless the possibility of outflow is remote)	Disclose as a contingent liability (unless the possibility of outflow is remote)	Only disclose if inflow is probable

### Decision tree

An Appendix to IAS 37 includes a decision tree, showing the rules for deciding whether an item should be recognised as a provision, reported as a contingent liability, or not reported at all in the financial statements.



**Practice question****1**

Sahiwal Transformers Ltd (STL) is organised into several divisions.

The following events relate to the year ended 31 December 2015.

- 1** A number of products are sold with a warranty. At the beginning of the year the provision stood at Rs. 750,000.

A number of claims have been settled during the period for Rs. 400,000.

As at the year end there were unsettled claims from 150 customers. Experience is that 40% of the claims submitted do not fulfil warranty conditions and can be defended at no cost.

The average cost of settling the other claims will be Rs. 7,000 each.

- 2** A transformer unit supplied to Rahim Yar Khan District Hospital exploded during the year.

The hospital has initiated legal proceedings for damages of Rs. 10 million against STL.

STL's legal advisors have warned that STL has only a 40% chance of defending the claim successfully. The present value of this claim has been estimated at Rs. 9 million.

The explosion was due to faulty components supplied to STL for inclusion in the transformer. Legal proceedings have been started against the supplier. STL's legal advisors say that STL have a very good chance of winning the case and should receive 40% of the amount that they have to pay to the hospital.

- 3** On 1 July 2015 STL entered into a two-year, fixed price contract to supply a customer 100 units per month.

The forecast profit per unit was Rs. 1,600 but, due to unforeseen cost increases and production problems, each unit is anticipated to make a loss of Rs. 800.

- 4** On 1 July 2014 one of STL's divisions has commenced the extraction of minerals in an overseas country. The extraction process causes pollution progressively as the ore is extracted.

There is no environmental clean-up law enacted in the country.

STL made public statements during the licence negotiations that as a responsible company it would restore the environment at the end of the licence.

STL has a licence to operate for 5 years. At the end of five years the cost of cleaning (on the basis of the planned extraction) will be Rs. 5,000,000.

Extraction commenced on 1 July 2015 and is currently at planned levels.

**Required**

Prepare the provisions and contingencies note for the financial statements for the year ended 31 December 2015, including narrative commentary.

## 6 EVENTS AFTER THE REPORTING PERIOD: IAS 10

### Section overview

- Purpose of IAS 10
- Accounting for adjusting events after the reporting period
- Disclosures for non-adjusting events after the reporting period
- Dividends
- The going concern assumption

### 6.1 Purpose of IAS 10

IAS 10 **Events after the reporting period** has two main objectives:

- to specify when a company should adjust its financial statements for events that occur after the end of the reporting period, but before the financial statements are authorised for issue, and
- to specify the disclosures that should be given about events that have occurred after the end of the reporting period but before the financial statements were authorised for issue.

IAS 10 also includes a requirement that the financial statements should disclose when the statements were authorised for issue, and who gave the authorisation.

IAS 10 sets out the following key definitions.



#### Definitions

**Events after the reporting period:** Those events, favourable and unfavourable that occur between the end of the reporting period and the date the financial statements are authorised for issue.

**Adjusting events:** Events that provide evidence of conditions that already existed as at the end of the reporting period.

**Non-adjusting events:** Events that have occurred due to conditions arising after the end of the reporting period.

## 6.2 Accounting for adjusting events after the reporting period

IAS 10 states that if a company obtains information about an adjusting event after the reporting period, it should update the financial statements to allow for this new information.

‘A company shall adjust the amounts recognised in its financial statements to reflect adjusting events after the reporting period.’

IAS 10 gives the following examples of **adjusting events**.

- ❑ The settlement of a court case after the end of the reporting period, confirming that the company had a present obligation as at the end of the reporting period as a consequence of the case.
- ❑ The receipt of information after the reporting period indicating that an asset was impaired as at the end of the reporting period. For example, information may be obtained about the bankruptcy of a customer, indicating the need to make a provision for a bad (irrecoverable) debt against a trade receivable in the year-end statement of financial position. Similarly, information might be obtained after the reporting period has ended indicating that as at the end of the reporting period the net realisable value of some inventory was less than its cost, and the inventory should therefore be written down in value.
- ❑ The determination after the end of the reporting period of the purchase cost of an asset, where the asset had already been purchased before the end of the reporting period, but the purchase price had not been finally agreed or decided. Similarly, the determination after the reporting period of the sale price for a non-current asset, where the sale had been made before the end of the reporting period but the sale price had not yet been finally agreed.
- ❑ The discovery of fraud or errors showing that the financial statements are incorrect.



### Example:

On 31 December Year 1, Company G is involved in a court case. It is being sued by a supplier.

On 15 April Year 2, the court decided that Company G should pay the supplier Rs.45,000 in settlement of the dispute.

The financial statements for Company G for the year ended 31 December Year 1 were authorised for issue on 17 May Year 2.

The settlement of the court case is an adjusting event after the reporting period:

- ❑ It is an event that occurred between the end of the reporting period and the date the financial statements were authorised for issue.
- ❑ It provided evidence of a condition that existed at the end of the reporting period. In this example, the court decision provides evidence that the company had an obligation to the supplier as at the end of the reporting period.

Since it is an adjusting event after the reporting period, the financial statements for Year 1 must be adjusted to include a provision for Rs.45,000. The alteration to the financial statements should be made before they are approved and authorised for issue.

### 6.3 Disclosures for non-adjusting events after the reporting period

Non-adjusting events after the reporting period are treated differently. A non-adjusting event relates to conditions that did not exist at the end of the reporting period, therefore the financial statements must not be updated to include the effects of the event. IAS 10 states quite firmly: 'A company shall **not** adjust the amounts recognised in the financial statements to reflect non-adjusting events after the reporting period'.

However, IAS 10 goes on to say that if a non-adjusting event is material, a failure by the company to provide a disclosure about it could influence the economic decisions taken by users of the financial statements. For material non-adjusting events IAS 10 therefore requires disclosure of:

- ❑ the nature of the event; and
- ❑ an estimate of its financial effect, or a statement that such an estimate cannot be made.

This information should be disclosed in a note to the financial statements.

(Note: There are no disclosure requirements for adjusting events as they have already been reflected in the financial statements.)

IAS 10 gives the following examples of non-adjusting events:

- ❑ A fall in value of an asset after the end of the reporting period, such as a large fall in the market value of some investments owned by the company, between the end of the reporting period and the date the financial statements are authorised for issue. A fall in market value after the end of the reporting period will normally reflect conditions that arise after the reporting period, not conditions already existing as at the end of the reporting period.
- ❑ The acquisition or disposal of a major subsidiary.
- ❑ The formal announcement of a plan to discontinue a major operation.
- ❑ Announcing or commencing the implementation of a major restructuring.
- ❑ The destruction of a major plant by a fire after the end of the reporting period. The 'condition' is the fire, not the plant, and the fire didn't exist at the end of the reporting period. The plant should therefore be reported in the statement of financial position at its carrying amount as at the end of the reporting period. The fire, and the financial consequences of the fire, should be disclosed in a note to the financial statements.

## 6.4 Dividends

IAS 10 also contains specific provisions about proposed dividends and the going concern presumption on which financial statements are normally based.

If equity dividends are declared after the reporting period, they should not be recognised, because they did not exist as an obligation at the end of the reporting period.

Dividends proposed after the reporting period (but before the financial statements are approved) should be disclosed in a note to the financial statements, in accordance with IAS 1.

### Pakistan

Typically, in Pakistan a company will pay a dividend once a year. Dividend payments in Pakistan must be approved by the members in a general meeting and this usually takes place after the year end. This means that the dividend expensed in any one year is the previous year's dividend (which could not be recognised last year as it had not yet been approved in the general meeting).

Listed companies often pay an interim dividend part way through a year and a final dividend after the year end. The actual dividend payment recognised in any one year would then be that year's interim dividend and the previous year's final dividend (which could not be recognised last year as it had not yet been approved in the general meeting).

## 6.5 The going concern assumption

There is one important exception to the normal rule that the financial statements reflect conditions as at the end of the reporting period.

A deterioration in operating results and financial position after the end of the reporting period may indicate that the going concern presumption is no longer appropriate.

There are a large number of circumstances that could lead to going concern problems. For example:

- The financial difficulty of a major customer leading to their inability to pay their debt to the agreed schedule if at all.
- An event leading to the net realisable value of lines of inventory falling to less than cost.
- An event leading to a crucial non-current asset falling out of use. This might cause difficulties in supplying customers and fulfilling contracts.
- A change in market conditions leading to a loss in value of major investments.
- Shortages of important supplies
- The emergence of a highly effective competitor.

If it becomes clear that the client cannot be considered to be a going concern, the financial statements will need to disclose this and the basis for preparing them will change to the 'break-up' basis.

This means that values will have to be adjusted to the amounts expected to be realised through sale.

## SOLUTION TO PRACTICE QUESTION

### Solution: Provisions and contingencies

**1**

	Warranty Rs. 000	Legal claim Rs. 000	Onerous contract Rs. 000	Clean-up costs Rs. 000	Total Rs. 000
At 1 January 2015	750	nil	nil	500	1,250
Used in the year	(400)				(400)
Statement of profit or loss (balance)	280	9,000	1,440	1,000	11,720
At 31 December 2015	630	9,000	1,440	1,500	12,570
	W1		W2	W3	W4

**Warranty:** The company grants warranties on certain categories of goods. The measurement of the provision is on the company's experience of the likelihood and cost of paying out under the warranty.

**Legal claim:** The legal claim provision is in respect of a claim made by a customer for damages as a result of faulty equipment supplied by the company. It represents the present value of the amount at which the company's legal advisors believe the claim is likely to be settled.

**Onerous contract:** The provision for the onerous contract is in respect of a two-year fixed-price contract which the company entered into on 1 July 2015. Due to unforeseen cost increases and production problems, a loss on this contract is now anticipated. The provision is based on the amount of this loss up to the end of the contract.

**Clean-up costs:** The provision for clean-up costs is in respect of the company's overseas mineral extraction operations.

The company is 18 months into a five year operating licence. The estimated cost of cleaning up the site at the end of the five years is Rs. 5,000,000. A provision of Rs. 1,000,000 per annum is recognised.

**Contingent asset:** The company is making a claim against a supplier of components. These components led in part to the legal claim against the company for which a provision has been made above. Legal advice is that this claim is likely to succeed and should amount to around 40% of the total damages (Rs. 3.6 million).

**W1** Warranty provision:  $150 \times \text{Rs. } 7,000 \times 60\% = \text{Rs. } 630,000$ .

**W2** Onerous contract:  $18 \text{ months} \times 100 \text{ units} \times \text{Rs. } 800 = \text{Rs. } 1,440,000$ .

**W3** Clean up costs: Rs. 1,000,000 per annum as it is the extraction that causes the cost.



## IAS 8: Accounting policies, changes in accounting estimates and errors

### Contents

- 1 Accounting policies
- 2 Accounting estimates
- 3 Errors

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

**LO 3            Understand the implication of contingencies; changes in accounting policies and estimates; errors and events occurring after reporting period.**

LO3.2.1        Define accounting policies, accounting estimates and prior period errors.

LO3.2.2        Account for the effect of change in accounting estimates and policies in the financial statements.

LO3.2.3        Understand and analyse using examples, IFRS guidance on accounting policies, change in accounting policies and disclosure.

LO3.2.4        Understand and analyse using examples, IFRS guidance on accounting estimates, changes in accounting estimates and disclosure.

LO3.2.5        Understand and analyse using examples, IFRS guidance on errors, correction of errors and disclosure.

## 1 ACCOUNTING POLICIES

### Section overview

- Introduction to IAS 8
- Accounting policies
- Selection of accounting policies
- Changes in accounting policies
- Retrospective application of a change in accounting policy
- Limitation on retrospective application
- Disclosure of a change in accounting policy

### 1.1 Introduction to IAS 8

The aim of *IAS 8: Accounting policies, changes in accounting estimates and errors* is to enhance comparability of the entity's financial statements to previous periods and to the financial statements of other entities.

It does this by prescribing:

- the criteria for selecting accounting policies; and
- the accounting treatment and disclosure of:
  - changes in accounting policies;
  - changes in accounting estimates; and
  - errors.

Much of IAS 8 is concerned with how changes or corrections should be reported in the financial statements.

### 1.2 Accounting policies



#### Definition: Accounting policies

Accounting policies are the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements.

IFRSs set out accounting policies that result in financial statements containing relevant and reliable information about the transactions, other events and conditions to which they apply. Those policies need not be applied when the effect of applying them is immaterial.



#### Definition: Material

Omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions that users make on the basis of the financial statements. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances. The size or nature of the item, or a combination of both, could be the determining factor.

### 1.3 Selection of accounting policies

#### Selection of accounting policies – Areas covered by IFRS

If an IFRS (or an Interpretation) applies to an item in the financial statements, the accounting policy or policies applied to that item must be determined by applying the Standard or Interpretation and any relevant implementation guidance issued.

#### Selection of accounting policies – Area not covered by IFRS

If there is no rule in IFRS that specifically applies to an item in the financial statements, management must use its judgement to develop and apply an accounting policy that results in information that is:

- relevant to the decision-making needs of users; and
- reliable in that the financial statements:
  - represent faithfully the results and financial position of the entity;
  - reflect the economic substance of transactions and other events, and not merely the legal form;
  - are neutral, ie free from bias;
  - are prudent; and
  - are complete in all material respects.

In making the judgement management must consider the following sources in descending order:

- the requirements and guidance in IFRS dealing with similar and related issues;
- the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses set out in the “Framework”.

Management may also consider the most recent pronouncements of other standard-setting bodies that use a similar conceptual framework to the extent that these do not conflict with the above sources.

#### Consistency of accounting policies

An entity must apply consistent accounting policies in a period to deal with similar transactions, and other events and circumstances, unless IFRS specifically requires or permits categorisation of items for which different policies may be appropriate.



#### Illustration: Consistency

**IAS 16: Property, plant and equipment allows the use of the cost model or the revaluation model for measurement after recognition.**

**This is an example of where IFRS permits categorisation of items for which different policies may be appropriate.**

**If chosen, each model must be applied to an entire class of assets. Each model must be applied consistently within each class that has been identified.**

## 1.4 Changes in accounting policies

Users of financial statements need to be able to compare financial statements of an entity over time, so that they can identify trends in its financial performance or financial position. Frequent changes in accounting policies are therefore undesirable because they make comparisons with previous periods more difficult.

The same accounting policies must be applied within each period and from one period to the next unless a change in accounting policy meets one of the following criteria. A change in accounting policy is permitted only if the change is:

- required by IFRS; or
- results in the financial statements providing reliable and more relevant financial information.

A new or revised standard usually include specific **transitional provisions** to explain how the change required by the new rules should be introduced.

In the absence of specific transitional provisions, a change in policy should be applied retrospectively. This is explained shortly.

### Determining when there is a change in accounting policy

A change in accounting policy can be established as follows. The accounting policies chosen by an entity should reflect transactions and events through:

- recognition (e.g. capitalising or writing off certain types of expenditure)
- measurement (e.g. measuring non-current assets at cost or valuation)
- presentation (e.g. classification of costs as cost of sales or administrative expenses)

If at least one of these criteria is changed, then there is a change in accounting policy.



#### Illustration:

IAS 23 requires the capitalisation of borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset.

Previously, IAS 23 allowed companies to expense or capitalise borrowing costs.

The revision to IAS 23 led to a change in accounting policy for some companies as it affected:

- recognition – the interest cost previously recognised as an expense had to be recognised as an asset; and
- presentation – the interest cost previously presented in the statement of profit or loss had to be presented in the statement of financial position.

IAS 8 specifies that the application of a new accounting policy to transactions or events that did not occur previously or differ in substance from those that occurred previously, is **not** a change of accounting policy. It is simply the application of a suitable accounting policy to a new type of transaction.

The initial application of a policy to revalue assets in accordance with IAS 16 Property, Plant and Equipment or IAS 38 Intangible Assets is a change in an accounting policy. However, it is accounted for in accordance guidance in those standards rather than in accordance with IAS 8.

## 1.5 Retrospective application of a change in accounting policy

When a change in accounting policy is required, and there are no transitional provisions relating to the introduction of a new accounting standard, the change in policy should be applied retrospectively.



### Definition: Retrospective application

Retrospective application is applying a new accounting policy to transactions, other events and conditions as if that policy had always been applied.

The entity should adjust the opening balance for each item of equity affected by the change, for the earliest prior period presented, and the other comparative amounts for each prior period presented, as if the new accounting policy had always been applied.

*IAS 1: Presentation of Financial Statements* requires a statement of financial position at the beginning of the earliest comparative period when a new accounting policy is applied retrospectively.



### Illustration:

A company presents comparatives for the previous year only.

During the year ended 31 December 2016 it changes an accounting policy and this change must be applied retrospectively.

If there were no change in accounting policy the company would present statements of financial position as at December 2016 and December 2015 only.

However, because there is a change in policy the company must also present a statement of financial position as at 1 January 2015 (the beginning of the earliest comparative period).

The change in accounting policy is applied retrospectively. This means that the change should be applied to the balances as at 1 January 2015 as if the new policy had always been applied.

Similarly, any other comparative amounts in previous periods should be adjusted as if the new accounting policy had always been applied.

If this is impracticable, retrospective application should be applied from the earliest date that is practicable.

## 1.7 Limitation on retrospective application

It might be impracticable to retrospectively apply an accounting policy. This could be because the information necessary for the application of the policy to earlier periods is not available because it had not been collected then.



### Definition: Impracticable

Applying a requirement is impracticable when the entity cannot apply it after making every reasonable effort to do so. For a particular prior period, it is impracticable to apply a change in an accounting policy retrospectively or to make a retrospective restatement to correct an error if:

- (a) the effects of the retrospective application or retrospective restatement are not determinable;
- (b) the retrospective application or retrospective restatement requires assumptions about what management's intent would have been in that period; or
- (c) the retrospective application or retrospective restatement requires significant estimates of amounts and it is impossible to distinguish objectively information about those estimates that:
  - (i) provides evidence of circumstances that existed on the date(s) as at which those amounts are to be recognised, measured or disclosed; and
  - (ii) would have been available when the financial statements for that prior period were authorised for issue from other information.

There are different degrees of impracticability.

### Period specific effect

It might be impracticable to determine the effect of changing an accounting policy on comparative information for one or more prior periods presented. For example, it might be impracticable to determine the impact on profit for the prior year.

In this case a company must apply the new accounting policy to the carrying amounts of assets and liabilities (and therefore equity) as at the beginning of the earliest period for which retrospective application is practicable. This may be the current period.

### Cumulative effect

It might be impracticable to determine the cumulative effect, at the beginning of the current period, of applying a new accounting policy to all prior periods,

In this case a company must adjust the comparative information to apply the new accounting policy prospectively from the earliest date practicable.

When the cumulative effect of applying the policy to all prior periods cannot be determined, a company must apply the new policy prospectively from the start of the earliest period practicable. This means that it would disregard the portion of the cumulative adjustment to assets, liabilities and equity arising before that date.

**Definition: Prospective application**

Prospective application of a change in accounting policy and of recognising the effect of a change in an accounting estimate, respectively, are:

- (a) applying the new accounting policy to transactions, other events and conditions occurring after the date as at which the policy is changed; and
- (b) recognising the effect of the change in the accounting estimate in the current and future periods affected by the change.

**1.6 Disclosure of a change in accounting policy**

When a change in accounting policy has an effect on the current period or any prior period (or would have an affected that period except that it is impracticable to determine the amount of the adjustment) or might have an effect on future periods the following must be disclosed:

Disclosure:	Change due to IFRS	Voluntary change
The title of the Standard or Interpretation	✓	
The nature of the change in accounting policy	✓	✓
A description of any transitional provisions	✓	
The reason why the new accounting policy provides reliable and more relevant information		✓
For the current and previous period(s), to the extent practicable, the amount of the adjustment to each item in the financial statements.	✓	✓
To the extent practicable, the adjustment relating to accounting periods before those presented in the financial statements	✓	✓
If retrospective application is impracticable, an explanation of how the accounting policy change has been applied	✓	✓

## 2 ACCOUNTING ESTIMATES

### Section overview

- Accounting estimates
- Changes in accounting estimates
- Disclosures

### 2.1 Accounting estimates

An accounting estimate is made for an item in the financial statements when the item cannot be measured with precision, and there is some uncertainty about it.

An estimate is therefore based, to some extent, on management's judgement. Management estimates might be required, for example, for the following items:

- bad debts;
- inventory obsolescence;
- the fair value of financial assets or liabilities;
- the useful lives of non-current assets;
- the most appropriate depreciation pattern (depreciation method, for example straight line or reducing balance) for a category of non-current assets;
- measurement of warranty provisions.

The use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability.

#### Accounting policy vs accounting estimate

It is important to distinguish between an accounting policy and an accounting estimate.

Sometimes it can be difficult to distinguish between changes in accounting policy from changes in accounting estimate. In such cases any change is treated as a change in accounting estimate.



#### Illustration:

**Accounting policy:** Depreciating plant and equipment over its useful life

**Accounting estimate:** How to apply the policy. For example whether to use the straight line method of depreciation or the reducing balance method is a choice of accounting estimate.

A change in the measurement basis applied is a change in an accounting policy, and is not a change in an accounting estimate.



#### Illustration:

**IAS 16:** Property, plant and equipment allows the use of the cost model or the revaluation model for measurement after recognition.

This is a choice of accounting policy.

## 2.2 Changes in accounting estimates



### Definition: Change in accounting estimate

A change in accounting estimate is an adjustment of the carrying amount of an asset or a liability, or the amount of the periodic consumption of an asset, that results from the assessment of the present status of, and expected future benefits and obligations associated with, assets and liabilities. Changes in accounting estimates result from new information or new developments and, accordingly, are not corrections of errors.

A change in accounting estimate may be needed if changes occur in the circumstances on which the estimate was based, or if new information becomes available. A change in estimate is **not** the result of discovering an error in the way an item has been accounted for in the past and it is **not** a correction of an error.

IAS 8 requires a change in an accounting policy to be accounted for retrospectively whereas a change in an accounting estimate is normally recognised from the current period.

The effect of a change in accounting estimate should be recognised prospectively, by including it:

- in profit or loss for the period in which the change is made, if the change affects that period only, or
- in profit or loss for the period of change and future periods, if the change affects both.

To the extent that a change in estimate results in a change in assets and liabilities, it should be recognised by adjusting the carrying amount of the affected assets or liabilities in the period of change.



### Example:

A non-current asset was purchased for Rs. 200,000 two years ago, when its expected economic life was ten years and its expected residual value was nil. The asset is being depreciated by the straight-line method.

A review of the non-current assets at the end of year 2 revealed that due to technological change, the useful life of the asset is only six years in total, and the asset therefore has a remaining useful life of four years.

The original depreciation charge was Rs. 20,000 per year ( $\text{Rs. } 200,000 / 10 \text{ years}$ ) and at the beginning of Year 2, its carrying value was Rs. 180,000 (Rs. 200,000 - Rs. 20,000).

The change in the estimate occurs in Year 2. The change in estimate should be applied prospectively, for years 2 onwards (years 2 – 6). From the beginning of year 2, the asset has a revised useful remaining life of five years.

The annual charge for depreciation for year 2 (the current year) and for the future years 3 – 6 will be changed from Rs. 20,000 to Rs. 36,000 ( $\text{Rs. } 180,000 / 5 \text{ years}$ ).

## 2.3 Disclosures

The following information must be disclosed:

- ❑ The nature and amount of a change in an accounting estimate that has an effect in the current period or is expected to have an effect in future periods, except for the effect on future periods when it is impracticable to estimate that effect.
- ❑ The fact that the effect in future periods is not disclosed because estimating it is impracticable (if this is the case).

### 3 ERRORS

#### Section overview

- Errors
- The correction of prior period errors
- Limitation on retrospective restatement
- Disclosure of prior period errors

#### 3.1 Errors

Errors might happen in preparing financial statements. If they are discovered quickly, they are corrected before the finalised financial statements are published. When this happens, the correction of the error is of no significance for the purpose of financial reporting.

A problem arises, however, when an error is discovered that relates to a prior accounting period. For example, in preparing the financial statements for Year 3, an error may be discovered affecting the financial statements for Year 2, or even Year 1.



#### Definition: Prior period errors

Prior period errors are omissions from, and misstatements in, the entity's financial statements for one or more prior periods arising from a failure to use, or misuse of, reliable information that:

- (a) was available when financial statements for those periods were authorised for issue; and
- (b) could reasonably be expected to have been obtained and taken into account in the preparation and presentation of those financial statements.

Such errors include the effects of mathematical mistakes, mistakes in applying accounting policies, oversights or misinterpretations of facts, and fraud.

#### 3.2 Correction of prior period errors

All material prior period errors should be corrected retrospectively in the first set of financial statements following the discovery of the error.

Comparative amounts for the previous period should be re-stated at their corrected amount.

If the error occurred before the previous year, the opening balances of assets, liabilities and equity for the previous period should be re-stated at their corrected amount unless that is impracticable.

The correction of a prior period error is excluded from profit or loss in the period when the error was discovered.



**Illustration:**

In preparing its financial statements for 31 December 2015 Company A discovers an error affecting the 31 December 2014 financial statements.

The error should be corrected in the 31 December 2015 financial statements by re-stating the comparative figures for 31 December 2014 at their correct amount.

If the error had occurred in 31 December 2013, the comparative opening balances for the beginning of 31 December 2014 should be re-stated at their correct amount.

The reported profit for 31 December 2015 is not affected.

**Example:**

DEF is preparing its financial statements for 2015.

The draft statement of changes in equity is as follows:

	Share capital	Share premium	Retained earnings	Total
	Rs.000	Rs.000	Rs.000	Rs.000
Balance at 31/12/11	500	50	90	640
Profit for the year	-	-	150	150
Balance at 31/12/12	500	50	240	790
<b>2015</b>				
Dividends			(100)	(100)
Profit for the year			385	385
Balance at 31/12/13	500	50	525	1,075

DEF has now discovered an error in its inventory valuation. Inventory was overstated by Rs. 70,000 at 31 December 2015 and by Rs. 60,000 at 31 December 2014. The rate of tax on profits was 30% in both 2014 and 2015.

The error in 2015 is corrected against the current year profit.

The error in 2014 is corrected against the prior year profit. (Note that the 2014 closing inventory is the opening inventory in 2015 so the 2014 adjustment will impact both periods statements comprehensive income.)

Profit adjustments:	2015	2014
	Rs.000	Rs.000
Profit (2015 draft and 2014 actual)	385	150
Deduct error in closing inventory	(70)	(60)
Add error in opening inventory	60	
Tax at 30%	(10)	(60)
	3	18
	(7)	(42)
<b>Adjusted profit</b>	<b>378</b>	<b>108</b>

The statement of changes in equity as published in 2015 becomes:

	Share capital	Share premium	Retained earnings	Total
	Rs.000	Rs.000	Rs.000	Rs.000
Balance at 31/12/11	500	50	90	640
Profit for the year <b>(restated)</b>	-	-	<b>108</b>	108
Balance at 31/12/12	500	50	198	748
<b>2015</b>				
Dividends			(100)	(100)
Profit for the year			378	378
Balance at 31/12/13	500	50	476	1,026

### 2.3 Limitation on retrospective restatement

A prior period error must be corrected by retrospective restatement except to the extent that it is impracticable to determine either the period-specific effects or the cumulative effect of the error.

#### Period specific effect

It might be impracticable to determine the effect of correcting an error in comparative information for one or more prior periods presented. For example, it might be impracticable to determine the impact on profit for the prior year.

In this case a company must restate the carrying amounts of assets and liabilities (and therefore equity) as at the beginning of the earliest period for which retrospective restatement is practicable. This may be the current period.

#### Cumulative effect

It might be impracticable to determine the cumulative effect, at the beginning of the current period, of correcting an error in all prior periods,

In this case a company must correct the error prospectively from the earliest date practicable.

### 3.3 Disclosure of prior period errors

The following information must be disclosed:

- the nature of the prior period error;
- for each period presented in the financial statements, and to the extent practicable, the amount of the correction for each financial statement item and the change to basic and fully diluted earnings per share;
- the amount of the correction at the beginning of the earliest prior period in the statements (typically, at the start of the previous year);
- if retrospective re-statement is not practicable for a prior period, an explanation of how and when the error has been corrected.

IAS 8 therefore requires that a note to the financial statements should disclose details of the prior year error, and the effect that the correction has had on 'line items' in the prior year.



#### Example:

Returning to the above example the following note would be needed to the financial statements for the year to 31 December 2015 to explain the adjustments made to figures previously published for the year to 31 December 2014.

<b>Note about statement of profit or loss.</b>	<b>Rs.000</b>
(Increase) in cost of goods sold	(60)
Decrease in tax	18
(Decrease) in profit	<u>(42)</u>
<b>Note about statement of financial position</b>	<b>Rs.000</b>
(Decrease) in closing inventory	(60)
Decrease in tax payable	18
(Decrease) in equity	<u>(42)</u>



## IAS 12: Income taxes

### Contents

- 1 Accounting for taxation
- 2 Deferred tax: Introduction
- 3 Recognition of deferred tax: basic approach
- 4 Recognition and measurement rules
- 5 Presentation and disclosure

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

#### **LO 4 Account for transactions relating to taxation.**

- LO4.1.1 Define temporary differences and identify temporary differences that cause deferred tax liabilities and deferred tax assets
- LO4.1.2 Determine amounts to be recognised in respect of temporary differences
- LO4.1.3 Prepare and present deferred tax calculations using the balance sheet approach.
- LO4.1.4 Account for the major components of tax expense/income and its relationship with accounting profit.
- LO4.1.5 Formulate accounting policies in respect of deferred tax
- LO4.1.6 Apply disclosure requirements of IAS12 to scenarios of a moderate level of complexity

## 1 ACCOUNTING FOR TAXATION

### Section overview

- Taxation of profits
- Over-estimate or under-estimate of tax from the previous year
- Taxation in the statement of financial position

### 1.1 Taxation of profits

Companies pay tax on their profits. The tax charge is based on their accounting profit as adjusted according to the tax law of Pakistan.



#### Definitions

Accounting profit is profit or loss for a period before deducting tax expense.

Taxable profit (tax loss) is the profit (loss) for a period, determined in accordance with the rules established by the taxation authorities, upon which income taxes are payable (recoverable).

Current tax is the amount of income taxes payable (recoverable) in respect of the taxable profit (tax loss) for a period.

#### Tax computation

A series of adjustments is made against a company's accounting profit to arrive at its taxable profit. These adjustments involve:

- Adding back inadmissible deductions (accounting expenses which are not allowed as a deduction against taxable profit).
- Deducting admissible deductions which include:
  - expenses that are allowable as a deduction against taxable profit but which have not been recognised in the financial statements.
  - Income recognised in the financial statements but which is not taxed.

The tax rate is applied to the taxable profit to calculate how much a company owes in tax for the period. IFRS describes this as **current tax**.

An exam question might require you to perform a basic taxation computation from information given in the question.



#### Illustration: Tax computation format

	<b>Rs.</b>
Accounting profit before tax	X
Add back: Inadmissible deductions	X
Less: Admissible deductions	(X)
Taxable profit	X
Tax rate	x%
Tax payable (current tax)	X



### Example: Taxation computation

Jhelum Traders had an accounting profit of Rs. 789,000 for the year ended 31 December 2015.

The accounting profit was after depreciation of Rs. 70,000 and included a profit on disposal (capital gain) of Rs. 97,000.

The company had incurred borrowing costs of Rs. 70,000 in the year of which Rs. 10,000 had been capitalised in accordance with IAS 23.

The company holds some assets under finance leases. During the year it had recognised finance charge in respect of the leases was Rs. 15,000 and rentals paid were Rs. 80,000.

At 1 January 2015 the tax written down value of machinery was Rs. 120,000 and for buildings was Rs. 600,000.

#### Tax regime

All borrowing costs are deductible for tax purposes.

Capital gains are not taxable.

Fines are not tax deductible.

Finance lease rentals are deductible in full for tax purposes.

Accounting depreciation is not allowable for tax purposes.

Tax depreciation is claimable at 10% per annum for buildings and 15% per annum for machinery applied to tax written down value at the start of the year.

Tax is paid at 30%

#### The tax computation is as follows:

	Rs.
Accounting profit	789,000
Add back inadmissible deductions:	
Accounting depreciation	70,000
Fine paid	125,000
Finance charge on finance lease	15,000
	210,000
Less: Admissible deductions	
Tax depreciation (15% × 120,000 + 10% × 600,000)	78,000
Lease payments	80,000
Capital gain	97,000
Borrowing cost capitalised	10,000
	(265,000)
Taxable profit	734,000
Tax rate	30%
Tax payable	220,200

### Tax base

The above example referred to the tax written down value of the machinery and buildings. This is the tax authority's view of the carrying amount of the asset measured as cost less depreciation calculated according to the tax legislation.

IFRS uses the term tax base to refer to an asset or liability measured according to the tax rules.



#### Definition

The tax base of an asset or liability is the amount attributed to that asset or liability for tax purposes.

The tax base of an asset is the amount that the tax authorities will allow as a deduction in the future.

### Measurement

Current tax liabilities (assets) for the current and prior periods must be measured at the amount expected to be paid to (recovered from) the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

## 1.2 Over-estimate or under-estimate of tax from the previous year

Current tax for current and prior periods must be recognised as a liability until paid. If the amount already paid exceeds the amount due the excess must be recognised as an asset.

When the financial statements are prepared, the tax charge on the profits for the year is likely to be an estimate. The figure for tax on profits in the statement of profit or loss is therefore not the amount of tax that will eventually be payable, because it is only an estimate. The actual tax charge, agreed with the tax authorities some time later, is likely to be different.

In these circumstances, the tax charge for the year is adjusted for any under-estimate or over-estimate of tax in the previous year.

- ❑ An under-estimate of tax on the previous year's profits is added to the tax charge for the current year.
- ❑ An over-estimate of tax on the previous year's profits is deducted from the tax charge for the current year.



#### Example:

	Rs.	Rs.
Profit from operations		460,000
Interest		(60,000)
Profit before tax		<u>400,000</u>
Tax:		
Adjustment for under-estimate of tax in the previous year	3,000	
Tax on current year profits	<u>100,000</u>	
Tax charge for the year		<u>(103,000)</u>
Profit after tax		<u>297,000</u>

### 1.3 Taxation in the statement of financial position

The taxation charge for the year is the liability that the company expects to pay. The timing of tax payments on profits varies from one country to another, depending on the tax rules in each country. The actual amount of tax payable, and reported in the statement of financial position as a current liability (taxation payable), is calculated as follows:



#### Illustration:

	<b>Rs.</b>
Tax payable at the beginning of the year	X
Tax charge for the year	X
	<hr/>
	X
Tax payments made during the year	(X)
	<hr/>
Tax payable at the end of the year	X
	<hr/>



#### Example:

Fresh Company has a financial year ending on 31 December.

At 31 December 2014 it had a liability for income tax of Rs. 77,000.

The tax on profits for the year to 31 December 2015 was Rs. 114,000.

The tax charge for the year to 31 December 2014 was over-estimated by Rs. 6,000.

During the year to 31 December 2015, the company made payments of Rs. 123,000 in income tax.

This would result in the following accounting treatment:

<b>Tax charge in the statement of profit or loss</b>	<b>Rs.</b>
Tax on current year profits	114,000
Adjustment for over-estimate of tax in the previous year	(6,000)
	<hr/>
Taxation charge for the year	108,000
	<hr/>
<b>Tax liability in the statement of financial position</b>	<b>Rs.</b>
Tax payable at the beginning of the year	77,000
Tax charge for the year	108,000
	<hr/>
	185,000
Tax payments made during the year	(123,000)
	<hr/>
Tax payable at the end of the year	62,000
	<hr/>

## 2 DEFERRED TAX: INTRODUCTION

### Section overview

- Deferred taxation – Underlying problem
- Identifying deferred tax balances
- IAS 12 approach to the problem

### 2.1 Deferred taxation - Underlying problem

As explained in the last section, in most jurisdictions the rules for the recognition and measurement of certain assets, liabilities, income and expenses for tax purposes differ from the equivalent rules under IFRSs. This results in different figures in the financial statements and in the tax computations/tax working papers.

It is convenient to envisage two separate sets of accounts:

- one set constructed following IFRS rules; and,
- a second set following the tax rules (tax computations).

This results in a breakdown in the tax rate percentage relationship between the profit before tax figure and the taxation figure. In other words the tax charge is not the tax rate applied to the profit before tax.



#### Example:

X Limited made accounting profit before tax of Rs. 50,000 in each of the years, 20X1, 20X2 and 20X3 and pays tax at 30%.

X Limited bought an item of plant on 1 January 20X1 for Rs. 9,000. This asset is to be depreciated on a straight line basis over 3 years.

Accounting depreciation is not allowed as a taxable deduction in the jurisdiction in which the company operates. Instead tax allowable depreciation is available as shown in the following tax computations.

	<b>20X1</b>	<b>20X2</b>	<b>20X3</b>
	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
Accounting profit (after depreciation)	50,000	50,000	50,000
Add back depreciation	3,000	3,000	3,000
Deduct capital allowances	(4,500)	(2,500)	(2,000)
	(1,500)	500	1,000
<b>Taxable profit</b>	<b>48,500</b>	<b>50,500</b>	<b>51,000</b>
<b>Tax @ 30%</b>	<b>14,550</b>	<b>15,150</b>	<b>15,300</b>

**Example continued:**

In the absence of the recognition of deferred tax this would be reported as follows:

X Limited: Statement of profit or loss for the years ending:

	20X1	20X2	20X3	Total
	Rs.	Rs.	Rs.	Rs.
Profit before tax	50,000	50,000	50,000	150,000
Income tax @ 30% (as above)	(14,550)	(15,150)	(15,300)	(45,000)
Profit after tax	35,450	34,850	34,700	105,000

Looking at the total column, the profit before tax is linked to the taxation figure through the tax rate ( $150,000 \times 30\% = 45,000$ ).

This is not the case in each separate year.

This is because the tax rate is not applied to the accounting profit before tax but to find the current tax charge but to that figure after adjustments.

The item of plant is written off in the calculation of both accounting profit and taxable profit but by different amounts in different periods. The differences are temporary in nature as over the three year period, the same expense is recognised for the item of plant under both the accounting rules and the tax rules.

Transactions recognised in the financial statements in one period may have their tax effect deferred to (or more rarely, accelerated from) another. Thus the tax is not matched with the underlying transaction that has given rise to it.

In the above example the tax consequences of an expense (depreciation in this case) are recognised in different periods to when the expense is recognised.

Accounting for deferred tax is based on the principle that the tax consequence of an item should be recognised in the same period as the item is recognised. It tries to match tax expenses and credits to the period in which the underlying transactions to which they relate are recognised.

In order to do this, the taxation effect that arises due to the differences between the figures recognised under IFRS and the tax rules is recognised in the financial statements.

The double entry to achieve this is between a deferred tax balance in the statement of financial position (which might be an asset or a liability) and the tax charge in the statement of profit or loss. (More complex double entry is possible but this is outside the scope of your syllabus).

The result of this is that the overall tax expense recognised in the statement of profit or loss is made up of the current tax and deferred tax numbers.

**Definition: Tax expense**

Tax expense (tax income) is the aggregate amount included in the determination of profit or loss for the period in respect of current tax and deferred tax.

## 2.2 Identifying deferred tax balances

The differences between the two sets of rules will result in different numbers in the financial statements and in the tax computations.

### Two perspectives

These differences can be viewed from:

- ❑ a statement of profit or loss (income and expenses) perspective:
  - the differences arising in the period are identified by comparing income and expenses recognised under IFRS to the equivalent figures that are taxable or allowable under tax legislation;
  - the approach identifies the deferred tax expense or credit recognised in the statement of profit or loss for the period (with the other side of the entry recognised as a liability or asset); or
- ❑ a statement of financial position (assets and liabilities) perspective:
  - the differences are identified on a cumulative basis by comparing the carrying amount of assets and liabilities under IFRS to the carrying amount of the same assets and liabilities according to the tax rules;
  - the approach identifies the deferred tax liability (or asset) that should be recognised (with the movement on this amount recognised as a credit or expense in the statement of profit or loss).

IAS 12 uses the statement of financial position perspective but both will be explained here for greater understanding.



#### Example continued:

The following table identifies the differences between the accounting treatment and the taxation treatment of the item of plant from both perspectives.

	Carrying amount	Tax base	Assets and liabilities	Income and expenses
Cost at 01/01/X1	9,000	9,000		
Charge for the year	(3,000)	(4,500)		(1,500)
Cost at 31/12/X1	6,000	4,500	1,500	
Charge for the year	(3,000)	(2,500)		500
Cost at 31/12/X2	3,000	2,000	1,000	
Charge for the year	(3,000)	(2,000)		1,000
Cost at 31/12/X3	–	–	–	–

### Statement of profit or loss perspective



#### Example continued: Statement of profit or loss perspective

##### 20X1:

Rs. 3,000 is disallowed but Rs. 4,500 is allowed instead.

⇒ taxable expense is Rs. 1,500 greater than the accounting expense.

⇒ taxable profit is Rs. 1,500 less than accounting profit.

⇒ current tax is reduced by 30% of Rs. 1,500 (Rs. 450).

⇒ deferred tax expense of Rs. 450 must be recognised to restore the balance (Dr: Tax expense / Cr: Deferred taxation liability).

##### 20X2:

Rs. 3,000 is disallowed but Rs. 2,500 is allowed instead.

⇒ taxable expense is Rs. 500 less than the accounting expense.

⇒ taxable profit is Rs. 500 more than accounting profit.

⇒ current tax is increased by 30% of Rs. 500 (Rs. 150).

⇒ deferred tax credit of Rs. 150 must be recognised to restore the balance (Dr: Deferred taxation liability / Cr: Tax expense).

##### 20X3:

Rs. 3,000 is disallowed but Rs. 2,000 is allowed instead.

⇒ taxable expense is Rs. 1,000 less than the accounting expense.

⇒ taxable profit is Rs. 1,000 more than accounting profit.

⇒ current tax is increased by 30% of Rs. 1,000 (Rs. 300).

⇒ deferred tax credit of Rs. 300 must be recognised to restore the balance (Dr: Deferred taxation liability / Cr: Tax expense).

#### The statement of profit or loss would now be as follows:

	20X1	20X2	20X3
	Rs.	Rs.	Rs.
Profit before tax	50,000	50,000	50,000
Income tax @ 30% W1	14,550	15,150	15,300
Deferred tax	450	(150)	(300)
	(15,000)	(15,000)	(15,000)
Profit after tax	35,000	35,000	35,000
<b>Statement of financial position</b>	<b>20X1</b>	<b>20X2</b>	<b>20X3</b>
Deferred tax liability:	Rs.	Rs.	Rs.
Balance b/f	nil	450	300
Movement in the year	450	(150)	(300)
Balance b/f	450	300	nil

## Statement of financial position perspective



### Example continued: Statement of financial position perspective

This approach compares the carrying amount of assets and liabilities in the financial statements to their tax base to identify the cumulative differences to that point in time.

These differences are called temporary differences.

An asset in the financial statements compared to the taxman's view requires the recognition of a deferred tax liability which is measured by applying the tax rate to the temporary difference.

	Carrying amount	Tax base	Temporary difference	Tax @ 30%
At 31/12/X1	6,000	4,500	1,500	450
At 31/12/X2	3,000	2,000	1,000	300
At 31/12/X3	nil	nil	nil	nil

#### By the end of 20X1

The asset in the financial statements is Rs. 1,500 more than the tax base.

A deferred tax liability of Rs. 450 must be recognised.

	Debit	Credit
Tax expense	450	
Deferred tax liability		450

#### By the end of 20X2

The asset in the financial statements is Rs. 1,000 more than the tax base.

A deferred tax liability of Rs. 300 must be recognised but there was Rs. 450 at the start of the year so the liability must be reduced.

	Debit	Credit
Deferred tax liability	150	
Tax expense		150

#### By the end of 20X3

The asset in the financial statements is the same as the tax base (nil).

A deferred tax liability of nil must be recognised but there was Rs. 300 at the start of the year so the liability must be reduced.

	Debit	Credit
Deferred tax liability	300	
Tax expense		300

These amounts are the same as on the previous page and would have the same impact on the financial statements.

The recognition of deferred taxation has restored the relationship between profit before tax and the tax charge through the tax rate in each year (30% of Rs. 50,000 = Rs. 15,000).

### **Terminology**

When a difference comes into existence or grows it is said to originate. When the difference reduces in size it is said to reverse.

Thus, in the above example a difference of Rs. 1,500 originated in 20X1. This difference then reversed in 20X2 and 20X3.

### **Warning**

Do not think that an origination always leads to the recognition of a liability and an expense. The direction of the double entry depends on the circumstances that gave rise to the temporary difference. This is covered in section 3 of this chapter.

## **2.3 IAS 12 approach to the problem**

*IAS 12: Income taxes*, advocates a statement of financial position approach.

Business must identify a deferred tax liability (or perhaps asset) at each reporting date.

It must do this by identifying the differences between the carrying amount of assets and liabilities in the financial statements to the tax base (tax authority's view of those same items). These differences are known as temporary differences (this will be explained in more detail in the next section).

Once the temporary differences have been identified the deferred tax balance is calculated by applying the appropriate tax rate to the difference.

### 3 RECOGNITION OF DEFERRED TAX: BASIC APPROACH

#### Section overview

- Identifying the temporary difference
- Taxable and deductible temporary differences
- Accounting for deferred tax
- Sources of temporary differences

#### 3.1 Identifying the temporary difference

Accounting for deferred tax is based on the identification of the temporary differences.



##### **Definition: Temporary difference**

Temporary differences are differences between the carrying amount of an asset or liability in the statement of financial position and its tax base.

Temporary differences may be either:

- (a) taxable temporary differences, which are temporary differences that will result in taxable amounts in determining taxable profit (tax loss) of future periods when the carrying amount of the asset or liability is recovered or settled; or
- (b) deductible temporary differences, which are temporary differences that will result in amounts that are deductible in determining taxable profit (tax loss) of future periods when the carrying amount of the asset or liability is recovered or settled.

The tax base of an asset is the amount that will be deductible for tax purposes against any taxable economic benefit that will flow to an entity when it recovers the carrying amount of the asset.



##### **Definition: Tax base**

The tax base of an asset or liability is the amount attributed to that asset or liability for tax purposes.

### 3.2 Taxable and deductible temporary differences

Temporary differences may be either taxable temporary differences or deductible temporary differences.

#### Taxable temporary differences

A taxable temporary difference is caused by a debit in the carrying amount of an asset or liability in the financial statements compared to the tax base of that item.

Taxable temporary differences lead to the recognition of deferred tax liabilities.



#### Example: Taxable temporary differences

Each of the following is a taxable temporary difference leading to the recognition of a deferred tax liability.

	Carrying amount	Tax base	Temporary difference	Deferred tax liability (30%)
Non-current asset	1,000	800	200	60
Inventory	650	600	50	15
Receivable	800	500	300	90
Receivable (note 1)	500	nil	500	150
Payable (note 2)	(1,000)	(1,200)	200	60

#### Note 1:

This implies that an item accounted for using the accruals basis in the financial statements is being taxed on a cash bases.

If an item is taxed on cash basis the tax base would be zero as no receivable would be recognised under the tax rules.

#### Note 2:

The credit balance in the financial statements is Rs. 1,000 and the tax base is a credit of Rs. 1,200. Therefore, the financial statements show a debit balance of 200 compared to the tax base. This leads to a deferred tax liability.

IAS 12 rationalises the approach as follows (using the non-current assets figures to illustrate)

Inherent in the recognition of an asset is that the carrying amount (Rs. 1,000) will be recovered in the form of economic benefits that will flow to the entity in future periods.

When the carrying amount exceeds the tax base (as it does in this case at Rs. 800) the amount of taxable economic benefit will exceed the amount that will be allowed as a deduction for tax purposes.

This difference is a taxable temporary difference and the obligation to pay the resulting income tax in the future periods is a liability that exists at the reporting date.

The company will only be able to expense Rs. 800 in the tax computations against the recovery of Rs. 1,000.

The Rs. 200 that is not covered will be taxed and that tax should be recognised for now.

**Definition: Deferred tax liability**

Deferred tax liabilities are the amounts of income taxes payable in future periods in respect of taxable temporary differences.

**Deductible temporary differences**

A deductible temporary difference is caused by a credit in the carrying amount of an asset or liability in the financial statements compared to the tax base of that item.

Deductible temporary differences lead to the recognition of deferred tax assets.

**Example: Deductible temporary differences**

Each of the following is a deductible temporary difference leading to the recognition of a deferred tax asset.

	Carrying amount	Tax base	Temporary difference	Deferred tax asset (30%)
Non-current asset (note 1)	1,000	1,200	(200)	60
Receivable	800	900	(100)	30
Payable	(1,200)	(1,000)	(200)	60

**Note 1:**

There is a debit balance for the non-current asset of Rs. 1,000 and its tax base is a debit of Rs. 1,200. Therefore, the financial statements show a credit balance of 200 compared to the tax base. This leads to a deferred tax asset.

**Definition: Deferred tax asset**

Deferred tax assets are the amounts of income taxes recoverable in future periods in respect of:

- deductible temporary differences;
- the carry forward of unused tax losses; and
- the carry forward of unused tax credits.

(The deferred tax assets arising from the carry forward of unused tax losses and the carry forward of unused tax credits are not in your syllabus).

### 3.3 Accounting for deferred tax

Accounting for deferred taxation involves the recognition of a liability (or an asset) in the statement of financial position at each year end. The business must then account for the movement on the liability.

The other side of the entry that changes the balance on the deferred taxation liability (asset) is recognised in the statement of profit or loss. (Note, that some differences require double entry to other comprehensive income or directly to equity but the deferred tax consequences of these is outside your syllabus).

#### Approach

The calculation of the balance to be recognised in the statement of financial position is quite straightforward.

- ❑ **Step 1:** Identify the temporary differences (this should always involve a columnar working as in the example below);
- ❑ **Step 2:** Multiply the temporary differences by the appropriate tax rate.
- ❑ **Step 3:** Compare this figure to the opening figure and complete the double entry.



#### Example:

X plc has non-current assets with a carrying value of Rs. 200,000 and a tax base of Rs. 140,000.

It has recognised a receivable of Rs. 10,000. This relates to income which is taxed on cash basis.

It has also accrued for an expense in the amount of Rs. 20,000. Tax relief is only given on this expense when it is paid.

At the start of the year X plc had a deferred tax liability of Rs. 12,000.

#### Required

Show the movement on the deferred tax account and construct the journal to record this movement.

In order to answer a question like this you need to complete the following proforma:

	<b>Rs.</b>
Deferred taxation balance at the start of the year	12,000
Transfer to the income statement (as a balancing figure)	?
Deferred taxation balance at the end of the year ( <b>working</b> )	?

In order to complete this you need a working to identify the temporary differences.

**Example continued:**

The temporary differences are identified and the required deferred tax balance calculated as follows:

**Working:**

	Carrying amount	Tax base	Temporary differences	DT balance at 30%
	Rs.	Rs.	Rs.	Rs.
Non-current assets	200,000	140,000	60,000	18,000 (liability)
Accrued income	10,000	–	10,000	3,000 (liability)
Accrued expense	(20,000)	–	(20,000)	(6,000) asset
			50,000	15,000

The answer can then be completed by filling in the missing figures and constructing the journal as follows:

	Rs.
Deferred taxation balance at the start of the year	12,000
Statement of profit or loss (as a balancing figure)	3,000
Deferred taxation balance at the end of the year (working)	15,000

Journal:	Debit	Credit
Income statement (tax expense)	3,000	
Deferred tax liability		3,000

### 3.4 Sources of temporary differences

Circumstances under which temporary differences arise include;

- ❑ Situations when income or expense is included in accounting profit in one period but included in the taxable profit in a different period. Examples include:
  - Items which are taxed on a cash basis but which will be accounted for on an accruals basis.
  - Situations where the accounting depreciation does not equal tax allowable depreciation.
- ❑ Revaluation of assets where the tax authorities do not amend the tax base when the asset is revalued. (Not in your syllabus).

#### Examples leading to the recognition of deferred tax liabilities

Interest may be received in arrears, leading to a receivable in the statement of financial position. However, this interest may not be taxable until the cash is received.



**Example:**

A plc recognises interest receivable of Rs. 600,000 in its financial statements. No cash has yet been received and interest is taxed on a cash basis. The interest receivable has a tax base of nil.

	Carrying amount	Tax base	Temporary difference
	Rs.	Rs.	Rs.
Interest receivable	600,000	–	600,000
Deferred tax liability @ 30%			180,000

Development costs may be capitalised and amortised (in accordance with IAS 38) but tax relief may be given for the development costs as they are paid.



**Example:**

In the year ended 30 June 2016, B Plc incurred development costs of Rs. 320,000. These were capitalised in accordance with IAS 38, with an amortisation charge of Rs. 15,000 in 2016.

Development costs are an allowable expense for tax purposes in the period in which they are paid. The relevant tax rate is 30%.

	Carrying amount	Tax base	Temporary difference
	Rs.	Rs.	Rs.
Development costs	305,000	–	305,000
Deferred tax liability @ 30%			91,500

Accounting depreciation is not deductible for tax purposes in most tax regimes. Instead the governments allow a deduction on statutory grounds.

**Example:**

C plc has non-current assets at 31 December 2015 with a cost of Rs. 5,000,000.

Accumulated depreciation for accounting purposes is Rs. 2,250,000 to give a carrying amount of Rs. 2,750,000

Tax deductible depreciation of Rs. 3,000,000 has been deducted to date.

The fixed assets have a tax base of Rs. 2,000,000.

	<b>Carrying amount</b>	<b>Tax base</b>	<b>Temporary difference</b>
	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
Non-current asset	2,750,000	2,000,000	750,000
Deferred tax liability @ 30%			225,000

**Examples leading to the recognition of deferred tax assets**

Warranty costs may be recognised as a liability (in accordance with IAS 37) but tax relief may be given only when the cash is spent in the future.

**Example:**

D plc recognises a liability of Rs. 100,000 for accrued product warranty costs.

For tax purposes, the product warranty costs will not be deductible until the entity pays any warranty claims. (Therefore the tax base is nil).

The company is very profitable and does not expect this to change. (This means that they expect to pay tax in the future so should be able to recover the deferred tax asset).

	<b>Carrying amount</b>	<b>Tax base</b>	<b>Temporary difference</b>
	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
Warranty provision	100,000	–	100,000
Deferred tax asset @ 30%			30,000

This time the financial statements contain a liability when compared to the tax authority's view of the situation. Therefore deferred tax is an asset.

It is possible to have a temporary difference even if there is no asset or liability. In such cases there is a zero value for the asset (or liability). For example, research costs may be expensed as incurred (in accordance with IAS 38) but tax relief may be given for the costs at a later date.



**Example:**

In the year ended 31 December 2015, E Plc incurred research costs of Rs. 500,000.

These were expensed accordance with IAS 38.

Research costs are not permitted as a taxable deduction until a later period.

The relevant tax rate is 30%.

	<b>Carrying amount</b>	<b>Tax base</b>	<b>Temporary difference</b>
	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
Research costs	nil	500,000	500,000
			<hr/>
Deferred tax asset @ 30%			150,000
			<hr/>

## 4 RECOGNITION AND MEASUREMENT RULES

### Section overview

- Recognition of deferred tax liabilities
- Recognition of deferred tax assets
- A recognition issue – non-taxable items
- Measurement of deferred tax balances

### 4.1 Recognition of deferred tax liabilities

A deferred tax liability must be recognised for all taxable temporary differences, except to the extent that the deferred tax liability arises from:

- the initial recognition of goodwill; or
- the initial recognition of an asset or liability in a transaction which:
  - is not a business combination; and
  - at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

There is further guidance on the recognition of deferred tax liabilities in respect of taxable temporary differences arising in a business combination but that is outside the scope of your syllabus.

#### Comment on the exceptions: Goodwill

Goodwill usually exists only in group accounts. Groups are not taxed as such: it is the members of a group that are the taxable entities, i.e. the parent and each subsidiary are taxed separately. Goodwill in group accounts is not an asset recognised by the tax authorities so has a tax base of nil. This means that goodwill is a temporary difference but does not lead to the recognition of a deferred tax liability because of the exception.



#### Example:

In the year ended 31 December 2015, A Plc acquired 80% of another company and recognised goodwill of Rs. 100,000 in respect of this acquisition.

The relevant tax rate is 30%.

	Carrying amount	Tax base	Temporary difference
	Rs.	Rs.	Rs.
Goodwill	100,000	nil	100,000
Deferred tax (due to the exception)			nil

The exception refers to the initial recognition of goodwill. However, there is no deferred tax in respect of this difference at any time in the future even if the carrying amount (and hence the temporary difference) changes..

In some jurisdictions goodwill can arise in individual company financial statements. Furthermore, the goodwill might be tax deductible in those jurisdictions. In such cases goodwill is just the same as any other asset and its tax consequences would be recognised in the same way.

**Example:**

In the year ended 31 December 2015, B Plc acquired a partnership and recognised good will of Rs. 100,000 in respect of this acquisition.

The relevant tax rate is 30%.

	<b>Carrying amount</b>	<b>Tax base</b>	<b>Temporary difference</b>
	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
Goodwill	100,000	100,000	nil
			<hr/>
Deferred tax on initial recognition			nil
			<hr/> <hr/>

In the future, both the carrying amount and the tax base of the goodwill might change leading to deferred tax consequences.

**Comment on the exceptions: Initial recognition of other items**

A temporary difference may arise on initial recognition of an asset or liability, for example if part or all of the cost of an asset will not be deductible for tax purposes. This exception relates to the initial recognition of an asset or liability in a transaction that is not a business combination. In other words, the exception does not apply if the initial recognition is due to a business combination. There is guidance on deferred tax arising in business combinations but this is not examinable at this level.

If the transaction is not a business combination and affects either accounting profit or taxable profit the exception does not apply and deferred tax is recognised on initial recognition.

**Example:**

In the year ended 31 December 2015, C Plc lent Rs. 100,000 to another company and incurred costs of Rs. 5,000 in arranging the loan. The loan is recognised at Rs. 105,000 in the accounts.

Under the tax rules in C Plc's jurisdiction the cost of arranging the loan is deductible in the period in which the loan is made.

The relevant tax rate is 30%.

	<b>Carrying amount</b>	<b>Tax base</b>	<b>Temporary difference</b>
	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
Loans and advances	105,000	100,000	5,000
			<hr/>
Deferred tax on initial recognition			1,500
			<hr/> <hr/>

The exception does not apply as the transaction affects the taxable profits on initial recognition.

If the transaction is not a business combination, and affects neither accounting profit nor taxable profit, deferred tax would normally be recognised but the exception prohibits it.



**Example:**

In the year ended 31 December 2015, D Plc acquired a non-current asset at a cost of Rs. 100,000. The asset is to be depreciated on a straight line basis over its useful life of 5 years.

The asset falls outside the tax system. Depreciation is not allowable for tax purposes and there is no tax deductible equivalent. Any gain on disposal is not taxable and any loss on disposal not taxable.

The relevant tax rate is 30%.

**Initial recognition:**

	Carrying amount	Tax base	Temporary difference
	Rs.	Rs.	Rs.
Non-current asset	100,000	nil	100,000
Deferred tax on initial recognition (due to the exception)			nil

**Subsequent measurement (1 year later)**

	Carrying amount	Tax base	Temporary difference
	Rs.	Rs.	Rs.
Non-current asset	80,000	nil	80,000
Deferred tax on initial recognition (due to the exception – this still results from the initial recognition)			nil

## 4.2 Recognition of deferred tax assets

A deferred tax asset must be recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised, unless the deferred tax asset arises from the initial recognition of an asset or liability in a transaction that:

- is not a business combination; and
- at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

There is further guidance on the recognition of deferred tax asset in respect of deductible temporary differences arising in a business combination but that is outside the scope of your syllabus.

A deferred tax asset must only be recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be used.

This means that IAS 12 brings a different standard to the recognition of deferred tax assets than it does to deferred tax liabilities:

- liabilities are always be recognised in full (subject to certain exemptions beyond the scope of your syllabus); but

- assets may not be recognised in full (or in some cases at all).

IAS 12 also requires that the carrying amount of a deferred tax asset must be reviewed at the end of each reporting period to check if it is still probable that sufficient taxable profit is expected to be available to allow the benefit of its use.

If this is not the case the carrying amount of the deferred tax asset must be reduced to the amount that it is expected will be used in the future. Any such reduction might be reversed in the future if circumstances change again.

### 4.3 A recognition issue – non-taxable items

The definition of temporary difference is repeated here for convenience:



#### Definition: Temporary difference

Temporary differences are differences between the carrying amount of an asset or liability in the statement of financial position and its tax base.

Deferred tax should be recognised only in respect of those items where expense or income is recognised in both accounting profit and taxable profit but in different periods.

Unfortunately, applying the definition of temporary difference given above would result in the inclusion of items where the difference might not be temporary but permanent in nature.



#### Example: Permanent difference.

E Plc has recognised Rs. 100,000 income as a receivable in its accounting profit for the year.

This income is not taxable. This means that it falls outside of the tax rules and in the absence of other guidance it would have a tax base of nil.

Applying the definition of temporary difference would lead to the following:

	Carrying amount	Tax base	Temporary difference
	Rs.	Rs.	Rs.
Receivable	100,000	nil	<u>100,000</u>

However, this is not a temporary difference. It is not a transaction recognised in accounting profits in one period and taxable profits in another.

It is never recognised in taxable profits.

IAS 12 contains rules to stop this happening (see in bold below).

Items not taxable or tax allowable should not result in the recognition of deferred tax balances. In order to achieve this effect, IAS 12 includes the following rules:

- The tax base of an asset is the amount that will be deductible for tax purposes against any taxable economic benefits that will flow to an entity when it recovers the carrying amount of the asset. **If those economic benefits will not be taxable, the tax base of the asset is equal to its carrying amount.**

- The tax base of a liability is its carrying amount, less any amount that will be deductible for tax purposes in respect of that liability in future periods. In the case of revenue which is received in advance, the tax base of the resulting liability is its carrying amount, less any amount of the revenue that will not be taxable in future periods.

Returning to the above example:



**Example: Permanent difference.**

E Plc has recognised Rs. 100,000 income as a receivable in its accounting profit for the year.

This income is not taxable.

Applying the rule shown in bold above would lead to the following:

	<b>Carrying amount</b>	<b>Tax base</b>	<b>Temporary difference</b>
	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
Receivable	100,000	100,000	nil

The item is not taxable so its tax base is set to be the same as its carrying amount.

This results in a nil temporary difference and prevents the recognition of deferred tax on this asset.

This sounds rather complicated but just remember that it is a mechanism to exclude non-taxable items from the consideration of deferred tax (even though the definition might have included them).

**Remember this: there is no deferred tax to recognise on items that are not taxed or for which no tax relief is given.**

#### **Closing comment**

Accounting for deferred taxation restores the relationship that should exist between the profit before tax in the financial statements, the tax rate and the tax charge. In earlier examples we saw that after accounting for deferred tax the tax expense (current and deferred tax) was equal to the tax rate  $\times$  the accounting profit before tax.

This will not be the case if there are permanent differences.

#### **4.4 Measurement of deferred tax balances**

Deferred tax assets and liabilities must not be discounted.

Deferred tax assets and liabilities must be measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

## 5 PRESENTATION AND DISCLOSURE

### Section overview

- Presentation
- Disclosure

### 5.1 Presentation

*IAS 12: Income taxes* contains rules on when current tax liabilities may be offset against current tax assets

#### Offset of current tax liabilities and assets

A company must offset current tax assets and current tax liabilities if, and only if, it:

- has a legally enforceable right to set off the recognised amounts; and
- intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

These are the same rules as apply to assets and liabilities in general as described in IAS 1.

In the context of taxation balances whether a current tax liability and asset may be offset is usually specified in tax law, thus satisfying the first criterion.

In most cases, where offset is legally available the asset would then be settled on a net basis (i.e. the company would pay the net amount).

#### Offset of deferred tax liabilities and assets

A company must offset deferred tax assets and deferred tax liabilities if, and only if:

- the entity has a legally enforceable right to set off current tax assets against current tax liabilities; and
- the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either:
  - the same taxable entity; or
  - different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

The existence of deferred tax liability is strong evidence that a deferred tax asset from the same tax authority will be recoverable.

**Example:**

The following deferred tax positions relate to the same entity:

	<b>Situation 1</b>	<b>Situation 2</b>
Deferred tax liability	12,000	5,000
Deferred tax asset	(8,000)	(8,000)
	<u>4,000</u>	<u>(3,000)</u>

In situation 1, the financial statements will report the net position as a liability of 4,000. The existence of the liability indicates that the company will be able to recover the asset, so the asset can be set off against the liability.

In situation 2, setting off the asset against the liability leaves a deferred tax asset of 3,000. This asset may only be recognised if the entity believes it is probable that it will be recovered in the foreseeable future.

## 5.2 Disclosure

*This section does not include the IAS 12 disclosure requirements in respect of those aspects of deferred taxation which are not examinable at this level.*

### Components of tax expense (income)

The major components of tax expense (income) must be disclosed separately.

Components of tax expense (income) may include:

- current tax expense (income);
- any adjustments recognised in the period for current tax of prior periods;
- the amount of deferred tax expense (income) relating to the origination and reversal of temporary differences;
- the amount of deferred tax expense (income) relating to changes in tax rates or the imposition of new taxes;
- the amount of the benefit arising from a previously unrecognised tax loss, tax credit or temporary difference of a prior period that is used to reduce current tax expense;
- deferred tax expense arising from the write-down, or reversal of a previous write-down, of a deferred tax asset;
- the amount of tax expense (income) relating to those changes in accounting policies and errors that are included in profit or loss in accordance with IAS 8, because they cannot be accounted for retrospectively.



### Illustration: Note to the statement of profit or loss

<b>Taxation expense</b>	<b>Rs.</b>
Current tax	129,000
Adjustment for over estimate of tax in prior year	(5,000)
<b>Deferred taxation</b>	
Arising during the period	20,000
Due to change in tax rate	(5,000)
	<u>15,000</u>
	<u><u>139,000</u></u>

**Example: Change in rate****31 December 2015**

Profits were taxed at 30%.

A Plc recognised a deferred tax liability of Rs. 30,000 (it had temporary differences of Rs. 100,000).

**31 December 2016**

The tax rate changed to 25% during the year.

At the year-end A Plc carried out the following deferred tax calculation:

	Carrying amount	Tax base	Temporary difference
	Rs.	Rs.	Rs.
Non-current assets	1,000,000	820,000	180,000
Deferred tax at 25%			45,000

The movement on the deferred tax liability would be shown as follows:

	Rs.
Deferred taxation b/f	30,000
Statement of profit or loss: Rate change ( $5/30 \times 30,000$ )	(5,000)
Deferred taxation b/f restated	25,000
Statement of profit or loss (balancing figure – due to the origination of temporary differences in the period)	20,000
Deferred taxation balance at the end of the year (working)	45,000

Journal:	Debit	Credit
Income statement (tax expense)		5,000
Income statement (tax expense)	20,000	
Deferred tax liability		15,000

**Tax reconciliation**

The following must also be disclosed:

- an explanation of the relationship between tax expense (income) and accounting profit in either or both of the following forms:
  - a numerical reconciliation between tax expense (income) and the product of accounting profit multiplied by the applicable tax rate(s), disclosing also the basis on which the applicable tax rate(s) is (are) computed; or
  - a numerical reconciliation between the average effective tax rate and the applicable tax rate, disclosing also the basis on which the applicable tax rate is computed;
- an explanation of changes in the applicable tax rate(s) compared to the previous accounting period;

A major theme in this chapter is that the different rules followed to calculate accounting profit and taxable profit lead to distortion of the relationship that exists between profit before tax in the financial statements, the tax rate and the current tax expense for the period. Accounting for deferred tax corrects this distortion so that after accounting for deferred tax the tax expense (current and deferred tax) was equal to the tax rate  $\times$  the accounting profit before tax.

This is not the case if there are permanent differences. The above reconciliations show the effect of permanent differences.



### Example: Tax reconciliations

B Plc had an accounting profit before tax of Rs. 500,000.

This contained income of Rs. 20,000 which is not taxable.

Accounting depreciation in the year was Rs. 100,000 and tax allowable depreciation was Rs. 150,000. This means that a temporary difference of Rs. 50,000 originated in the year.

<b>B Plc's taxation computation is as follows:</b>	<b>Rs.</b>
Accounting profit	500,000
Add back inadmissible deductions	
Depreciation	100,000
Deduct admissible deduction	
Tax allowable depreciation	150,000
Income not taxed	20,000
	(170,000)
Taxable profit	430,000
Tax at 30%	129,000
<b>Tax expense</b>	<b>Rs.</b>
Current tax	129,000
Deferred taxation (30% $\times$ Rs. 50,000)	15,000
Tax expense	144,000
<b>Tax reconciliation (in absolute numbers)</b>	<b>Rs.</b>
Accounting profit	500,000
Applicable tax rate	30%
Accounting profit $\times$ the applicable tax rate	150,000
Tax effect of untaxed income (30% of Rs. 20,000)	(6,000)
Tax expense	144,000
<b>Tax reconciliation (in percentages)</b>	
Applicable tax rate	30.0%
Tax effect of untaxed income $(\frac{6,000}{500,000})$	(1.2%)
Effective tax rate $(\frac{144,000}{500,000})$	28.8%

### **Other disclosures**

An entity must disclose the amount of income tax consequences of dividends to shareholders of the entity that were proposed or declared before the financial statements were authorised for issue, but are not recognised as a liability in the financial statements;

An entity must disclose the amount of a deferred tax asset and the nature of the evidence supporting its recognition, when:

- ❑ the utilisation of the deferred tax asset is dependent on future taxable profits in excess of the profits arising from the reversal of existing taxable temporary differences; and
- ❑ the entity has suffered a loss in either the current or preceding period in the tax jurisdiction to which the deferred tax asset relates.



### Practice questions

**1**

XYZ Limited had an accounting profit before tax of Rs. 90,000 for the year ended 31<sup>st</sup> December 2015. The tax rate is 30%.

The following balances and information are relevant as at 31st December 2015.

Non-current assets	Rs.	Rs.	
Property	63,000		1
Plant and machinery	100,000	90,000	2
Assets held under finance lease	80,000		3
<b>Receivables:</b>			
Trade receivables	73,000		4
Interest receivable	1,000		5
<b>Payables</b>			
Fine	10,000		
Finance lease obligation	85,867		3
Interest payable	3,300		5

**Note 1:** The property cost the company Rs.70,000 at the start of the year. It is being depreciated on a 10% straight line basis for accounting purposes.

The company's tax advisers have said that the company can claim Rs.42,000 accelerated depreciation as a taxable expense in this year's tax computation.

**Note 2:** The balances in respect of plant and machinery are after providing for accounting depreciation of Rs. 12,000 and tax allowable depreciation of Rs.10,000 respectively.

**Note 3:** The asset held under the finance lease was acquired during the period.

The tax code does not distinguish between finance leases and operating leases. Rental expense for leases is tax deductible. The annual rental for the asset is Rs.28,800 and was paid on 31st December 2016.

**Note 4:** The receivables figure is shown net of an allowance for doubtful balances of Rs. 7,000. This is the first year that such an allowance has been recognised. A deduction for debts is only allowed for tax purposes when the debtor enters liquidation.

**Note 5:** Interest income is taxed and interest expense is allowable on a cash basis. There were no opening balances on interest receivable and interest payable.

- Prepare a tax computation and calculate the current tax expense.
- Calculate the deferred tax liability required as at 31 December 2015.
- Show the movement on the deferred tax account for the year ended 31 December 2015 given that the opening balance was Rs. 3,600 Cr.
- Prepare a note showing the components of the tax expense for the period.
- Prepare a reconciliation between the tax expense and the product of the accounting profit multiplied by the applicable rate.

## SOLUTIONS TO PRACTICE QUESTIONS

<b>Solution: Tax computation for the year ended 31 December 2015</b>		<b>1a</b>
	Rs.	Rs.
<b>Accounting profit</b>		90,000
<b>Add back inadmissible expenses</b>		
Depreciation on property	7,000	
Depreciation of plant and machinery	12,000	
Depreciation of asset held under finance lease	20,000	
Finance charge re finance lease	14,667	
Increase in provision for doubtful debts	7,000	
Interest payable accrual	3,300	
Fine	10,000	73,967
<b>Less admissible deductions</b>		
Interest income	1,000	
Tax allowable depreciation on property	42,000	
Tax allowable depreciation on plant and machinery	10,000	
Lease rentals	28,800	(81,800)
		<u>82,167</u>
Tax 30%		<u><u>24,650</u></u>

<b>Solution: Deferred tax liability as 31 December 2015</b>				<b>1b</b>
	Carrying value	Tax base	Temporary difference	
	Rs.	Rs.	Rs.	
Property	63,000	28,000	35,000	
Plant and machinery	100,000	90,000	10,000	
Assets held under finance lease	80,000	nil	80,000	
Finance lease obligation	(85,867)	nil	(85,867)	
	(5,867)	nil	(5,867)	
Trade receivables	73,000	80,000	(7,000)	
Interest receivable	1,000	nil	1,000	
Fine	(10,000)	(10,000)	–	
Interest payable	(3,300)	nil	(3,300)	
			<u>29,833</u>	
Deferred tax @ 30%			<u>8,950</u>	
		Temporary differences	Deferred tax @ 30%	
Deferred tax liabilities		46,000	13,800	
Deferred tax assets		(16,167)	(4,850)	
			<u><u>8,950</u></u>	

**Solution: Movement on the deferred tax account for the year ended 31 December 2015. 1c**

	Rs.
Deferred tax as at 1st January 2016	3,600
Statement of profit or loss (balancing figure)	5,350
Deferred tax as at 31st December 2016	<u>8,950</u>

**Solution: Components of tax expense for the year ended 31 December 2015. 1d**

	Rs.
Current tax expense (see part a)	24,650
Deferred tax (see part c)	5,350
Tax expense	<u>30,000</u>

**Solutions: Tax reconciliation for the year ended 31 December 2015. 1e**

	Rs.
Accounting profit	<u>90,000</u>
Tax at the applicable rate (30%)	27,000
Tax effects of expenses that are not deductible in determining taxable profit	
Fines	3,000
Tax expense	<u>30,000</u>



## Ratio analysis

### Contents

- 1 Purpose of financial ratio analysis
- 2 Return on capital, profitability and asset turnover
- 3 Working capital efficiency ratios
- 4 Liquidity ratios
- 5 Debt ratios

## INTRODUCTION

### Learning outcomes

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

**LO6                    On the successful completion of this paper, candidates will be able to analyse the financial statements of a company using various ratios**

LO6.1.1            Compute various ratios from data and information provided

- Current ratio
- Acid-test ratio / quick ratio
- Gross profit
- Return on equity
- Return on assets
- Return on capital employed
- Debt-equity ratio
- Inventory turnover
- Debtor turnover
- Creditor turnover

## 1 PURPOSE OF FINANCIAL RATIO ANALYSIS

### Section overview

- Obtaining information from the financial statements: financial ratios
- Uses of ratios
- Categories of financial ratios
- Users of the financial statements and their information needs

### 1.1 Obtaining information from the financial statements: financial ratios

Financial statements are used to make decisions. They are used by shareholders and investors, and also by lenders, as well as by management. The financial statements contain a large number of figures, but the figures themselves do not necessarily have much meaning to a user of the financial statements. However, the figures can be analysed and interpreted by calculating financial ratios.

Financial ratios can help the user of the financial statements to assess:

- the financial position of the entity, and
- its financial performance

### 1.2 Uses of ratios

Financial ratios can be used to make comparisons:

- Comparisons over a number of years. By looking at the ratios of a company over a number of years, it might be possible to detect improvements or deterioration in the financial performance or financial position of the entity. Ratios can therefore be used to make comparisons over time, and to identify changes or trends
- Comparisons with the similar ratios of other, similar companies for the same period.
- In some cases, perhaps, comparisons with 'industry average' ratios.

### 1.3 Categories of financial ratios

The main financial ratios can be classified as:

- financial performance: return on capital, profitability and use of assets
- working capital 'turnover' ratios
- liquidity ratios
- debt ratios
- investor ratios

### 1.4 Users of the financial statements and their information needs

The IASB Conceptual Framework identifies several groups of people who may use financial statements:

- investors and potential investors
- lenders

- ❑ employees
- ❑ suppliers
- ❑ customers
- ❑ government and government agencies
- ❑ the general public

All these groups are interested in financial performance, financial position and cash flows, but some users are mainly interested in performance and profitability, while others may be more interested in liquidity and gearing or other matters.

For example:

- ❑ A private investor needs to know whether to continue to hold shares or to sell them. He or she will tend to be most interested in profitability ratios (such as gross and net profit margin and return on capital employed) and investor ratios (such as earnings per share, dividend cover and price earnings ratio).
- ❑ A potential acquirer needs information about an entity's profitability and probably also information about whether or not the entity is managed efficiently. The acquirer's management is likely to focus on profit margins, return on capital employed, asset turnover and working capital ratios.
- ❑ A bank that has been approached to lend money to an entity needs to know whether it will receive interest payments when these are due and whether the money that it lends will eventually be repaid. A bank manager will normally be most interested in cash flows and liquidity ratios (current ratio, acid test ratio) gearing and interest cover. A potential lender will also be interested in predicting future performance as without sales there will be no cash.

An examination question might ask you to interpret an entity's financial statements for the benefit of specific people or groups of people. Therefore your analysis should focus on the needs of the user. What do they need to know? What are they interested in? What decision do they need to make?

## 2 RETURN ON CAPITAL, PROFITABILITY AND ASSET TURNOVER

### Section overview

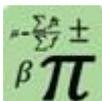
- Return on capital employed
- Return on shareholder capital (equity)
- Return on assets
- Analysing return: profitability and asset utilisation
- Profit/sales ratio (and cost/sales ratios)
- Sales/capital employed ratio
- Percentage annual growth in sales

The aim of 'profitability ratios' is to assess the financial performance of a profit-making entity and the return that it makes on the capital invested.

### 2.1 Return on capital employed

Profit-making companies should try to make a profit that is large enough in relation to the amount of money or capital invested in the business. The most important profitability ratio is probably return on capital employed or ROCE.

For a single company:



#### Formula:

$$\text{ROCE} = \frac{\text{Profit before interest and taxation}}{(\text{Share capital and reserves} + \text{long-term debt capital} + \text{preference share capital})} \times 100\%$$

The capital employed is the share capital and reserves, plus long-term debt capital such as bank loans, bonds and loan stock.

Where possible, use the average capital employed during the year. This is usually the average of the capital employed at the beginning of the year and end of the year.

**Example:**

Sting Company achieved the following results in Year 1.

	1 January Year 1	31 December Year 1
	Rs.	Rs.
Share capital	200,000	200,000
Share premium	100,000	100,000
Retained earnings	500,000	600,000
Bank loans	200,000	500,000
	Rs.	
Profit before tax	210,000	
Income tax expense	65,000	
Profit after tax	<u>145,000</u>	

Interest charges on bank loans were Rs.30,000. Dividend payments to shareholders were Rs.45,000. Sales during the year were Rs.5,800,000.

**Required**

Calculate the return on capital employed for Year 1.

**Answer**

Capital employed at the beginning of the year = Rs.1,000,000.

Capital employed at the end of the year = Rs.1,400,000.

Average capital employed =  $[\text{Rs.1,000,000} + \text{Rs.1,400,000}] / 2 = \text{Rs.1,200,000}$ .

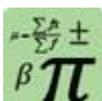
Profit before interest and taxation = Rs.210,000 + Rs.30,000 = Rs.240,000.

$$\text{ROCE} = \frac{240,000}{1,200,000} \times 100\% = 20\%$$

This ROCE figure can be compared with the ROCE achieved by the company in previous years, and with the ROCE achieved by other companies, particularly competitors.

## 2.2 Return on shareholder capital (equity)

Return on shareholder capital (ROSC), or return on equity, measures the return on investment that the shareholders of the company have made. This ratio normally uses the values of the shareholders' investment as shown in the statement of financial position (rather than market values of the shares).

**Formula:**

$$\text{ROSC} = \frac{\text{Profit after taxation and preference dividend}}{\text{Share capital and reserves}} \times 100\%$$

The average value of shareholder capital should be used if possible. This is the average of the shareholder capital at the beginning and the end of the year.

Profit after tax is used as the most suitable measure of return for the shareholders, since this is a measure of earnings (available for payment as dividends or for reinvestment in the business).

**Example:**

Using the figures in the previous example:

Shareholders' capital at the beginning of the year = Rs.200,000 + Rs.100,000 + Rs.500,000 = Rs.800,000.

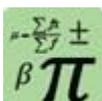
Shareholders' capital at the end of the year = Rs.200,000 + Rs.100,000 + Rs.600,000  
= Rs.900,000.

Average shareholders' capital employed = [Rs.800,000 + Rs.900,000]/2 = Rs.850,000.

$$\text{ROSC} = \frac{145,000}{850,000} \times 100\% = 17.06\%$$

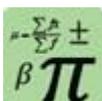
**Groups of companies and ROSC**

When calculating the ROSC for a group of companies, the main focus of attention is normally the return on the investment of the shareholders in the parent company. The ROSC should therefore be calculated as:

**Formula:**

$$\text{ROSC (group)} = \frac{\text{Profit after taxation and minority interest}}{\text{Equity attributable to equity holders of the parent company}} \times 100\%$$

The share capital and reserves should not include the non-controlling interest (minority interest) in the equity reserves.

**2.3 Return on assets****Formula:**

$$\text{ROA} = \frac{\text{Profit before interest and taxation}}{\text{Assets}} \times 100\%$$

The normal convention is to use 'total assets' which includes both current and non-current assets. However, other variations are sometimes used such as non-current assets only.

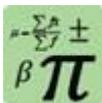
**2.4 Analysing return: profitability and asset utilisation**

The size of the return on capital employed, or the size of the return on shareholders' capital, depends on two factors:

- the profitability of the goods or services that the entity has sold
- the volume of sales that the entity has achieved with the capital and assets it has employed: this is known as asset utilisation or asset turnover.

## 2.5 Profit/sales ratio (and cost/sales ratios)

The profit/sales ratio is the ratio of the profit that has been achieved for every Rs.1 of sales.



### Formula:

$$\text{Profit/sales ratio} = \frac{\text{Profit}}{\text{Sales}} \times 100\%$$

Profit/sales ratios are commonly used by management to assess financial performance, and a variety of different figures for profit might be used.

The definition of profit can be any of the following:

- Profit before interest and tax
- Gross profit (= Sales minus the Cost of sales) = '**gross profit ratio**'
- Net profit (= Profit after tax) = '**net profit ratio**'.

It is important to be consistent in the definition of profit, when comparing performance from one year to the next.

The gross profit ratio is often useful for comparisons between companies in the same industry, or for comparison with an industry average.

It is also useful to compare the net profit ratio with the gross profit ratio. A high gross profit ratio and a low net profit ratio indicate high overhead costs for administrative expenses and selling and distribution costs.



### Example:

Using the figures in the previous example, profit/sales ratios can be calculated as follows:

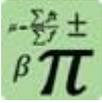
- If profit is defined as profit **before** interest and tax, the profit/sales ratio = Rs.240,000/Rs.5,800,000 = 0.0414 = 4.14%
- If profit is defined as profit **after** interest and tax, the profit/sales ratio = Rs.145,000/Rs.5,800,000 = 0.025 = 2.5%

It is also useful to monitor the ratio of costs to sales:

- Ratio of (Cost of sales/Sales) × 100%
- Ratio of (Administration costs/Sales) × 100%
- Ratio of (Selling and distribution costs/Sales) × 100%

## 2.6 Sales/capital employed ratio

The sales/capital employed ratio is also called the 'asset turnover ratio'. It measures the amount of sales achieved during the period for each Rs.1 of investment in assets.

**Formula:**

$$\text{Asset turnover ratio} = \frac{\text{Sales}}{(\text{Share capital and reserves} + \text{long-term debt capital})}$$

It is measured as 'x times a year'.

The sales/capital employed ratio is also a ratio of sales to (assets – current liabilities). This is because capital employed = total assets minus liabilities excluding long-term debt.

**Example:**

Using the figures in the previous example, the asset turnover ratio = Rs.5,800,000/Rs.1,200,000 = 4.83 times.

Note that:

**ROCE = Profit/sales ratio × Asset turnover ratio**

(where profit is defined as profit before interest and taxation).

Using the figures in the previous example:

<b>ROCE</b>	<b>=</b>	<b>Profit/sales</b>	<b>×</b>	<b>Sales/capital employed</b>
$\frac{240,000}{1,200,000}$	<b>=</b>	$\frac{240,000}{5,800,000}$	<b>×</b>	$\frac{5,800,000}{1,200,000}$
20%	<b>=</b>	4.14%	<b>×</b>	4.83 times

## 2.7 Percentage annual growth in sales

It can be useful to measure the annual growth (or decline) in sales, measured as a percentage of sales in the previous year.

For example, if sales in the year just ended were Rs.5,800,000 and sales in the previous year were Rs.5,500,000, the annual growth in sales has been (Rs.300,000/Rs.5,500,000) × 100% = 5.45%.

### 3 WORKING CAPITAL EFFICIENCY RATIOS

#### Section overview

- Purpose of working capital efficiency ratios
- Average time to collect (receivables days or days sales outstanding)
- Average time for holding inventory
- Average time to pay suppliers
- Cash operating cycle/working capital cycle
- Turnover (multiples) ratios
- Working capital efficiency ratios and consolidated accounts

#### 3.1 Purpose of working capital efficiency ratios

Working capital efficiency ratios measure the efficiency with which the entity has managed its receivables, inventory and trade payables. The ratios are usually measured in terms of an average number of days.

The working capital ratios are a useful measure of whether the entity has too much or too little invested in working capital.

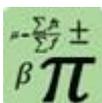
**Excessive investment in working capital** is indicated by a long cash cycle (a long working capital cycle) that appears to be getting even longer. When too much is invested in working capital, the return on capital employed and ROSC will be lower than they should be.

**Under-investment in working capital** is an indication of possible liquidity difficulties. When working capital is low in comparison with the industry average, this might indicate that current assets are being financed to an excessive extent by current liabilities, particularly trade payables and a bank overdraft.

(The cash cycle, also called the operating cycle and the working capital cycle, is explained later).

#### 3.2 Average time to collect (receivables days or days sales outstanding)

This ratio estimates the time that it takes on average to collect the payment from customers after the sale has been made. It could be described as the average credit period allowed to customers or the 'average collection period'.



##### Formula:

$$\text{Average days to collect} = \frac{\text{Trade receivables}}{\text{Sales}} \times 365 \text{ days}$$

Trade receivables should be the average value of receivables during the year. This is the average of the receivables at the beginning of the year and the receivables at the end of the year.

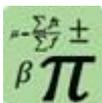
However, the value for receivables at the end of the year is also commonly used.

Sales are usually taken as total sales for the year. However, if sales are analysed into credit sales and cash sales, it is probably more appropriate to use the figure for credit sales only.

The average time to collect money from credit customers should not be too long. A long average time to collect suggests inefficient collection of amounts due from receivables.

### 3.3 Average time for holding inventory

This ratio is an estimate of the average time that inventory is held before it is used or sold.



#### Formula:

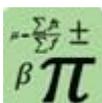
$$\text{Inventory holding period} = \frac{\text{Inventory}}{\text{Cost of sales}} \times 365 \text{ days}$$

In theory, inventory should be the average value of inventory during the year. This is the average of the inventory at the beginning of the year and the inventory at the end of the year.

However, the value for inventory at the end of the year is also commonly used, particularly in examinations.

### 3.4 Average time to pay suppliers

The average time to pay suppliers may be calculated as follows:



#### Formula:

$$\text{Average time to pay} = \frac{\text{Trade payables}}{\text{Cost of purchases}} \times 365 \text{ days}$$

Trade payables should be the average value of trade payables during the year. This is the average of the trade payables at the beginning of the year and the trade payables at the end of the year.

However, the value for trade payables at the end of the year is also commonly used. When the cost of purchases is not available, the **cost of sales** should be used instead. This figure is obtained from the profit and loss information in the statement of profit or loss and other comprehensive income.



#### Example:

The following information is available for The Brush Company for Year 1.

	1 January Year 1	31 December Year 1
	Rs.	Rs.
Inventory	300,000	360,000
Trade receivables	400,000	470,000
Trade payables	150,000	180,000

Sales in Year 1 totalled Rs.3,000,000 and the cost of sales was Rs.1,800,000.

#### Required

Calculate the working capital turnover ratios.

**Answer**

Average inventory =  $[\text{Rs.}300,000 + \text{Rs.}360,000]/2 = \text{Rs.}330,000$

Average trade receivables =  $[\text{Rs.}400,000 + \text{Rs.}470,000]/2 = \text{Rs.}435,000$

Average trade payables =  $[\text{Rs.}150,000 + \text{Rs.}180,000]/2 = \text{Rs.}165,000$ .

**Turnover ratios**

Average days to collect =  $[435,000/3,000,000] \times 365 \text{ days} = 52.9 \text{ days}$

Inventory turnover period =  $[330,000/1,800,000] \times 365 \text{ days} = 66.9 \text{ days}$

Average time to pay =  $[165,000/1,800,000] \times 365 \text{ days} = 33.5 \text{ days}$ .

### 3.5 Cash operating cycle/working capital cycle

The cash operating cycle or working capital cycle is the average time of one cycle of business operations:

- from the time that suppliers are paid for the resources they supply
- to the time that cash is received from customers for the goods (or services) that the entity makes (or provides) with those resources and then sells.

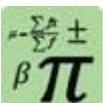
A cash cycle or operating cycle is measured as follows. Figures are included for the purpose of illustration:

	Days	Days
Inventory turnover	A	40.2
Average days to collect	B	88.2
		128.4
Average time to pay	(C)	(33.5)
Cash cycle/operating cycle	A + B – C	94.9

The working capital ratios and the length of the cash cycle should be monitored over time. The cycle should not be allowed to become unreasonable in length, with a risk of over-investment or under-investment in working capital.

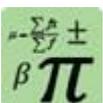
### 3.6 Turnover (multiples) ratios

#### Inventory turnover

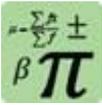
**Formula:**

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

#### Receivables (debtor) turnover

**Formula:**

$$\text{Receivables turnover} = \frac{\text{Credit sales}}{\text{Average trade receivables}} \text{ times}$$

**Payables (creditor) turnover****Formula:**

$$\text{Payables turnover} = \frac{\text{Credit purchases}}{\text{Average trade payables}} \text{ times}$$

**3.7 Working capital efficiency ratios and consolidated accounts**

Working capital efficiency ratios can be calculated from consolidated accounts, in the same way as for the financial statements of an individual company. However, the ratios obtained will be ratios for the group as if it were a single operating unit.

This could be misleading. Poor working capital efficiency in some subsidiaries may be hidden by reasonably good ratios in other subsidiaries.

## 4 LIQUIDITY RATIOS

### Section overview

- The meaning of liquidity
- Current ratio
- Quick ratio or acid test ratio
- Liquidity ratios and consolidated accounts

### 4.1 The meaning of liquidity

Liquidity means having cash or access to cash readily available to meet obligations to make payments

For the purpose of ratio analysis, liquidity is measured on the assumption that the only sources of cash available are:

- cash in hand or in the bank, plus
- current assets that will soon be converted into cash during the normal cycle of trade.

It is also assumed that the only immediate payment obligations faced by the entity are its current liabilities.

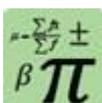
There are two ratios for measuring liquidity:

- current ratio
- quick ratio, also called the acid test ratio.

The more suitable ratio for use depends on whether inventory is considered a liquid asset that will soon be used or sold, and converted into cash from sales.

### 4.2 Current ratio

The current ratio is the ratio of current assets to current liabilities.



#### Formula:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

The amounts of current assets and current liabilities in the statement of financial position at the end of the year may be used. It is not necessary to use average values for the year.

It is sometimes suggested that there is an 'ideal' current ratio of 2.0 times (2:1).

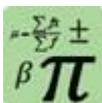
However, this is not necessarily true and in some industries, much lower current ratios are normal. It is important to assess the liquidity ratios by considering:

- changes in the ratio over time
- the liquidity ratios of other companies in the same period
- the industry average ratios.

Liquidity should be monitored by looking at changes in the ratio over time.

### 4.3 Quick ratio or acid test ratio

The quick ratio or acid test ratio is the ratio of current assets excluding inventory to current liabilities. Inventory is excluded from current assets on the assumption that it is not a very liquid item.



**Formula:**

$$\text{Quick ratio} = \frac{\text{Current assets excluding inventory}}{\text{Current liabilities}}$$

The amounts of current assets and current liabilities in the statement of financial position at the end of the year may be used. It is not necessary to use average values for the year.

This ratio is a better measurement of liquidity than the current ratio when inventory turnover times are very slow, and inventory is not a liquid asset.

It is sometimes suggested that there is an 'ideal' quick ratio of 1.0 times (1:1).

However, this is not necessarily true and in some industries, much lower quick ratios are normal. As indicated earlier, it is important to assess liquidity by looking at changes in the ratio over time, and comparisons with other companies and the industry norm.

### 4.4 Liquidity ratios and consolidated accounts

Liquidity ratios are more informative when they are calculated for individual companies. When liquidity ratios are calculated from a consolidated statement of financial position, they are average measures for all the companies in the group. The average liquidity ratios for the group might hide the fact that there may be poor liquidity in some of the subsidiaries in the group.

## 5 DEBT RATIOS

### Section overview

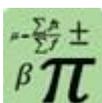
- Gearing (debt:equity) ratio
- Interest cover ratio

Debt ratios are used to assess whether the total debts of the entity are within control and are not excessive.

### 5.1 Gearing (debt:equity) ratio

Gearing, also called leverage, measures the total long-term debt of a company as a percentage of either:

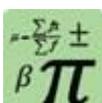
- the equity capital in the company, or
- the total capital of the company



#### Formula:

$$\text{Gearing} = \frac{\text{Long-term debt}}{\text{Share capital and reserves}} \times 100\%$$

Alternatively:



#### Formula:

$$\text{Gearing} = \frac{\text{Long-term debt}}{\text{Share capital and reserves} + \text{Long-term debt}} \times 100\%$$

It is usually appropriate to use the figures from the statement of financial position at the end of the year. However, a gearing ratio can also be calculated from average values for the year.

When there are redeemable preference shares it is usual to include them within debt capital. This is because redeemable preference shares behave more like a long-term loan or bond with fixed annual interest followed by future redemption.

Irredeemable preference shares behave more like Equity (as they are never redeemed) and should therefore be treated as equity.

A company is said to be **high-g geared** or **highly-leveraged** when its debt capital exceeds its share capital and reserves. This means that a company is high-g geared when the gearing ratio is above either 50% or 100%, depending on which method is used to calculate the ratio.

A company is said to be **low-g geared** when the amount of its debt capital is less than its share capital and reserves. This means that a company is low-g geared when the gearing ratio is less than either 50% or 100%, depending on which method is used to calculate the ratio.

A high level of gearing may indicate the following:

- ❑ The entity has a high level of debt, which means that it might be difficult for the entity to borrow more when it needs to raise new capital.
- ❑ High gearing can indicate a risk that the entity will be unable to meet its payment obligations to lenders, when these obligations are due for payment.

The gearing ratio can be used to monitor changes in the amount of debt of a company over time. It can also be used to make comparisons with the gearing levels of other, similar companies, to judge whether the company has too much debt, or perhaps too little, in its capital structure.

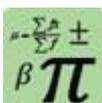
### Gearing and consolidated accounts

The gearing ratio for a group of companies is difficult to interpret, because the debt will be spread over several entities in the group.

When measuring gearing, the total capital or equity capital (the denominator in the ratio) should include non-controlling interests (minority interests).

## 5.2 Interest cover ratio

Interest cover measures the ability of the company to meet its obligations to pay interest.



### Formula:

$$\text{Interest cover} = \frac{\text{Profit before interest and tax}}{\text{Interest charges in the year}}$$

Profit before interest and taxation is calculated by adding the interest charges for the year to the figure for profit before taxation.

An interest cover ratio of less than 3.0 times is considered very low, suggesting that the company could be at risk from too much debt in relation to the amount of profits it is earning.

**Example:**

You are given the following information about Company R:

**At 31 December Year 6**

	Rs.000
Total assets	5,800
Share capital	1,200
Reserves	2,400
	3,600
Long-term liabilities (Bank loans)	1,500
Current liabilities	700
	<u>5,800</u>

**For the year to 31 December Year 6**

	Rs.000
Profit before interest and taxation	700
Interest	(230)
	<u>470</u>
Taxation	(140)
Profit after taxation	<u>330</u>

**Required**

Use this data to calculate:

- the gearing ratio at 31 December Year 6
- the interest cover in Year 6.

**Answer**

$$\text{Gearing} = \frac{1,500}{3,600} \times 100\% = 41.7\%$$

Alternatively:

$$\text{Gearing} = \frac{1,500}{(3,600 + 1,500)} \times 100\% = 29.4\%$$

(The company is fairly low-g geared.)

$$\text{Interest cover} = \frac{700}{230} = 3.04 \text{ times}$$

(This is fairly low.)

## Ethical issues in financial reporting

### Contents

- 1 ICAP Code of Ethics
- 2 Preparation and reporting of information

## INTRODUCTION

The overall objective of the syllabus is to broaden the knowledge base of basic accounting acquired in earlier modules with emphasis on International Financial Reporting Standards.

### Learning outcomes

**LO 5            Demonstrate knowledge of basic ethical issues in preparation and reporting of financial information (Section 320 of Code of Ethics for Chartered Accountants).**

LO5.1.1:        Describe with examples the fundamental principles of professional ethics of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

LO5.1.2:        Apply the conceptual framework to identify, evaluate and address threats to compliance with fundamental principle.

LO5.1.1        Explain using simple examples the ethical responsibilities of a chartered accountant in preparation and reporting of financial information.

## 1 ICAP CODE OF ETHICS

### Section overview

- Introduction
- The fundamental principles
- Threats to the fundamental principles

#### 1.1 Introduction

Ethics can be difficult to define but it is principally concerned with human character and conduct. Ethical behaviour is more than obeying laws, rules and regulations. It is about doing ‘the right thing’. The accountancy profession is committed to acting ethically and in the public interest.

Professional accountants may find themselves in situations where values are in conflict with one another due to responsibilities to employers, clients and the public.

ICAP has a code of conduct which members and student members must follow. The code provides guidance in situations where ethical issues arise.

#### Comment

Most people are honest and have integrity and will always try to behave in the right way in a given set of circumstances. However, accountants might face situations where it is not easy to see the most ethical course of action. One of the main roles of the ICAP code is to provide guidance in these situations.

#### Impact on members in practice

All members and student members of ICAP are required to comply with the code of ethics and it applies to both accountants in practice and in business.

This chapter explains ethical issues surrounding the preparation of financial statements and other financial information.

#### 1.2 The fundamental principles

ICAP’s Code of Ethics expresses its guidance in terms of five fundamental principles. . These are:

- integrity;
- objectivity;
- professional competence and due care;
- confidentiality; and
- professional behaviour

#### Integrity

Members should be straightforward and honest in all professional and business relationships. Integrity implies not just honesty but also fair dealing and truthfulness.

A chartered accountant should not be associated with reports, returns, communications or other information where they believe that the information:

- Contains a materially false or misleading statement;
- Contains statements or information furnished recklessly; or
- Omits or obscures information required to be included where such omission or obscurity would be misleading.

### **Objectivity**

Members should not allow bias, conflicts of interest or undue influence of others to override their professional or business judgements.

A chartered accountant may be exposed to situations that may impair objectivity. It is impracticable to define and prescribe all such situations.

Relationships that bias or unduly influence the professional judgment of the chartered accountant should be avoided.

### **Professional competence and due care**

Practising as a chartered accountant involves a commitment to learning over one's entire working life.

Members have a duty to maintain their professional knowledge and skill at such a level that a client or employer receives a competent service, based on current developments in practice, legislation and techniques. Members should act diligently and in accordance with applicable technical and professional standards.

Continuing professional development develops and maintains the capabilities that enable a chartered accountant to perform competently within the professional environments.

### **Confidentiality**

Members must respect the confidentiality of information acquired as a result of professional and business relationships and should not disclose such information to third parties without authority or unless there is a legal or professional right or duty to disclose.

Confidential information acquired as a result of professional and business relationships should not be used for the personal advantage of members or third parties.

### **Professional behaviour**

Members must comply with relevant laws and regulations and should avoid any action which discredits the profession. They should behave with courtesy and consideration towards all with whom they come into contact in a professional capacity.

## **1.3 Threats to the fundamental principles**

Compliance with the fundamental principles may potentially be threatened by a broad range of circumstances. Many threats fall into the following categories:

- Self-interest;
- Self-review;
- Advocacy;
- Familiarity; and
- Intimidation.

Members must identify, evaluate and respond to such threats. Unless any threat is clearly insignificant, members must implement safeguards to eliminate the threats or reduce them to an acceptable level so that compliance with the fundamental principles is not compromised.

### Self-interest threats

Self-interest threats may occur as a result of the financial or other interests of members or their immediate or close family members.

Such financial interests might cause members to be reluctant to take actions that would be against their own interests.

Examples of circumstances that may create self-interest threats include, but are not limited to:

- Incentive compensation arrangements.
- Concern over employment security.
- Commercial pressure from outside the employing organization.



#### Example:

Ibrahim is member of ICAP working as a unit accountant.

He is a member of a bonus scheme under which, staff receive a bonus of 10% of their annual salary if profit for the year exceeds a trigger level.

Ibrahim has been reviewing working papers prepared to support this year's financial statements. He has found a logic error in a spreadsheet used as a measurement tool for provisions.

Correction of this error would lead to an increase in provisions. This would decrease profit below the trigger level for the bonus.

#### Analysis:

Ibrahim faces a self-interest threat which might distort his objectivity.

### Self-review threats

Self-review threats occur when a previous judgement needs to be re-evaluated by members responsible for that judgement. For example, where a member has been involved in maintaining the accounting records of a client he may be unwilling to find fault with the financial statements derived from those records. Again, this would threaten the fundamental principle of objectivity.

Circumstances that may create self-review threats include, but are not limited to, business decisions or data being subject to review and justification by the same chartered accountant in business responsible for making those decisions or preparing that data.

### Advocacy threats

A chartered accountant in business may often need to promote the organisations position by providing financial information. As long as information provided is neither false nor misleading such actions would not create an advocacy threat.

### Familiarity threats

Familiarity threats occur when, because of a close relationship, members become too sympathetic to the interests of others. Examples of circumstances that may create familiarity threats include:

- ❑ A chartered accountant in business in a position to influence financial or non-financial reporting or business decisions having an immediate or close family member who is in a position to benefit from that influence.
- ❑ Long association with business contacts influencing business decisions.
- ❑ Acceptance of a gift or preferential treatment, unless the value is clearly insignificant.

### **Intimidation threats**

Intimidation threats occur when a member's conduct is influenced by fear or threats (for example, when he encounters an aggressive and dominating individual at a client or at his employer).

Examples of circumstances that may create intimidation threats include:

- ❑ Threat of dismissal or replacement over a disagreement about the application of an accounting principle or the way in which financial information is to be reported.
- ❑ A dominant personality attempting to influence decisions of the chartered accountant.

## 2 PREPARATION AND REPORTING OF INFORMATION

### Section overview

- Accountants in business
- Section 320 of the ICAP Code of Ethics
- Potential conflicts

### 2.1 Accountants in business

Accountants in business are often responsible for the preparation of accounting information.

Accountants in business need to ensure that they do not prepare financial information in a way that is misleading or that does not show a true and fair view of the entity's operations.

Accountants who are responsible for the preparation of financial information must ensure that the information they prepare is technically correct, reports the substance of the transaction and is adequately disclosed.

There is a danger of influence from senior managers to present figures that inflate profit or assets or understate liabilities. This puts the accountant in a difficult position. On one hand, they wish to prepare proper information and on the other hand, there is a possibility they might lose their job if they do not comply with their managers wishes.

In this case, ethics starts with the individual preparing the information. They have a difficult decision to make; whether to keep quiet or take the matter further. If they keep quiet, they will certainly be aware that they are not complying with the ethics of the accounting body they belong to. If they speak out, they may be bullied at work into changing the information or sacked.

### 2.2 Section 320 of the ICAP Code of Ethics

Chartered accountants in business are often involved in the preparation and reporting of information that may either be made public or used by others inside or outside the employing organisation. Such information may include financial or management information, for example:

- forecasts and budgets;
- financial statements;
- management discussion and analysis; and
- the management letter of representation provided to the auditors as part of an audit of financial statements.

Information must be prepared and presented fairly, honestly and in accordance with relevant professional standards. In particular financial statements must be prepared and presented in accordance with the applicable financial reporting standards.

A chartered accountant in business must maintain information for which he is responsible in a manner that:

- describes clearly the true nature of business transactions, assets or liabilities;

- ❑ classifies and records information in a timely and proper manner; and
- ❑ represents the facts accurately and completely in all material respects.

Threats to compliance with the fundamental principles, for example self-interest or intimidation threats to objectivity or professional competence and due care, may be created where a chartered accountant in business may be pressured (either externally or by the possibility of personal gain) to become associated with misleading information or to become associated with misleading information through the actions of others.

The significance of such threats will depend on factors such as the source of the pressure and the degree to which the information is, or may be, misleading.

The significance of the threats should be evaluated and unless they are clearly insignificant, safeguards should be considered and applied as necessary to eliminate them or reduce them to an acceptable level. Such safeguards may include consultation with superiors within the employing organization, for example, the audit committee or other body responsible for governance, or with a relevant professional body.

Where it is not possible to reduce the threat to an acceptable level, a chartered accountant should refuse to remain associated with information they consider is or may be misleading.

If the chartered accountant is aware that the issuance of misleading information is either significant or persistent, he should consider informing appropriate authorities in line with the guidance in this code. The chartered accountant in business may also wish to seek legal advice or resign.

### 2.3 Potential conflicts

There may be times when the responsibilities of a chartered accountant to an employing organisation come into conflict with their professional obligations to comply with the fundamental principles in the Code. Where compliance with the fundamental principles is threatened, a chartered accountant in business must consider a response to the circumstances.

Responsibilities to an employer may put a chartered accountant under pressure to act or behave in ways that could directly or indirectly threaten compliance with the fundamental principles. Such pressure may be explicit or implicit; it may come from a supervisor, manager, director or another individual within the employing organization.

A chartered accountant in business may face pressure to:

- ❑ Act contrary to law or regulation.
- ❑ Act contrary to technical or professional standards.
- ❑ Lie to, or otherwise intentionally mislead (including misleading by remaining silent) others, in particular:
  - The auditors of the employing organization; or
  - Regulators.

- ❑ Issue, or otherwise be associated with, a financial or non-financial report that materially misrepresents the facts, including statements in connection with, for example:
  - The financial statements;
  - Tax compliance;
  - Legal compliance; or
  - Reports required by securities regulators.

The significance of threats must be evaluated and unless they are clearly insignificant, safeguards should be considered and applied to eliminate them or reduce them to an acceptable level.

Such safeguards may include:

- ❑ Obtaining advice where appropriate from within the employing organisation, or an independent professional advisor or a relevant professional body.
- ❑ The existence of a formal dispute resolution process within the employing organization.
- ❑ Seeking legal advice.



**Example:**

Ibrahim is member of ICAP working as a unit accountant.

He is a member of a bonus scheme under which, staff receive a bonus of 10% of their annual salary if profit for the year exceeds a trigger level.

Ibrahim has been reviewing working papers prepared to support this year's financial statements. He has found a logic error in a spreadsheet used as a measurement tool for provisions.

Correction of this error would lead to an increase in provisions. This would decrease profit below the trigger level for the bonus.

**Analysis:**

Ibrahim faces a self-interest threat which might distort his objectivity.

Ibrahim has a professional responsibility to ensure that financial information is prepared and presented fairly, honestly and in accordance with relevant professional standards. He has further obligations to ensure that financial information is prepared in accordance with applicable accounting standards and that records maintained represent the facts accurately and completely in all material respects.

Ibrahim must make the necessary adjustment even though it would lead to a loss to himself.

**Example:**

Ali is a chartered accountant recruited on a short-term contract to assist the finance director, Bashir (who is not a chartered accountant) in finalising the draft financial statements.

The decision on whether to employ Ali on a permanent basis rests with Bashir.

Ali has been instructed to prepare information on leases to be included in the financial statements. He has identified a number of large leases which are being accounted for as operating leases even though the terms of the contract contain clear indicators that the risks and benefits have passed to the company. Changing the accounting treatment for the leases would have a material impact on asset and liability figures.

Ali has explained this to Bashir. Bashir responded that Ali should ignore this information as the company need to maintain a certain ratio between the assets and liabilities in the statement of financial position.

**Analysis**

Ali faces a self-interest threat which might distort his objectivity.

The current accounting treatment is incorrect.

Ali has a professional responsibility to ensure that financial information is prepared and presented fairly, honestly and in accordance with relevant professional standards. He has further obligations to ensure that financial information is prepared in accordance with applicable accounting standards and that records maintained represent the facts accurately and completely in all material respects.

**Possible course of action**

Ali must explain his professional obligations to Bashir in particular that he cannot be party to the preparation and presentation of knowingly misleading information.

Ali should refuse to remain associated with information that is misleading.

If Bashir refuses to allow the necessary changes to the information Ali should report the matter to the audit committee or the other directors.

As a last resort if the company refuses to change the information Ali should resign from his post.

Ali may need to consider informing the appropriate authorities in line with the ICAP guidance on confidentiality.

**Example:**

Etishad is a chartered accountant who works as in a team that reports to Fahad, the finance director of Kohat Holdings.

Fahad is also a chartered accountant. He has a domineering personality.

Kohat Holdings revalues commercial properties as allowed by IAS 16. Valuation information received last year showed that the fair value of the property portfolio was 2% less than the carrying amount of the properties (with no single property being more than 4% different). A downward revaluation was not recognised on the grounds that the carrying amount was not materially different from the fair value.

This year's valuation shows a continued decline in the fair value of the property portfolio. It is now 5% less than the carrying amount of the properties with some properties now being 15% below the carrying amount.

Etishad submitted workings to Fahad in which he had recognised the downward revaluations in accordance with IAS 16.

Fahad has sent him an email in response in which he wrote "Stop bothering me with this rubbish. There is no need to write the properties down. The fair value of the portfolio is only 5% different from its carrying amount. Restate the numbers immediately".

**Analysis**

Etishad faces an intimidation threat which might distort his objectivity.

The current accounting treatment might be incorrect. The value of the properties as a group is irrelevant in applying IAS 16's revaluation model. IAS 16 allows the use of a revaluation model but requires that the carrying amount of a property should not be materially different from its fair value. This applies to individual properties not the whole class taken together.

(It could be that Fahad is correct because there is insufficient information to judge materiality in this circumstance. However, a 15% discrepancy does sound significant).

Etishad has a professional responsibility to ensure that financial information is prepared and presented fairly, honestly and in accordance with relevant professional standards. He has further obligations to ensure that financial information is prepared in accordance with applicable accounting standards and that records maintained represent the facts accurately and completely in all material respects.



### **Example continued**

#### **Possible course of action**

Etishad should arrange a meeting with Fahad to try to explain Fahad's misapplication of the IAS 16 guidance and to try to persuade Fahad that a change might be necessary.

Fahad should be reminded that he too is bound by the same guidance that applies to Etishad. Indeed he has a greater responsibility as the more senior person to show leadership in this area.

Etishad cannot be party to the preparation and presentation of knowingly misleading information. He should explain that he cannot remain associated with information that is misleading. If Fahad refuses to allow the necessary changes to the information Etishad should report the matter to the audit committee or the other directors.

As a last resort if the company refuses to change the information Etishad should resign from his post.

Etishad may need to consider informing the appropriate authorities in line with the ICAP guidance on confidentiality.



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# FINANCIAL ACCOUNTING AND REPORTING II

STUDY TEXT

