CHAPTER 16
EMPLOYEE BENEFITS AND SHARE BASED PAYMENTS

Quick test

Question 1

The 20X5 statement of profit or loss should show an expense of £770,000.

The statement of financial position should show an accrued expense of £66,000 (770,000 – 704,000).

The employer has no further liability since this is a defined contribution scheme. If the employer increases its contributions, this will be accounted for at this time.

Question 2

(a) A vesting condition is a requirement that must be satisfied for the recipient to become entitled to receive a share-based payment. A performance condition is a type of vesting condition which requires the other party to complete a specified period of service and meet specified performance targets while rendering the service. A service condition is the other type of vesting condition.

IFRS 2 *Share-based Payment* does not specifically define a non-vesting condition, but uses the term to describe a condition that is neither a service condition nor a performance condition. A performance condition is distinguished from a non-vesting condition in that it has an explicit or implicit service requirement whereas a non-vesting condition does not. This means that, if the recipient is entitled to an award on the grant date and is not required to provide any future services to the entity, such a condition is not regarded as a vesting condition for the purpose of IFRS 2. Instead, it is referred to as a non-vesting condition.
(see diagram in IFRS 2)

(b) In equity-settled share-based payment transactions the company receives goods or services in exchange for equity instruments of the company which could be shares or share options. In cash-settled share-based payment transactions the company receives goods or services in exchange for amounts of cash that are based on the price or value of the company's shares or other equity instruments of the company.

The basic accounting treatment is that the company recognises an expense or asset for the goods or services received, and the credit entry is recognised either in equity, for equity-settled transactions, or as a liability, for cash-settled arrangements.

One key difference in the accounting is that for equity-settled transactions, the measurement of the transaction is at the fair value of the shares at the grant date. If there is a vesting period over which the expense is recognised, and the fair value of the shares changes over this period, this is not recognised.

For cash-settled transactions, however, the measurement of the transaction is at the fair value of the liability. This fair value is remeasured at each reporting period end and at the date of settlement. Any changes in fair value are recognised in profit or loss.

Question 3

The possibility that the share price target might not be achieved is already taken into account when estimating the fair value of the options at grant date. Therefore, if Dawson expects the director to complete the three-year service period and the director does so, the entity recognises the following amounts in years 20X1, 20X2 and 20X3:

Year		***Expense for period***	***Cumulative expense***
		£	***£***
20X1	(10,000 options x £24 x 1/3 years)	80,000	80,000
20X2	(10,000 options x £24 x 2/3 years) – £80,000	80,000	160,000
20X3	(50,000 options x £24 x 3/3 years) – £160,000	80,000	240,000

These amounts are recognised irrespective of the outcome of the market condition. However, if the director leaves during 20X2 (or 20X3), the amount recognised during 20X1 (and 20X2) will be reversed in 20X2 (or 20X3). This is because the service condition, in contrast to the market condition, was not taken into account when estimating the fair value of the share options at grant date. Instead, the service condition is taken into account by adjusting the transaction amount to be based on the number of equity instruments that ultimately vest.

Question 4

The non-compete clause is a non-vesting condition, because Bayliss does not receive any services. On the grant date, Bayliss immediately recognises the full cost of £150,000, as the director is not providing any future services. The company cannot reverse the expense recognised, even if the director goes to work for a competitor and loses the share options.

Question 5

20X6

Estimate of the total cost of scheme:
100 employees x £100 x £3 (excess of current share price over share price at grant date) = £30,000

Dr	Operating expense	30,000	
Cr	Liability		30,000

20X7

Calculate the total cost of scheme:
98 employees x £100 x £10 = £98,000

Liability increases by 98,000 – 30,000 = £68,000

Dr	Operating expense	68,000	
Cr	Liability		68,000

Question 6

(a) The interest cost for 20X3 is calculated by multiplying the defined benefit obligation at the start of the period by the discount rate at the start of the period:
£1,140,000 x 4.5% = £51,300

(b) The discount factor should be determined by reference to high quality corporate bonds with similar currency and maturity as the benefit obligations. Where no market in corporate bonds exists, the discount rate should be determined by reference to government debt. Where there is no deep market in corporate bonds with sufficiently long maturities, IAS 19 requires the use of current market rates of appropriate term to discount short-term payments and the estimation of the rate for longer maturities by extrapolating current market rates on the yield curves.

(c) The discount rate should not reflect:
- Investment risk
- Actuarial risk
- Specific risk relating to the entity's business

Develop your understanding

Question 7

Defined contribution retirement plans are those where an employer pays fixed contributions into the retirement fund each year and is not obliged to make any further contributions, even if the fund's assets are insufficient to pay adequate benefits to employees. The risk that benefits will be less than expected falls upon the employees, not the employer.

Defined benefit plans are those where the employer is obliged to provide an agreed level of retirements to employees. The employer's contributions are not limited to any fixed amount and these contributions may need to be increased if the retirement fund has insufficient assets to pay the agreed level of retirements. The risk of having to make further contributions is borne by the employer, not the employee.

Accounting for a defined benefit plan is difficult because the expense recognised each accounting period should be the cost to the employer of the pensions that will eventually be paid to employees as a result of the services that they have provided during that

period. The cost of these pensions is difficult to determine in advance because of the unpredictability of factors such as employee mortality rates, future salary levels, length of service and future returns on investments.

Question 8

The cost reduction target is a non-market performance condition which is taken into account in estimating whether the options will vest. The expense recognised in profit or loss in each of the three years is:

		Cumulative	*Charge in the year*
		£	£
20X7	(10,000 x £21)/3 years	70,000	70,000
20X8	Assumed performance would not be achieved	-	(70,000)
20X9	(10,000 x £21)	210,000	210,000

Question 9

	Expense	*Equity (per statement of financial position)*
	£	£
20X2	660,000	660,000
20X3	174,000	834,000
20X4	423,000	1,257,000

Workings

20X2

Equity: (440 employees x 100 options x £30)/2 years (using original estimate of two-year period)	£660,000

20X3

	£
Equity: [(500 – 30 – 28 – 25) employees x 100 x £30 x 2/3] (using revised estimate of three-year period)	834,000
Previously recognised	(660,000)
Expense	174,000

20X4

	£
Equity: [(500 – 30 – 28 – 23) x 100 x £30]	1,257,000
Previously recognised	(834,000)
Expense	423,000

Question 10

Year		*Expense for period*	*Equity*
		£	£
20X0	80 employees x 200 options x £20 x $^1/_3$	106,667	106,667
20X1	(85 employees x 300 options x £20 x $^2/_3$) – £106,667	233,333	340,000
20X2	(86 employees x 300 options x £20 x $^3/_3$) – £340,000	176,000	516,000

Question 11

(a) The statement shows the reconciliation of Hawk's defined benefit scheme's assets from the beginning to the end of the year. The scheme assets are valued at fair value at the beginning and end of the year.

During the year a return would be received on the assets. For financial reporting purposes, this is an assumed return on the plan's assets calculated as:

Interest rate x plan assets at start of the year.

The interest rate used is the market yield on high quality corporate bonds. This is credited to profit and loss.

During the year the company would pay into the scheme contributions from itself and members which increases the assets in the scheme.

The assumed return on the net assets in the reconciliation would be different from the actual return on the scheme assets, and that the fair value of the scheme assets would have changed from the beginning of the year. The consequence of this is that there will be a difference in the reconciliation, which is shown as the actuarial deficit. In the 2011 revision of IAS 19 the accounting treatment of this difference was changed, and the difference was termed a remeasurement. The remeasurement is now accounted for in the year in which it occurs in other comprehensive income. In the reconciliation shown it would be accounted for as other comprehensive expense (debit) since the difference reduces (credits) the scheme assets.

(b) Benefits of a move to defined contribution scheme:

- The risk that the scheme's assets are sufficient to meet the ultimate pension payments is moved from the company to the employees. This risk is borne by the company with a defined benefit scheme, since there is the potential for such a scheme to show a deficit (when the scheme assets are insufficient to meet the expected pension liability) and for the company to have to make this up. All a defined contribution scheme requires is for the company to pay a fixed level of contributions, usually in monthly instalments, for each employee. Any shortfall in the scheme will have to be made up by the employees, or the pension payments will be reduced.
- Defined contribution schemes are easier for the company to administer and manage.

- Defined contribution schemes are easier to account for. Contributions are charged to profit or loss on a systematic basis. Provided the company is not in arrears on contributions, the monthly double entry required is therefore:
  Dr Staff costs
  Cr Cash

Question 12

Because the most likely outcome of the market condition is that the share price target will be achieved at 30 June 20X8, Copperfield plc estimates that the expected vesting period is five years.

Because Copperfield plc also estimates that two executives will have left by 30 June 20X8, it therefore expects that 80,000 share options (10,000 share options x 8 executives) will vest on 30 June 20X8.

IFRS 2 requires the entity to recognise the services received over the expected vesting period, as estimated at grant date, and also requires Copperfield not to revise that estimate. Therefore, the company recognises the services received from the executives over years ended 30 June 20X4-20X8.

The transaction amount is ultimately based on 70,000 share options (10,000 share options x 7 executives who remain in service on 30 June 20X8).

Although another executive left during year ended 30 June 20X9, no adjustment is made, because the executive had already completed the expected vesting period of five years. Therefore, the entity recognises the following amounts in years ended 30 June 20X4-20X8:

Year		*Remuneration expense for period*	*Cumulative remuneration expense*
		£	£
20X4	(80,000 options x £2.50 x $^{1}/_{5}$)	40,000	40,000
20X5	(80,000 options x £2.50 x $^{2}/_{5}$) – £40,000	40,000	80,000
20X6	(80,000 options x £2.50 x $^{3}/_{5}$) – £80,000	40,000	120,000
20X7	(80,000 options x £2.50 x $^{4}/_{5}$) – £120,000	40,000	160,000
20X8	(70,000 options x £2.50) – £160,000	15,000	175,000

Take it further

Question 13

Year			*Expense*	*Liability*
			£	£
20X0	(500 – 95) employees x 100 SARs x £14.40 x $^{1}/_{3}$		194,400	194,400
20X1	(500 – 100) employees x 100 SARs x £15.50 x $^{2}/_{3}$ – £194,400		218,933	413,333
20X2	(500 – 97 – 150) employees x 100 SARs x £18.20 – £413,333	47,127		460,460
	+ 150 employees x 100 SARs x £15.00	225,000		
			272,127	
20X3	(253 – 140) employees x 100 SARs x £21.40 – £460,460	(218,640)		241,820
	+ 140 employees x 100 SARs x £20.00	280,000		
			61,360	
20X4	£0 – £241,820	(241,820)		0
	+ 113 employees x 100 SARs x £25.00	282,500		
			40,680	
	Total		787,500	

Question 14

Year		*Expense for period*	*Equity*
		£	£
20X6	(500 – 110) employees x 100 options x £15 x $^{1}/_{3}$	195,000	195,000
20X7	[(500 – 105) employees x 100 options x ((£15 x $^{2}/_{3}$) + (£3 x ½))] * – £195,000	259,250	454,250
20X2	[(500 – 103) employees x 100 options x (£15 + £3)] * – £454,250	260,350	714,600

* At the date of repricing of the share options, 1 April 20X6, the incremental value is £3 per share option (£8 – £5). This amount is recognised over the remaining two years of the vesting period, along with remuneration expense based on the original option value of £15.

Question 15

Irrespective of any modifications to the terms and conditions on which the equity instruments were granted, or a cancellation or settlement of that grant of equity instruments, IFRS 2 requires a company to recognise, as a minimum, the services received measured at the grant date fair value of the equity instruments granted, unless those equity instruments do not vest because of failure to satisfy a vesting condition (other than a market condition) that was specified at grant date. Therefore, Havers recognises the services received over the three-year period, based on the grant date fair value of the shares.

Furthermore, the addition of the cash alternative at 30 September 20X3 creates an obligation to settle in cash. In accordance with the requirements for cash-settled share-based payment transactions, Havers recognises the liability to settle in cash at the modification date, based on the fair value of the shares at the modification date and the extent to which the specified services have been received. Furthermore, the company remeasures the fair value of the liability at the end of each reporting period and at the date of settlement, with any changes in fair value recognised in profit or loss for the period.

Therefore, Havers recognises the following amounts:

Year		*Expense*	*Equity*	*Liability*
		£	£	£
20X2	10,000 shares x £33 x $^1/_3$	110,000	110,000	
20X3	(10,000 shares x £33 x $^2/_3$) – £110,000	110,000	110,000	
			220,000	
	Reclassify equity to liabilities: 10,000 shares x £25 x $^2/_3$		(166,667)	166,667
			53,333	
20X4	(10,000 shares x £33) – £220,000	110,000[1]	26,667	83,333
			80,000	250,000
	Adjust liability to closing fair value: (£250,000 – (£22 x 10,000 shares)	(30,000)		(30,000)
Total		300,000	80,000	220,000

[1] Allocated between liabilities and equity, to bring in the final third of the liability based on the fair value of the shares as at the date of the modification (10,000 shares x £25).

Question 16

Change in the PV of the obligation

	£000	
PV of obligation at start of year	9,375	
Add: Interest cost @ 7%	656.25	
Current service cost	200	
Past service costs	375	
Less: Benefits paid in year	(213)	
	10,393.25	
Remeasurement	86.75	β
PV of obligation at end of year	10,480	

Change in FV of plan assets

FV of plan assets at start of year	7,875	
Add: Interest on plan assets @ 7%	551.25	
Contributions received from employer	65	
Contributions received from employees	40	
Less: Benefits paid in year	(213)	
	8,318.25	
Remeasurement	(1,358.25)	β
FV of plan assets at end of year	6,960	

Statement of comprehensive income

	£000
In profit or loss	
Current service cost for year	200
Past service costs for year	375
Net interest expense for year (656.25 – 551.25)	105
Total expense	680
In other comprehensive income	
Remeasurements (86.75 + 1,358.25 expense)	1,445

Statement of financial position

	£000
Present value of defined benefit obligation	10,480
Less: Fair value of plan assets	(6,960)
Defined benefit **liability**	3,520