11

Accounting for Financial Instruments

Accounting for Financial Instruments 11

Learning Outcome

After studying this chapter students should be able to:

- explain the possible treatments of financial instruments in the issuer's accounts, including the classification of liabilities and equity, and the implications for the associated finance costs;
- identify circumstances in which amortised cost, fair value and hedge accounting are appropriate for financial instruments, and explain the principles of these accounting methods.

11.1 Introduction

This chapter looks at accounting for financial instruments. Section 11.2 introduces the relevant standards that provide guidance for financial instruments. In Section 11.3 we will look at how to identify and classify financial instruments. Section 11.4 looks at how financial instruments are recognised and measured. We will also study the principles of impairment of financial assets. Section 11.5 looks at the basics of hedging relationships. Section 11.6 will provide a brief overview of the disclosure requirements for financial instruments.

11.2 Financial instruments – relevant accounting standards

The provisions are very detailed as financial instruments make up a large part of our statement of financial position. As a result the accounting and disclosure requirements are contained in three accounting standards:

- IAS 32 *Financial instruments: presentation*
- IAS 39 *Financial instruments: recognition and measurement*
- IFRS 7 *Financial instruments: disclosure*

IAS 39 has been controversial from its original inception. Proposals for changing it have elicited comments and criticisms from many quarters, and several issues remain to be clarified and agreed. The current version of the standard should be regarded as an interim measure only; the IASB is currently undertaking research work that will ultimately lead to the replacement of IAS 39.

The objective of the standard is to establish principles for recognising and measuring financial assets, financial liabilities and contracts to buy or sell a non-financial item that can be settled net in cash or by some other financial instrument.

11.3 IAS 32 *Financial instruments: presentation*

IAS 32 deals mainly with how to identify and classify financial instruments and pays particular note to the issues in classifying debt and equity.

11.3.1 Definitions

IAS 32 defines a financial instrument as:

Any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity.

A 'financial asset' can be any of the following:

- cash;
- a contractual right to receive cash or another financial asset from another entity;
- a contractual right to exchange financial instruments with another entity under conditions that are potentially favourable; or
- an equity instrument of another entity;
- a contract that will, or may be, settled in an entity's own financial instruments.

A 'financial liability' can be:
A contractual obligation:

- to deliver cash or another financial asset to another entity;
- to exchange financial instruments with another entity under conditions that are potentially unfavourable.

Or a contract that will, or may be, settled in the entity's own equity instruments.

An equity instrument is: 'any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities'. To take the most common example, ordinary shares in an entity fall into this category.

Some common examples of financial instruments include the following:

- cash;
- deposits available on demand or after the lapse of a specified period of time;
- commercial debt;
- loans receivable and payable;
- debt and equity securities that are financial instruments from the point of view of both the holder and the issuer;

- asset backed securities, for example, mortgages and other forms of secured loan;
- derivatives, such as options, forward contracts, futures contracts, warrants and other future rights.

Certain types of financial instrument fall outside the scope of the IAS because they are dealt with more fully in other standards. These include: interests in subsidiaries, interests in associates and joint ventures, employee benefit plans and obligations arising under insurance contracts.

11.3.2 Classification of financial instruments

In order to be able to apply the recognition and measurement criteria in IAS 39, we must first decide how a financial instrument should be classified. The classifications of financial instruments are based on the definitions above.

Financial assets should be easy to identify, however a difficulty often arises when classifying debt and equity. Prior to the introduction of this standard, the equity of the business could include all types of shares. The term 'share' being used in the terms of the instrument normally resulted in them being classified as equity.

The definition that IAS 32 introduced describes a financial liability as containing an obligation to transfer economic benefit at a future date. It is this 'obligation' that resulted in many financial instruments being reclassified from equity to debt when IAS 32 was first applied. Classifications as debt as opposed to equity will affect the gearing ratio of the entity.

Gearing is an important measure of an entity's risk and stability. Debt takes priority over shareholders' funds, and interest on debt must be paid otherwise the entity's survival is at risk. The return on shareholders' funds, in the form of dividends, does not have to be paid. The level of payment of dividend, and whether or not a dividend is paid at all, are under the control of the entity's directors.

The importance of the gearing ratio as a measure of the riskiness of the entity means that the classification of financial instruments as debt or equity is of significant importance. Where an entity's gearing ratio is already high, it will probably wish to avoid issuing new financial instruments that fall into the debt category. A straightforward way of doing this is to issue uncontroversial equity in the form of ordinary shares. However, there has been a tendency in recent years to issue complex financial instruments that technically meet the classification of equity but that are actually, in most essential respects, debt. Where these instruments contain any element of obligation they will now be classified as financial liabilities in accordance with IAS 32.

The classification of the instrument has a significant affect on the income statement of the entity. Distributions associated with debt (interest/finance costs) will be deducted from profit, whereas distributions associated with equity (dividends) will be shown as a reduction in equity through the Statement of Changes in Equity. The classification of financial instruments will have an impact on the reported profit for the period and the performance ratios that are subsequently calculated. When determining the classification, IAS 32 requires that the substance of the instrument be considered and not merely its legal form.

Debt or equity?

Some of the basic characteristics of debt and equity are set out in the table below:

	Equity	*Debt*
Return	Dividend	Interest
Rights	Legal ownership of the entity	Repayment of capital
Effect on income statement	Appropriation of profit after tax determined by the directors	Charge against profits before tax
Interest on winding up of the entity	Residual	Preferential, ranking before equity holders
Taxation implications	Appropriation of post-tax profits	Interest payments are tax-deductible

These distinctions appear to be quite straightforward. However, in practice, determining the difference between debt and equity can be quite difficult because of the complexity of some of the financial instruments that have been issued in recent years. IAS 32 provides the following guidance:

IAS 32 requires that the issuer of a financial instrument shall classify it upon initial issue as either a liability or equity, according to the following classification principles:

1. The substance of a financial instrument, rather than its legal form, governs its classification.
2. Where there is a contractual obligation, potentially unfavourable to the issue of the instrument, to deliver either cash or another financial asset to the holder of the instrument, the instrument meets the definition of a financial liability.
3. Where a financial instrument does not give rise to a contractual obligation under potentially unfavourable conditions, then the instrument is classified as equity.
4. Where there is a requirement for mandatory redemption of the instrument by the issuer at a fixed or determinable future data, the instrument meets the definition of a financial liability.

In recent years there has been a trend towards the issue of complex financial instruments whose classification is not immediately obvious, this is when applying substance over form becomes particularly important. In the rest of this section we consider some examples:

Warrants and options

Warrants and options give the holder the right to subscribe for equity shares at a specified time at a specified price. Share option schemes are commonly used as a form of remuneration, especially for senior staff. In February 2004, the IASB issued IFRS 2 on accounting for share-based payment. This financial reporting standard requires that a charge should be made in the income statement to reflect the benefit transferred to the holder of the option, with a credit to share capital. Such instruments therefore have an effect on equity, rather than debt capital. IFRS 2 is covered in Chapter 12 of this *Learning System*.

Perpetual debt

Perpetual debt is an instrument that provides the holder with the right to receive payments in respect of interest at fixed rates, extending into the indefinite future. There is no redemption date for the debt, which makes it rather akin to equity which, similarly, is issued without a redemption date. Perpetual debt, nevertheless, is classified as debt. When

such debt is issued, the issuer takes on a financial obligation to make a stream of future interest payments. The payments are regular and fixed in nature, and therefore the capital element is more akin to debt than equity, and should be classified as such.

Redeemable preference shares

Preference shares usually carry a fixed rate of return, and sometimes they are issued with redemption terms attached to them. Where the issuer is obliged to redeem the shares at a fixed or determinable future date, at a fixed or determinable amount, the instrument has the characteristics of a liability, and should be classified as such.

However, a distinction can be drawn between the type of preference share described above, and a preferred share that is redeemable solely at the option of the issuer (i.e. at the point of issue there is no fixed or determinable date of redemption attached to the instrument). In this case, the instrument is probably equity.

Non-redeemable preference shares

Non-redeemable shares may appear to be rather similar to the perpetual debt described earlier. However, the standard makes it clear that classification as debt or equity is determined by the rights attaching to the shares. If distributions are at the discretion of the issuer, then the non-redeemable shares are likely to be classified as equity. However, where distribution is mandatory, the instrument is much more akin to debt.

Example 11.A

On 1 January 20X1 DP issues preference shares at $1 million par value. There is no redemption date attached to the shares. Under the terms of issue, DP has the option of determining the level of distribution to the holders of the preference shares, and the issue document refers to the possibility that in some years no distribution will be made.

In this example, the financial instrument will be classified as equity.

Example 11.B

On 1 January 20X1 EQ issues 7% preference shares at $1 million par value. There is no redemption date attached to the shares. The preference shares are cumulative in nature, that is, if EQ cannot make the distribution of 7% of par value, the distribution liability is carried forward to a future year.

In this example the distribution cannot be avoided (although it can be deferred). Therefore, the instrument is classified as debt.

Preference shares: conflict with national law

One other relevant point about the classification of preference shares is that, in some jurisdictions, national laws require that preference shares are classified as equity. Adherence to the law is, obviously, a matter of some importance, and so compliance with IAS 32 in this respect may not be possible. This conflict exists in respect of the UK, for example. However, it is to be expected that national laws will, in time, be altered in this respect, so that international accounting standards can be adhered to.

Convertible securities with options

Sometimes, debt is issued with an option to convert the debt at some future date into equity shares. So, rather than repaying the debt with cash, the repayment would be with equity shares. Sometimes, such instruments contain an agreement (a put option) which allows holders of the debt to require redemption at a premium; often such securities will

carry a low rate of interest to balance a high redemption premium. The put option requires buy-back of the debt by the issuer at a premium price if conversion does not take place.

Example 11.C

C issues $1 million in convertible debt securities in 20X4. The debt carries an annual interest rate of 3%, and conversion is available in 20X9 at the option of the holder at a rate of 1 equity share for every $10 of debt. Alternatively, the holder can opt to exercise a put option in 20X9 to redeem the debt at a premium of 10%. At the time of issue, the market rate of interest for similar debt is 5.5%.

In this case, the annual interest rate is low but is balanced by the availability of a high premium on redemption. If the price of 1 equity share in 20X9 is greater than $11 ($10 of debt plus 10% redemption premium) then the holders of the debt will choose that option. If, however, the price of a share is below $11, holders will choose to exercise the put option and will require redemption at par value + 10%.

In this case, the financial instrument should be classified as debt.

Financial instruments with contingent settlement

Where shares are issued that give the holder the right to require redemption, in cash or another financial asset, upon the occurrence of an uncertain future event (e.g. if the entity fails to achieve a certain level of profits), the instrument should be classified as debt.

Zero coupon bonds

This is a financial instrument that requires no annual payment of interest. Instead, the issuer has a contractual obligation to repay the holders of the bonds a sum on redemption that reflects the fact that they have received no interest (i.e. it is higher than it would have been if annual interest had been paid). The redemption sum represents 'rolled up' finance charges. The obligation is clearly unfavourable to the issuer, it involves the delivery of a financial asset at a fixed or determinable point in the future, and it is therefore classified as debt.

11.3.3 Hybrid instruments

IAS 32 recognises certain categories of financial instrument as having characteristics of both debt and equity. These are known as hybrid financial instruments, and the most common example is that of convertible debt securities. The view taken by IAS 32 is that this type of single financial instrument creates both debt and equity interests. The standard requires that the component parts of the instrument should be classified separately, and the following example demonstrates how this is done.

Example 11.D

An entity issues 5,000 convertible bonds at 1 January 20X0. The bonds have a 5 year term and are issued at par with a face value of $100 per bond. Total proceeds from the bond issue are therefore: 5,000 × $100 = $500,000. The interest rate on the bonds is 5%. Each bond is convertible at any time up to maturity into 100 ordinary shares.

When the bonds are issued the prevailing market interest rate for similar debt without conversion options is 7%. At the issue date, the market price of one ordinary share is $2.50. The dividends expected over the 5 year term of the bonds amount to 10 cents per share at the end of each year.

IAS 32 requires that the liability element is valued by reference, not to the actual interest rate on the convertible bond, but rather by reference to the prevailing market interest rate on similar debt without conversion right – in this case 7%. The calculations are as follows:

	$
Present value of the principal – $500,000 at the end of 5 years discounted to present value: $^{500,000}/_{(1.07)^5}$	356,379
Present value of the interest – $25,000 payable annually in arrears for 5 years: $25,000 3 annuity factor for 5 years: $25,000 × ($^1/_{1.07}$) + ($^1/_{1.07^2}$) + ($^1/_{1.07^3}$) + ($^1/_{1.07^4}$) + ($^1/_{1.07^5}$)	102,500
Total liability component	458,879
Equity component (balancing figure)	41,121
Total value of bond issue	500,000

11.4 IAS 39 *Financial instruments:recognition and measurement*

This standard deals with the recognition and measurement of all financial instruments (except any that are specifically dealt with by a more specific standard).

11.4.1 Initial recognition of financial assets and liabilities

The standard requires recognition of a financial asset or financial liability once the entity becomes **party to the contractual provisions** of the instruments. For example, Entity C enters into a loan agreement with a financial institution, which involves borrowing $50 million. The liability under the agreement will be recognised when, and only when, the contractual arrangements become binding on C.

All financial assets and financial liabilities should be recognised on an entity's statement of financial position. This may seem uncontroversial, but it is important to note that financial assets and financial liabilities include derivative instruments. Prior to IAS 39 being applied, derivatives were not reflected in the financial statements until they were settled. The result of first time application was a significant number of new financial assets and liabilities being included in the accounts of entities, entities that had probably traded in derivatives for years.

The initial recognition criteria is the same for most elements of the financial statements:

- It is probable that economic benefit will flow to or from the entity.
- It can be measured reliably.

Financial assets

Financial assets must be classified as one of the following:

- fair value through profit or loss
- loans and receivables
- held-to-maturity investments
- available-for-sale financial assets.

It is important that classification should take place immediately because it affects the subsequent measurement rules that apply to the instrument. Each of the categories is described in more detail below.

Fair value through profit or loss

Financial assets categorised as 'fair value through profit or loss' are those that fall into one of these categories:

1. Those that are classified as 'held-for-trading'. This classification is appropriate where financial assets are acquired principally for the purpose of short-term resale, or where the asset is acquired as part of a portfolio where short-term profit taking is the norm.
2. Those that are held as part of a group of financial assets that are managed on a fair value basis in accordance with a documented risk management or investment strategy.

Loans and receivables

These financial assets include non-derivative assets with fixed or determinable payments that are not quoted in an active market, and that are not held as fair value through profit or loss, or as available-for-sale assets. Examples would include loans made to other entities that may be sold on or exchanged at some point before they mature.

Held-to-maturity investments

These are non-derivative financial assets with fixed or determinable payments that an entity intends to hold until they mature. The intention to hold until maturity must be demonstrable. For example, if an entity sells a 'held-to-maturity' investment of a significant amount before its maturity date, the validity of its intentions in respect of other 'held-to-maturity' investments is called into question. The standard requires that in such cases the investments must be reclassified as available-for sale. (Note that this point is important because of differences in approach to measurement of financial assets, which will be discussed in the next section of this chapter.)

Available-for-sale financial assets

A financial asset that is not classified as fair value through profit or loss, or as loans and receivables or as held-to-maturity, will be classified as available-for-sale. Available-for-sale financial assets are held at fair value, with subsequent gains or losses recognised in equity until disposal.

Classification in practice could present some problems. A few examples will help to draw distinctions between the four categories:

Example 11.E

In the course of its normal business, entity D lends $130,000 to entity E at a commercial rate of interest for 5 years. Regular repayments of the loan are scheduled to take place annually. There is no active market for this loan instrument, but in similar circumstances in the past D has sold on such financial assets before they reach maturity.

Initial classification in the books of D: loans and receivables.

Example 11.F

Entity F lends entity G $150,000 for 7 years. The rate of interest on the loan is variable depending on market rates, but there is no commercial market for this financial asset. Regular repayments of the loan are scheduled to take place annually. F will retain the gradually reducing loan in its books until the end of the 7 year period, and intends to hold the asset until maturity.

Initial classification in the books of F: held-to-maturity investments.

Example 11.G

Entity H holds surplus cash of $100,000. Because of the seasonal nature of its business it expects to need the cash to fund investment in inventory in about 6 months' time. In the meantime, the directors of H decide to invest in the listed securities of entity J. After 5 or 6 months the investment will be realised.

Initial classification in the books of H: fair value through profit or loss.

Financial liabilities

Financial liabilities is not specifically mentioned as a category in IAS 39, however it is obviously a very important category as it includes loans, payables, preference shares, debentures, etc.

Financial liabilities can be designated as 'fair value through profit or loss', provided that it is either held for trading, or is designated by the entity as such.

Note that derivatives would normally fall into the 'fair value through profit or loss' category and depending on whether the terms are favourable or unfavourable will determine whether it is shown as a financial asset or liability.

11.4.2 Initial measurement

The initial measurement of all financial instruments should be at fair value. Transactions costs should be included in the initial measurement, except for assets and liabilities held at fair value through profit or loss.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's-length transaction.

Determining fair value may not be straightforward. IAS 39 provides the following guidance in order of preference:

1. Quoted market prices; these are regarded as the best indicator of fair value and should always be used where available.
2. Where there is no active market, fair value should be established using a valuation technique that refers, where possible, to market conditions. Examples of the type of information that may be used include: recent similar transactions at arm's length, discounted cash flow techniques, reference to the market value of similar instruments, and option pricing models.
3. Where there is no active market and if no reliable estimate of fair value can be made, the entity must measure the financial instrument at cost less any impairment

Transactions costs should be included in the initial measurement of assets and liabilities. The normal recording of costs is:

Dr	expenses (income statement)	
Cr	Bank	

IAS 39 requires that transaction costs be included in the initial measurement of the financial instrument.

For financial assets the transaction costs will be:

Dr	asset	
Cr	bank	

And for financial liabilities:

Dr	liability	
Cr	bank	

Example 11.H

AB acquires a loan investment of $5 million. The transaction costs associated with this acquisition totalled $600,000. In the absence of any other information the investment will be classified as loans and receivables and will be initially recognised by:

Dr	Loans and receivables (financial assets)	$5.6m
Cr	Bank	$5.6m

Example 11.I

CD issues debentures with a value of $4 million. The associated transaction costs were $300,000. The net proceeds of the financial liability will be recorded:

Dr	Bank	$3.7m
Cr	financial liability	$3.7m

The treatment of the transaction costs is very important as they are included in the opening carrying value of the instrument. Subsequent measurement rules will then be applied and adjustments made to this initial carrying amount.

11.4.3 Subsequent measurement of financial instruments Financial assets

The regulations in IAS 39 in respect of financial asset categories are as follows:

- *fair value through profit or loss*: fair value;
- *loans and receivables*: amortised cost, using the effective interest rate method;
- *held-to-maturity investments*: amortised cost, using the effective interest rate method;
- *available-for-sale financial assets*: fair value.

Once a decision has been taken on the valuation principles to be applied to a financial asset (i.e., fair value or amortised cost) the entity is not permitted to subsequently change the classification.

Also note that, all derivatives that are not designated as hedging items should be measured at fair value.

Fair value will normally be market value, which in the case of traded instruments will be relatively easy to access (financial press). Where an equity investment cannot be reliably measured (shares in private entities) they must be included in the available for sale category and would be held at cost.

Treatment of gains and losses

Where financial assets are accounted for at fair value, gains and losses on periodic remeasurement (e.g., at the year end date) should be taken straight to the income statement. The exception to this is where financial assets are classified as available-for-sale. Gains and losses arising on these assets should be included in other comprehensive income. Upon their disposal, gains and losses previously taken to equity (and included in OCI) should then be recognised in the income statement.

Example 11.J

Financial asset held at fair value through profit of loss

P purchases 100,000 shares in a listed entity X. The shares were acquired during 20X8 at 118¢ per share, transaction costs were $2,000. X's shares are quoted at 31 December 20X8 date at 112¢. P has classified these financial assets as assets held at fair value through profit or loss.

Initial recording:

Dr	Financial asset	$118,000
Cr	Bank	$118,000

The transaction costs cannot be included for assets and liabilities held at fair value through profit or loss (see Section 11.4.2), there are written off as a period expense:

Dr	Expenses	$2,000
Cr	Bank	$2,000

Subsequent measurement:
Subsequent measurement is at fair value. The 100,000 shares should be held at the year end valuation of 112¢ per share. P has made a loss of $6,000 (112,000 – 118,000). As the asset is classified at fair value through profit or loss so the loss should be recorded in the income statement for the period:

Dr	Loss on financial asset (income statement)	$6,000
Cr	Financial asset	$6,000

Derecognition
If the shares were sold during 20X9 for 119¢ per share, the asset would be derecognised and the gain arising from the 31 December 20X8 until the date of disposal will be recognised in the income statement:

Dr	Bank	$119,000
Cr	Financial asset	$112,000
Cr	Gain on disposal of financial asset	$7,000

Example 11.K

Available for sale asset

If we use the same information about the shares but assume that the shares were classified as available for sale. The initial recording will include transaction costs as it is an available for sale asset (see Section 11.4.2). Subsequent measurement is at fair value with gains and losses being recognised in equity until disposal when the recognised gains are recycled to the income statement.
Initial recording:

Dr	Financial asset	$120,000
Cr	Bank	$120,000

Subsequent measurement:
Subsequent measurement is at fair value. The 100,000 shares should be held at the year end valuation of 112¢ per share. P has made a loss of $8,000 (112,000 – 120,000). As the asset is classified as available for sale the loss goes to equity:

Dr	Other reserves	$8,000
Cr	Financial asset	$8,000

This loss would be included as a loss in other comprehensive income in the year.

Derecognition
If the shares were sold during 20X9 for 119¢ per share, the asset would be derecognised and the gain arising from the 31 December 20X8 until the date of disposal will be recognised in the income statement:

Dr	Bank	$119,000
Cr	Financial asset	$112,000
Cr	Gain on disposal of financial asset	$7,000

The previously recognised loss will be recycled through the income statement on disposal:

Dr	Income statement	$8,000
Cr	Other reserves	$8,000

Loans and receivables and held to maturity assets are held at amortised cost and the principles of calculation are the same for financial liabilities that are held at amortised cost (see below).

Financial liabilities

There are two categories of financial liabilities – those held at fair value through profit or loss; and all other financial liabilities.

The general rule is that financial liabilities should be measured at amortised cost, using the effective interest rate method. The associated finance cost is charged to the income statement.

Derivatives not designated for hedging purposes, however, should be measured at fair value as should those financial liabilities that have been designated at fair value through profit or loss. Profits and losses on subsequent measurement are recognised in the income statement.

Example 11.L

On 1 January 20X0 an entity issues debt of $10 million, incurring issue costs of $100,000. The debt carries a rate of interest of 4% per year (payable on 31 December) and it is repayable on 31 December 20X4 at a premium of $3.5 million (i.e., the capital repayment is $13.5 million). The return to the holder of the debt is therefore partly in the form of periodic interest payments, and partly in the form of a premium on redemption.

The total finance costs associated with the financial instrument can be calculated as follows:

	$'000	$'000
Total amount payable		
Interest (4% × $10m × 5 years)	2,000	
Final repayment	13,500	
		15,500
Net amount receivable		
Issue at par	10,000	
Issue costs	(100)	
		(9,900)
Total finance cost		5,600

Under the amortised cost method it is necessary to calculate the constant percentage rate that would need to be applied to the periodic carrying value of the financial liability to bring the carrying value of the liability up to $13.5 million just before the date of repayment of the principal. In this case, the relevant rate is 10%. In an examination question it is likely that the constant percentage rate would be provided.

The initial recognition of the liability at fair value would be $9.9 million, the proceeds of the issue of the financial instrument. The carrying amount is increased each year by the finance cost, and reduced by any payments made to the holders of the instrument.

Year ended 31 December	*Balance b/fwd*	*Issue*	*Finance cost*	*Payment*	*Balance c/fwd*
	$'000	$'000	$'000	$'000	$'000
20X0	–	9,900	990	(400)	10,490
20X1	10,490	–	1,049	(400)	11,139
20X2	11,139	–	1,113	(400)	11,852
20X3	11,852	–	1,185	(400)	12,637
20X4	12,637	–	1,263	(400)	13,500

Each year the finance cost, which is charged in the income statement, is 10% of the outstanding balance of the financial liability.

The recording in 20X0 would be:

Initial measurement at net proceeds:

Dr	Bank	$9.9m
Cr	Financial liability	$9.9m

Subsequent measurement at amortised cost using the effective interest rate (from table above)

Dr	Finance costs	$990,000
Cr	Bank	$400,000
Cr	Financial liability	$590,000

You can see that the financial liability has been credited with $590,000 which increases the carrying value of the debt to $10,490,000. This includes year 1's apportionment of the total finance cost (see above). This will appear in the statement of financial position, allocated between current and non-current liabilities.

11.4.4 Impairment

Impairment is a potentially significant aspect of the measurement of financial assets. Note, however, that impairment of financial assets applies only to those assets that are measured at amortised cost. Gains and losses on regular remeasurement of financial assets valued at

fair value are dealt with as explained earlier in the chapter. Note, however, that where an available-for-sale financial asset has been impaired, the cumulative loss recognised to date in equity, should be transferred to profit or loss (even though the financial asset has not been derecognised).

The rules in the revised IAS 39 are summarised as follows:

- An entity is required to assess at each statement of financial position date whether or not any objective evidence exists of impairment of financial assets (evidence would be e.g. financial distress of the entity you have invested in; an entity you have given a loan to has failed to make a repayment on a due date).
- If there is such evidence a detailed impairment review must be undertaken to assess the extent of any impairment loss.
- If not given the loss amount then the loss is measured as the difference between the carrying amount of the financial asset and the present value of the cash flows estimated to arise from the asset, discounted at the asset's original effective interest rate.
- Impairment losses are recognised through the income statement.

Note that impairment should be recognised only in respect of losses that have already been incurred – not in respect of losses that may take place in the future (the incurred loss model, not the expected loss model).

Example 11.M

A has a financial asset classified as fair value through profit or loss, which has a carrying value of $100,000. The entity to which the investment relates is showing signs of financial distress and the directors of A believe it is prudent to conduct an impairment review on this investment. The review shows the value of the asset to be $88,000. The impairment is taken straight to the income statement:

Dr	Impairment loss (income statement)	$12,000
Cr	Financial asset	$12,000

If we now assume that the investment was initially classified as available for sale and that previously recognised gains to date were $9,000 and had been posted to equity. This amount will be transferred to income statement as it would be inconsistent to charge the income statement with the impairment while a credit balance exists within equity relating to the same asset.

Dr	Impairment loss (income statement)	$12,000
Cr	Financial asset	$12,000
Dr	Other reserves	$9,000
Cr	Income statement	$9,000

11.4.5 Derivatives

The definition of a derivative is as follows:

A derivative is a financial instrument with all three of the following characteristics:

1. its value changes in response to the change in a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, a credit rating or credit index or other variable;

2. it requires no initial net investment;
3. it is settled at a future date.

Examples of derivatives include:

- Forward contracts: contracts to purchase or sell specific quantities of commodities of foreign currencies at a specified price determined at the inception of the contract, with delivery or settlement to take place at a specified future date.
- Options: these are contracts that give a purchaser the right to buy (call option) or to sell (put option) a specified quantity of, for example, a financial instrument, commodity or currency at a specified price.

First, it may be helpful to look at an example of a derivative financial instrument in order to demonstrate accounting at fair value for derivatives.

Example 11.N

On 30 November 20X1, the directors of an entity, Z, decide to enter into a forward foreign exchange contract to buy one million Swiss francs on 31 March 20X2. This is a promise to purchase which, at the time it is taken out, has a cost of zero.

This contract fulfils all three requirements to be classified as a derivative. Until the revised version of IAS 39 was issued this type of stand alone derivative would not have been recorded at all before the date at which the transaction takes place (31 March 20X2). However, IAS 39 now requires that derivatives are recorded at fair value. How is this effected?

More information is required:

The balance sheet date of Z is 31 December 20X1. The exchange rate specified in the forward contract is Sw Fr.2.3 = $1. Therefore, on 31 March Z will be required to pay 1,000,000/2.3 = $434,783. At 31 December, the fair value of the derivative could be more or less than that figure. If it is less, Z will have to record a loss on the derivative, but if it is more, there will be a gain. Let us examine both possibilities:

(1) The exchange rate at 31 December = Sw Fr.2.4 = $1. The fair value of the derivative is therefore 1,000,000/2.4 = $416,667. The best way of looking at this is to say that, if this exchange rate persists until settlement of the contract, Z will have made a loss. It will be obliged to spend $434,783 to buy Sw Fr. 1,000,000, but if the actual exchange rate on that date is Sw Fr.2.4 = $1 it will have made a loss on the deal which could have been done, without the forward contract, for $416,667. The difference between the two figures of $434,783 – $416,667 = $18,116 at 31 December will be recorded, under the provisions of revised IAS 39 as follows:

DR	Income statement (loss)	$18,116
CR	Derivative liability	$18,116

(2) The exchange rate at 31 December = Sw Fr.2.1 = $1. The fair value of the derivative is therefore 1,000,000/2.1 = $476,190. At 31 March Z will be obliged to spend $434,783 to buy Sw Fr.1,000,000, but if the actual exchange rate on that day is Sw Fr.2.1 = $1, it will have made a gain on the deal. The difference between the two figures of $476,190 – $434,783 = $41,407 at 31 December will be recorded, under the provisions of revised IAS 39 as follows:

DR	Derivative asset	$41,407
CR	Income statement (gain)	$41,407

The ultimate gain or loss will be determined by the actual exchange rate on 31 March 20X2.

Assume that the actual rate is Sw Fr.2.35 = $1. Under the terms of the forward contract Z actually pays $434,783. However, if the contract did not exist, it would have paid Sw Fr.1,000,000/2.35 = $425,532. The directors' actions have resulted in Z incurring an overall loss by taking out the contract of $434,783 – $425,532 = $9,251. This is the overall fair value of the derivative liability.

How will the transaction be accounted for at 31 March 20X2? This depends upon the fair value of the derivative that is already accounted for in the books. Two possibilities were examined above at 31 December 20X2. Assume that the exchange rate at that date was Sw Fr.2.4 = $1. As we saw this resulted in the recognition of a derivative liability of $18,116. The final fair value of the derivative liability at 31 March 20X2 has been calculated at $9,251. The derivative ceases to exist at this date and so it must be removed from the books. The accounting entries at 31 March 20X2 are as follows:

DR Derivative liability	$18,116	
CR Gain (income statement) $18,116 – $9,251		$8,865
CR Cash		$434,783
DR Swiss francs cash account* $434,783 – $9,251	$425,532	

**Note*: this is obviously the dollar value of the Swiss franc account. The Swiss franc value of 31 March 20X2 is Sw Fr. 1,000,000.

Understanding this type of complex transaction is easier if the reasoning behind the adjustments is fully understood. The intention of IAS 39 is that users of financial statements should be given sufficient information to be able to assess the performance of management in respect of this type of transaction, and that it is necessary, therefore, to include the fair value of derivatives.

11.5 Hedging

Hedging establishes a relationship between a hedging instrument and a hedged item or items. It is essentially all about making exceptions to the rules we have been learning about above in respect of where gains and losses on subsequent measurement.

A hedged item is an asset, liability, firm commitment, forecast future transaction or net investment in a foreign operation that (a) exposes the entity to risk of changes in fair value or future cash flows and (b) is designated as being hedged.

A hedging instrument is a designated derivative or (in limited circumstances) a non-derivative financial asset or non-derivative financial liability whose fair value or cash flows are expected to offset changes in the fair value or cash flows of a designated hedged item.

11.5.1 Hedging relationships

Hedging is simply one of management's strategies to reduce risk and volatility in the management of assets and liabilities.

IAS 39 permits hedge accounting with two provisos:

1. The hedging relationship must be formally designated and documented. The formal documentation should include the entity's risk management objective, its strategy in undertaking the hedge, the nature of the hedged item and of the risk being hedged, and the methods the entity will employ in order to assess the effectiveness of the hedge.
2. The hedge must be expected to be highly effective and its effectiveness must be capable of being reliably measured.

The guidance notes to the standard provide more information as to the criteria that must be met for a hedge to be considered highly effective. It can be regarded as highly effective if two conditions are met:

1. At the inception of the hedge and subsequently, there was an expectation that there would be a high level of correlation between the fair value or cash flows of the hedged item and those of the hedging instrument, during the period that the hedge is designated.
2. The actual results of the hedge are within a range of 80–125 per cent. The standard gives the example of a loss on the hedging instrument of CU (Currency Unit) 120, with a gain on the hedged item of CU 100. The offset can be measured either at 120/100 (120 per cent) or 100/120 (83 per cent). In this case the hedge would be regarded as highly effective, provided that condition (1) was also met.

In its original form, IAS 39 prohibited the type of hedging that involves setting a hedging instrument against a group of aggregated hedged items. However, following objections from banks and others, the IASB revisited the issue by issuing an exposure draft, *Fair value hedge accounting for a portfolio hedge of interset rate risk (macro hedging)* in August 2003. These proposals were incorporated into IAS 39 in March 2004, and are effective for accounting periods beginning on the 1 January 2005 and subsequently. This so-called 'portfolio' hedging permits a hedging instrument to be set off against a portfolio containing more than one hedged item.

There are two principal types of hedging relationship. It is important to distinguish between them because they have different effects on the income statement and the reporting of profit or loss.

11.5.2 Fair value hedges

Fair value hedges are those in which the fair value of the item being hedged changes as market prices change. An example of this would be where the entity is due to pay an amount in a foreign currency at a future specified date and has therefore taken out a forward foreign exchange contract to buy the stipulated amount at the future date. Until the contracts mature there will be changes in the fair value of the liability and also the related fair value of the hedging instrument. These do not, however, result in cash flows until the date specified in the future for maturity of the contracts.

Example 11.O

This example was included in the IAS 39 exposure draft to illustrate a fair value hedging arrangement. It illustrates a hedge of exposure to changes in the fair value of an investment in fixed rate debt as a result of changes in interest rates. In year 1 an investor purchases for 100 a debt security that is classified as available for sale. At the end of year 1, the current fair value of the security is 110. The increase of 10 is reported as a gain and the carrying amount of the security is increased to 110. To protect the value of 110, the investor acquires a derivative at the beginning of year 2 with no cost. By the end of year 2, the derivative instrument has a gain of 5 and the debt security has a corresponding decline in fair value. (This is an example of a highly effective hedge, where gains and losses match exactly.)

The accounting entries are as follows:

Year 1		
DR Investment in debt security	100	
CR Cash		100
Recording the purchase of the security		
DR Investment in debt security	10	
CR Equity (via statement of changes in equity)		10

Reflecting the increase in the fair value of the security (note that this is reflected through the statement of changes in equity because the asset is available for sale).

Also, it should be noted that, at this stage, the financial asset is not hedged.

Year 2		
DR Derivative financial asset	*5*	
CR Gain (to be included in the income statement)		*5*
Reflecting the increase in the fair value of the derivative		
DR Loss (to be included in the income statement)	*5*	
CR Investment in debt security		*5*

Reflecting the decrease in fair value of the debt security.

At the end of year 2, the financial assets subject to the hedging arrangement total 110, the same as at the end of year 1. The only difference is that the financial assets now comprise a derivative asset (at a value of 5) and the investment in debt security (at a value of 105). The effective hedge means that net profit is protected from the effects of changes in value, because the gain on the derivative exactly offsets the loss arising from the decrease in fair value of the debt security.

Gains and losses on available for sale investments are normally recorded through equity, but where a fair value hedge exists the rule is broken, and the gain/loss on the available for sale investment is instead taken to the income statement in the same period as the gain/loss on the derivative that is being used to hedge against the risk of the change in value of the investment.

11.5.3 Cash flow hedges

Cash flow hedges are those in which the cash flows of the item being hedged change as market prices change. The accounting treatment of gains and losses differs from that adopted in respect of fair value hedges. Changes in the fair value of the hedging instrument are initially reported in equity, via the statement of changes in equity. They are then transferred to profit or loss to match the recognition of the offsetting gains or losses on the hedged transaction. This mean that the effect of gains and losses on the hedged transaction is minimised because any gains are matched by losses on the hedging instrument, and vice versa.

Note that a hedge of a net investment in a foreign operation is treated as for a cash flow hedge.

In this case, the rules are different as the gain/loss on the derivative would normally be recorded in the income statement from the date the contract is entered into. The transaction that it is hedging against, however will not be included in the income statement until some future date (the date the transaction will occur). The rules need to be adjusted as this would mean that gain/losses on each item will appear in different accounting periods. As a result the gain/loss on the derivative is held in equity until the transaction occurs and then is released to the income statement to match against the effect of the transaction it is hedging against.

11.5.4 Designation of hedges

Hedging is useful to organisations in helping to mitigate risk. However, the regulation in IAS 39 relating to hedges does allow entities some control over the timing of recognition of losses. In order to avoid manipulation of the reporting of profits and losses, there are some quite stringent rules in the standard about the designation of hedges:

- the hedging relationship has to be designated and the designation must be documented;
- to the extent that a hedging relationship is effective, the offsetting gains and losses on the hedging instrument and the hedged item must be recognised in profit or loss at the same time;
- all hedge ineffectiveness must be recognised immediately in the income statement;
- only items that meet the definitions of assets and liabilities are recognised as such in the statement of financial position.

11.6 IFRS 7 Financial instruments:disclosure

The standard's disclosure requirements are intended to enhance understanding of the significance of financial instruments to an entity's financial position, performance and cash flows. The disclosures should provide users with information that assists them in assessing the extent of risks related to financial statements.

The **disclosure** requirements of IFRS 7 are as follows:

1. Information enabling users to evaluate the significance of financial instruments for the entity's financial position and performance.
2. The carrying amounts of financial assets at fair value through profit or loss, held- to-maturity investments, loans and receivables, available-for-sale financial assets, financial liabilities at fair value through profit or loss and financial liabilities at amortised cost.
3. Information about collateral, both collateral pledged in the form of financial assets, and its holding of collateral.
4. Information about compound financial instruments.
5. Details of any defaults and breaches in respect of loans payable.
6. Information about items of income, expense, gains or losses in respect of financial instruments.
7. Accounting policies relating to financial instruments.
8. Description of fair value hedges, cash flow hedges and hedges of net investments in foreign operations.
9. Disclosure of the fair value of financial assets and financial liabilities where fair value differs from the carrying amount.

Additionally, entities must disclose information about the nature and extent of risks arising from financial instruments, including qualitative descriptions of the exposure to risks and the entity's objectives, policies and procedures for managing the risk and the methods used to measure the risk. Quantitative disclosures are also required.

Risk

Three significant classes of risk are identified in the standard: credit risk, liquidity risk and market risk, but the standard notes that there may be other categories of risk that affect the entity. The following definitions of risk are provided in the standard:

Credit risk: The risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation.

Currency risk: The risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

Interest rate risk: The risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

Liquidity risk: The risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities.

Market risk: The risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: *currency risk, interest rate risk* and *other price risk*.

Other price risk: The risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market.

Risk management policies and hedging activities. In addition to providing specific information about specific financial balances and transactions, an entity must provide a discussion of the extent to which financial instruments are used, the associated risks and the business purposes served.

Hedging relationships

Disclosure of hedging activities is also required:

Terms, conditions and accounting policies. Information about the nature and extent of financial instruments must be provided. This is to include significant terms and conditions that may affect the amount, timing and certainty of future cash flows, and the accounting policies and methods adopted.

Interest rate risk. For each class of financial assets and financial liabilities, the entity should disclose information about the extent of its exposure to interest rate risk. This is to include information about the dates of maturity, and the effective interest rates applicable to the instruments.

Credit risk. An entity should disclose information about the extent of its exposure to credit risk, including information about significant concentrations of credit risk (e.g., where an entity is exposed to risk in a particular geographical area).

Fair value. Where an entity does not measure a financial asset or financial liability in its statement of financial position at fair value, it should provide sufficient fair value information about financial assets and financial liabilities through supplementary disclosures. Where entities recognise financial instruments at fair value then the methods and assumptions underlying the fair valuation should be disclosed.

11.7 Summary

This chapter of the *Learning System* has covered one of the more complex accounting issues in the syllabus. The following areas of financial instruments have been covered:

- Classification of financial instruments
- Initial recognition and measurement of financial instruments
- Subsequent measurement of financial instruments, including impairment

- Hedging relationships
- Disclosure requirements

Accounting for financial instruments is still in the process of development, and there are likely to be further changes.

Students can expect both computational and discussion-type questions to be set in this area of the syllabus. They are expected to be able to calculate the impact of financial instrument measurement on financial statements in all the aspects explained in the chapter.

Revision Questions 11

Question 1

The directors of QRS, a listed entity, have met to discuss the business's medium-to long-term financing requirements. Several possibilities were discussed, including the issue of more shares using a rights issue. In many respects this would be the most desirable option because the entity is already quite highly geared. However, the directors are aware of several recent cases where rights issues have not been successful because share prices are currently quite low and many investors are averse to any kind of investment in shares. Therefore, the directors have turned their attention to other options. The finance director is on sick leave, and so you, her assistant, have been given the task of responding to the following note from the chief executive:

Now that we have had a chance to discuss possible financing arrangements, the directors are in agreement that we should structure our issue of financial instruments in order to be able to classify them as equity rather than debt. Any increase in the gearing ratio would be unacceptable. Therefore, we have provisionally decided to make two issues of financial instruments as follows:

1. An issue of non-redeemable preference shares to raise $5 million. These shares will carry a fixed interest rate of 6%, and because they are shares they can be classified as equity.
2. An issue of 6% convertible bonds, issued at par value, to raise $6 million. These bonds will carry a fixed date for conversion in 4 years time. Each $100 of debt will be convertible at the holder's option into 120 $1 shares. In our opinion, these bonds can actually be classified as equity immediately, because they are convertible within 5 years on terms that are favourable to the holder.

Please confirm that these instruments will not increase our gearing ratio, should they be issued.

Note: You determine that the market rate available for similar non-convertible bonds is currently 8%.

Requirement

Explain to the directors the accounting treatment, in respect of debt/equity classification, required by *IAS 32 Financial Instruments: Presentation* for each of the proposed issues, advising them on the acceptability of classifying the instruments as equity. Your explanation should be accompanied by calculations where appropriate. **(10 marks)**

Question 2

(a) ABC has the following financial instruments in issue:

On 1 January 20X6, ABC issued 10,000 5% convertible bonds at their par value of $50 each. The bonds will be redeemed on 1 January 20Y1. Each bond is convertible at the option of the holder at any time during the 5 year period. Interest on the bond will be paid annually in arrears.

The prevailing market interest rate at the date of issue was 6%.

Requirement

Calculate the value that should be recorded in respect of the equity element of the hybrid financial instrument be recognised in the financial statements of ABC at the date of issue.

(b) On 1 January 20X6 an entity, ABC, issued a debt instrument with a value of $5,000,000, incurring $150,000 in issue costs. The coupon rate of the debt is 2.5%. It will become repayable on 1 January 20Y6 at a premium of $1,750,000.

Requirement

Calculate the total amount of finance cost associated with the debt instrument.

(10 marks)

Question 3

You are the management accountant of Short. On 1 October 20X3 Short issued 10 million $1 preference shares at par, incurring issue costs of $100,000. The dividend payable on the preference shares was a fixed 4% per annum, payable on 30 September each year in arrears. The preference shares were redeemed on 1 October 20X8 at a price of $1.35 per share. The effective finance cost of the preference shares was 10%. The statement of financial position of the entity as at 30 September 20X8, the day before the redemption of the preference shares, was as follows:

	$
Ordinary share capital (non-redeemable)	100.0
Redeemable preference shares	13.5
Share premium account	25.8
Retained earnings	59.7
	199.0
Total equity	199.0

Requirements

(a) Write a memorandum to your assistant which explains:

- how the total finance cost of the preference shares should be allocated to the income statement over their period of issue;

Your memorandum should refer to the provisions of relevant accounting standards.

(5 marks)

(b) Calculate the finance cost in respect of the preference shares for each of the 5 years ended 30 September 20X8.

(5 marks)

(Total Marks = 10)

Question 4

On 1 January 20X1 A issued 50,000 $100 2% debentures to investors for $55 each. The debentures are redeemable at their par value of $100 in 5 years' time, 31 December 20X5.

The accountant has drafted the financial statements but has omitted to apply IAS 39. The draft income statement and an extract from the balance sheet are as follows:

Income statement

	20X2	*20X1*
	$'000	$'000
Revenue	7,830	6,690
Operating expenses	5,322	5,109
Interest payable	100	100
Profit before taxation	2,408	1,481
Taxation	521	320
Profit for the period	1,887	1,161
Dividends paid	200	200

Statement of financial position (extract)

	20X2	*20X1*
	$'000	$'000
Payable: amounts falling due after 1 year		
2% debenture	2,750	2,750

Requirement

Amend the draft accounts including comparatives to comply with IAS 39. The rate of interest implicit for the debentures is 15.62% per annum.

(10 marks)

Question 5

During its financial year ended 31 December 20X8, CD entered into the following transactions:

1. In August 20X8, CD made an investment in the securities of a listed entity. The directors intend to realise the investment in the first quarter of 20X9 in order to fund the planned refit of the head office.
2. CD lent one of its customers, XY, $1,000,000 at a variable interest rate pegged to average bank lending rates. The loan is scheduled for repayment in 5 years time and CD has provided an undertaking to XY that it will not assign the loan to a third party.
3. CD made some small investments in the securities of some other listed entities. CD does not plan to dispose of these investments in the short term.

Requirements

In accordance with IAS 39 *Financial Instruments: Recognition and Measurement*:

(a) Identify the appropriate classification of these three categories of financial asset and briefly explain the reason for each classification. **(6 marks)**

(b) Explain how the financial assets should be measured in the financial statements of CD at 31 December 20X8. **(4 marks)**

(Total marks = 10)

Question 6

(a) At its year end, 31 March 20X7, entity JBK held 60,000 $1 shares in a listed entity, X. The shares were purchased on 11 February 20X7 at a price of 85¢ per share. The market value of the shares on 31 March 20X7 was 93¢ and the transaction costs associated with the acquisition were $2,000. The investment is categorised as available for sale.

Requirement

Show the journal entries required in respect of both the initial acquisition and its subsequent remeasurement on 31 March 20X7 and show the relevant extract from the statement of comprehensive income and the statement of financial position in respect of this investment. **(6 marks)**

(b) JBK disposed of these shares on 16 May 20X9 for 96¢ per share.

Requirement

Show the journal entries required to record the derecognition of this investment and briefly explain the accounting treatment adopted. **(4 marks)**

(Total marks = 10)

Question 7

XY purchase 100,000 $1 shares in CD for $1.10 during 20X7. The investment was classified on initial recognition as held for trading and transaction costs associated with the purchase totalled $3,000. At the year end 31 December 20X7 the shares were trading at $1.15.

During 20X8 it became apparent that CD was in financial distress and the directors of XY thought it prudent to conduct an impairment review. The review showed that the investment was impaired by $10,000.

Requirement

(a) Prepare the journal entries to record the initial recognition and subsequent measurement of the instrument above and briefly describe the accounting treatment adopted for the year ended 31 December 20X7.

(b) Briefly describe the accounting treatment required in respect of the impairment in the 20X8 accounts and prepare the necessary journal entries. **(10 marks)**

Question 8

CD has an available for sale investment with a carrying value of $130,000 as at the year end date, 31 December 20X6. The value of the investment at 31 December 20X7 is $138,000.

CD was concerned about the value of the shares falling and in order to mitigate this risk it entered into a derivative contract during 20X8 to hedge against the potential effect on the value of the shares of a general downturn in the market. The hedge is 100% effective and the contract has a positive value of $1,800 as at 31 December 20X8. The fall in the value of the available for sale investment was $2,000 as at 31 December 20X8, however $200 of that related to a change in the credit rating of the entity invested in.

Requirement

Briefly describe the treatment of the investments noted above and prepare the required journal entries for the years ended 31 December 20X7 and 20X8. **(10 marks)**

Solutions to Revision Questions 11

Solution 1

In general, under the requirements of *IAS 32 – Financial instruments: presentation* – financial instruments that fulfil the characteristics of a liability should be classified as such. Although preference shares carry the description of 'shares' this does not mean that they can necessarily be classified as equity. In cases where the payment of the 'dividend' is a fixed sum that is normally paid in respect of each accounting period, the instrument is really a long-term liability and must be classified as such.

The convertible bonds would be classified as a compound, or hybrid, instrument by IAS 32; that is, they have characteristics of both debt and equity, and would therefore be presented partly as debt and partly as equity in the statement of financial position. Valuation of the equity element is often difficult. The method required by IAS 32 involves valuation of the liability element using an equivalent market rate of interest for non-convertible bonds, with equity as a residual figure.

Applying this approach to the proposed instrument, the following debt/equity split results:

Present value of the capital element of the bond issue:	$
$\$6\,m \times 1/(1.08^4)$	4,410,000
Interest at present value:	
$(\$6{,}000{,}000 \times 6\%) \times [1/(1.08) + 1/(1.08^2) + 1/(1.08^3) + 1/(1.08^4)]$	
$= \$360{,}000 \times 3.312$ (from tables)	1,192,320
Value of liability element	5,602,320
Equity element (balancing figure)	397,680
Total value of instrument	6,000,000

Apart from the relatively small element of the hybrid instrument that can be classified as equity, the two proposed issues will be classified as debt under the provisions of IAS 32. If the directors wish to obtain finance through an issue of financial instruments that can be properly classified as equity, they should reconsider the rights issue proposal.

Solution 2

Bond principal: $10{,}000 \times \$50 = 500{,}000$. Annual interest payment $= \$500{,}000 \times 5\% = \$25{,}000$.

Present value of principal: $\$500{,}000/(1.06)^5$ (factor from table = 0.747)	373,500
Present value of interest: \$25,000 × cumulative discount factor (from tables = 4.212)	105,300
	478,800
Balancing figure = equity element	21,200
Principal	500,000

The equity element should be held at a value of \$21,200.

	$	$
Total amount payable:		
Interest payable: 5,000,000 × 2.5% × 10		1,250,000
Repayment: 5,000,000 + 1,750,000		6,750,000
		8,000,000
Total amount received:		
Issue		5,000,000
Less: issue costs		(150,000)
		4,850,000
Total finance cost		3,150,000

Solution 3

(a)

Memorandum

To: Assistant accountant
From: Management accountant
Date:
Subject: Financial instruments – preference shares

Preference shares are, in substance, similar to a debt instrument. They are issued on the understanding that they will receive a fixed dividend and will be redeemed at a specified amount on an agreed date. It is likely that IAS 32 would require these instruments to be recognised as a financial liability.

In the income statement, the finance charge should be calculated as the effective rate applied to the carrying value of the instrument. However, this charge represents the difference between the net proceeds and the total payments made during the life of the instrument. It will therefore incorporate not only interest charges but also the initial issue expenses, as well as any premiums payable at the end of the instrument's life.

The carrying value of the non-equity shares will increase each year by the difference between the effective interest charge and the dividends paid in cash. At the end of the instrument's life the amount outstanding on the statement of financial position should therefore represent the cash that must be paid to extinguish the full debt at the time.

Signed: Management accountant

(b) Short – finance cost for each of the 5 years to 30 September 20X8

	$'m	$'m
Total payments over the life of the instrument		
10m × $1.35		13.5
Dividends 0.4m × 5 years		2.0
		15.5
Net proceeds		
Proceeds on issue	10.0	
Less issue costs	0.1	
		9.9
Finance charge		5.6

The spreading of the annual finance cost is as follows:

	Opening balance	*Finance charge (10%)*	*Dividend cash flow*	*Closing balance*	
	$'000	$'000	$'000	$'000	
20X4	9,900	990	(400)	10,490	
20X5	10,490	1,049	(400)	11,139	
20X6	11,139	1,114	(400)	11,853	
20X7	11,853	1,185	(400)	12,638	
20X8	12,638	1,262*	(400)	13,500	redeemed
		5,600	2,000		

(*rounding)

Solution 4

You should first show the table for the allocation of interest as follows (with a slight rounding adjustment at the end):

Year	*Balance b/f*	*Interest*	*Cash flow*	*Balance c/f*
	$	$	$	$
20X1	2,750,000	429,550	100,000	3,079,550
20X2	3,079,550	481,026	100,000	3,460,576
20X3	3,460,576	540,542	100,000	3,901,118
20X4	3,901,118	609,355	100,000	4,410,473
20X5	4,410,473	689,527	5,100,000	0

In substance the debentures are issued at a discount and repaid at a premium. This must all be allocated in the finance charge so that users of the financial statements have full information.

The revised income statement and statement of financial position extract will be as follows:

Income statement

	20X2	*20X1*
	$'000	$'000
Revenue	7,830	6,690
Operating expenses	5,322	5,109
Interest payable	481	430
Profit for the period	2,027	1,151
Taxation	521	320
Profit after taxation	1,506	831
Dividends paid	200	200

Statement of financial position (extract)

	20X2	*20X1*
	$'000	$'000
Payable: amounts falling due after 1 year		
2% debenture	3,461	3,080

Solution 5

(a) 1. This is classified as a financial asset at fair value through profit or loss because the directors acquired the securities with the intention of selling them in the short term; they fall into the category of 'held-for-trading'.

2. The loan is classified as a held-to-maturity financial asset. The loan is an unlisted security with determinable payments. The intention to hold the asset until maturity is demonstrated by the undertaking not to assign the loan to a third party.

3. There is no plan to sell these investments in the short term, but they do not appear to fall into the loans and receivables or held-to-maturity classifications either. Financial assets that do not fall into the three other classifications identified by IAS 39 are likely to be classified as available-for-sale.

(b) The standard requires that financial assets held for trading (which are classified as financial assets at fair value through profit or loss, and those available for sale should be measured at fair value (categories 1 and 3 of PX's financial assets). Held-to-maturity financial assets are measured at amortised cost.

Solution 6

(a) IAS 39 requires that the available for sale investment be initially recorded at cost plus transaction costs.

Dr	Available for sale investment	$53,000
Cr	Bank	$53,000

Being the initial recording of the investment including transaction costs ((60,000 × $0.85) + $2,000)

Subsequent measurement will occur at the year end and available for sale assets are measured at fair value with gains and losses being recorded in equity until derecognition. The shares will be held at $55,800 (60,000 × 0.93) and the gain of $2,800 (55,800 − 53,000) will be recorded in equity.

Dr	Available for sale investment	$2,800
Cr	Other reserves	$2,800

Being the remeasurement of the available for sale investment

Extracts from the statement of financial position at 31 March 20X7

Assets

Non-current assets

Available for sale investment	$55,800

Equity

Other reserves	$2,800

Extracts from the statement of comprehensive income for the year ended 31 March 20X7

Other comprehensive income

Gain on available for sale asset	$2,800

(b) On disposal the asset will be derecognised and the gain on sale will include the gain in the period (disposal proceeds less carry value) plus the recycled gains that were previously recognised through reserves.

Dr	Bank (60,000 × 0.96)	$57,600
Cr	Available for sale investment	$55,800
Cr	Gain on disposal (income statement)	$1,800
Dr	Other reserves	$2,800
Cr	Gain on disposal (income statement)	$2,800

Being the disposal of the shares

Solution 7

(a) The shares are held for trading and so are initially recorded are cost. Transaction costs are not included for investments classed as fair value through profit or loss and so they will be written off to the income statement in the year:

Dr	Held for trading asset	$110,000
Cr	Bank	$110,000

Being purchase of held for trading asset

Dr	Expense	$3,000
Cr	Bank	$3,000

Being write off of transaction costs

The investment will subsequently be held at fair value and gains and losses from investment held at fair value through profit or loss are recorded in the income statement:

Dr	Held for trading	$5,000
Cr	Gain in income statement	$5,000

Being the gain on held for trading investment 100,000 × ($1.15 − $1.10)

(b) The impairment should be recorded and the investment should be carried at the impaired value of $105,000. The impairment loss will be charged to the income statement when it is incurred:

Dr	Impairment loss on financial asset	$10,000
Cr	Held for trading asset	$10,000

Being the impairment loss in the year

Solution 8

This is an example of a fair value hedge. CD have entered into a hedging arrangement as it wants to minimise the risk of the value of the AFS investment falling as a result of a fall in value of the share price.

In 20X7 the available for sale asset is recorded as normal with the gain of $8,000 being recorded in reserves, in accordance with IAS 39:

Dr	Available for sale investment	$8,000
Cr	Other reserves	$8,000

This gain of $8,000 will be shown within other comprehensive income for the year ended 31 December 20X7.

In 20X8 an effective hedge exists to cover any fall in the value of the shares due to general market conditions. The derivative has a positive value and is therefore an asset held at fair value through profit or loss. This hedged item is the AFS but only the effective part of the hedge can be offset in the income statement (we break the rules for AFS gains/losses so

that the gain/loss on the hedging instrument matches against the gain/loss on the hedged item). Any effective part or any loss not covered by hedge is recorded according to the normal rules for the available for sale asset, i.e. to reserves. The recording for 20X8 is:

Dr	Financial asset – derivative	$1,800
Cr	Gain on derivative (IS)	$1,800

Being the accounting for the derivative

Dr	Loss on hedged investment	$1,800
Dr	Other reserves	$200
Cr	Available for sale investment	$2,000

Being the accounting for the AFS investment