Property, Plant and Equipment
Part 3 – Solutions to Examples

Solution to Example 1

In accordance with IAS 16 *Property, Plant and Equipment*, all costs required to bring an asset to its present location and condition for its intended use should be capitalised. Therefore, the initial purchase price of the asset should be:

	$
List price	82,000
Less: trade discount (10%)	(8,200)
	73,800
Import duty	1,500
Delivery fees	2,050
Installation costs	9,500
Pre-production testing	4,900
Total amount to be capitalised at 1 March 20X0	**91,750**

The maintenance contract of $7,000 is an expense and, therefore, should be spread over a five-year period in accordance with accruals accounting and taken to the operating category of the statement of profit or loss. If the $7,000 has been paid in full, then some of this cost will represent a prepayment.

In addition, the settlement discount received of $3,690 (5% × $73,800) should be credited to the statement of profit or loss.

The asset would be depreciated from the date it was ready for its intended use, even if not brought into use at that date.

Solution to Example 2

PPE

This is an example of a self-constructed asset. All costs to get the store to its present location and condition for its intended use should be capitalised. All the expenditure listed in the question, except for general overheads, would qualify for capitalisation. The interest expense on the loan should also be capitalised from 1 April 20X1 as, in accordance with IAS 23 Borrowing Costs, it meets the definition of a qualifying asset. The definition of a qualifying asset is one that necessarily takes a substantial period of time to get ready for its intended use or sale.

The recognition criteria for capitalisation appears to be met (ie activities to prepare the asset for its intended use are in progress, expenditure for the asset is being incurred and borrowing costs are being incurred). Capitalisation of the interest expense on the

loan must **cease when the asset is ready for use** (ie 1 January 20X2), even though the asset was not brought into use until 1 April 20X2. From 1 January 20X2, the interest expenses on borrowings must remain charged to the statement of profit or loss.

	$'000
Cost of land	4,500
Architect fees	620
Site preparation costs	1,650
Materials	7,800
Direct labour costs	11,200
Legal fees	2,400
Borrowing costs (9/12 months × 8% × $25m)	1,500
Total to be capitalised	**29,670**

Statement of profit or loss

The following costs should be charged to the statement of profit or loss for the year ended 31 March 20X2:

	$'000
General overheads	940
Interest expenses on borrowings (3/12 months × 8% × $25m)	500

In addition, even though the asset has not been brought into use, IAS 16 states that depreciation of an asset begins when it is available for use (ie when it is in the location and condition necessary for it to be capable of operating in the manner intended by management). Therefore, depreciation should begin on 1 January 20X2.

Solution to Example 3

The $18,000 should be capitalised as part of the cost of the asset rather than being expensed to the statement of profit or loss. The cost can be measured reliably and the reduction in the production time means that the revenue earning capacity of the machine has increased, which will in turn lead to additional economic benefits.

Solution to Example 4

Carrying amount = $112,500

Depreciation charge = $37,500

Workings:

	$
Year 1	
Cost at 1 April 20X1	200,000
Depreciation at 25% of cost (25% × $200,000)	(50,000)
Carrying amount at 31 March 20X1	**150,000**
Year 2	
Carrying amount brought forward	150,000
Depreciation at 25% of carrying amount (25% × $150,000)	(37,500)
Carrying amount at 31 March 20X2	**112,500**

Solution to Example 5

31 March 20X1

At the date of acquisition, the cost of the machine of $120,000 would be capitalised. The asset should then be depreciated for the years ended 31 March 20X1 and 31 March 20X2 as follows:

Depreciation charge

= 1/10 years × ($120,000 cost - $20,000 residual value)

= 10% × $100,000

= $10,000

The carrying amount at 31 March 20X1, after the first year of depreciation, will be $110,000 ($120,000 cost - $10,000 accumulated depreciation).

The carrying amount at 31 March 20X2, after two years of depreciation, will be $100,000 ($120,000 cost - $20,000 accumulated depreciation).

31 March 20X3

As the residual value and useful life estimates have changed at the start of the year, the depreciation charge will need to be recalculated and applied from 1 April 20X2:

Revised depreciation charge

= 1/5 years × ($100,000 carrying amount - $15,000 residual value)

= 20% × $85,000

= $17,000

The carrying amount at 31 March 20X3, after one year of revised depreciation, will be $83,000 ($100,000 carrying amount - $17,000 accumulated depreciation).

Solution to Example 6

	$'000
Buildings (1/50 years × [$65m total - $20m land])	900
Fixtures and fittings (1/10 years × $24m)	2,400
Elevators (1/20 years × $11m)	550
Total property depreciation	**3,850**

Solution to Example 7

	$'000	
Carrying amount (38/40 years × $100,000 cost)	95	
Fair value	120	
Revaluation increase	**25**	
	$'000	**$'000**
Dr Buildings – cost/ valuation ($120,000 fair value - $100,000)	20	
Dr Buildings – acc dep'n (2/40 years × $100,000 cost)	5	
Cr Revaluation surplus		25

Note that the $25,000 revaluation increase which has been credited to the revaluation surplus would be recognised as a gain in other comprehensive income as well as being presented as a movement in the revaluation surplus in the statement of changes in equity.

Solution to Example 8

	$'000	
Carrying amount (given)	108	
Fair value	95	
Revaluation decrease	**13**	
	$'000	**$'000**
Dr Revaluation surplus	10	
Dr SPL – revaluation decrease	3	
Dr Property – acc dep'n	17	
Cr Property – valuation		30

Note that the $10,000 portion of the revaluation decrease which has been debited to the revaluation surplus would be recognised as a loss in other comprehensive income as well as being presented as a movement in the revaluation surplus in the statement of changes in equity.

Solution to Example 9

(a) Journal entries:

	$'000	**$'000**
Revaluation increase:		
Dr Property – cost/ valuation ($20m - $10m)	10,000	
Dr Property – acc dep'n (10/40 years × [$10m - $2m land])	2,000	
Cr Revaluation surplus		12,000
Depreciation charge for the year ended 31 March 20X2:		
Dr Depreciation charge (1/30 years × [$20m - $8m land])	400	
Cr Property – acc dep'n		400
Annual transfer:		
Dr Revaluation surplus	200	
Cr Retained earnings		200

Workings:

(W1) Revaluation increase	**$'000**
Carrying amount ($10m - $2m)	8,000
Fair value	20,000
Revaluation increase	**12,000**
(W2) Annual transfer	
Old depreciation (1/40 years × $8m)	200
New depreciation	400
Excess depreciation to be transferred	**200**

(b) Financial statements extracts:

Extract of statement of profit or loss and other comprehensive income for the year ended 31 March 20X2:

	$'000
Depreciation expense	400
Other comprehensive income:	
Gains on property revaluation	12,000

Extract of statement of financial position as at 31 March 20X2:

	$'000
Non-current assets	
Property ($20m fair value - $400,000 depreciation charge)	19,600
Equity	
Revaluation surplus ($12m increase - $200,000 annual transfer)	11,800

Extract of statement of changes in equity for the year ended 31 March 20X2:

	Revaluation surplus	**Retained earnings**
	$'000	**$'000**
Gains on property revaluation	12,000	-
Reserves transfer	(200)	200

Solution to Example 10

(a) Journal entries:

	$'000	$'000
Gain on revaluation:		
Dr Building – acc dep'n (5/40 years × $100m)	12,500	
Cr Building – cost ($100m - $98m)		2,000
Cr Revaluation surplus (see working)		10,500
Depreciation charge for year ended 31 March 20X2:		
Dr Depreciation expense (1/40 years × $100m)	2,500	
Cr Building - accumulated depreciation		2,500

Working:

Revaluation increase	$'000
Carrying amount ($100m - $12.5m)	87,500
Fair value	98,000
Revaluation increase	**10,500**

Note: There is, overall, a revaluation increase as the fair value of the building is greater than the carrying amount. However, the valuation of the building is still **below cost** and, therefore, requires a **credit** to the 'Buildings – cost/ valuation' general ledger account, despite there being an overall increase in value.

Also, as the revaluation has taken place at the end of the year, a full year of depreciation was charged **before** the revaluation. This means that there is **no** transfer of the revaluation surplus required as there was no excess depreciation in the **current** year.

(b) Financial statements extracts:

Extract of statement of profit or loss and other comprehensive income for the year ended 31 March 20X6:

	$'000
Depreciation charge	2,500
Other comprehensive income:	
Gains on building revaluation	10,500

Extract of statement of financial position as at 31 March 20X6:

	$'000
Non-current assets	
Building	98,000
Equity	
Revaluation surplus	10,500

Solution to Example 11

(a) Journal entries:

	$'000	**$'000**
Depreciation charge (before revaluation):		
Dr Depreciation charge (6/600 months × $2m)	20	
Cr Property – acc dep'n		20
Revaluation increase (W1):		
Dr Building – cost ($2.2m - $2m)	200	
Dr Building – acc dep'n ($400,000 + $20,000)	420	
Cr Revaluation surplus		620
Depreciation charge (after revaluation):		
Dr Depreciation charge (6/474 months × $2.2m)	28	
Cr Property – acc dep'n		28
Annual transfer (six months) (W2):		
Dr Revaluation surplus	8	
Cr Retained earnings		8

Workings:

	$'000
(W1) Revaluation increase	
Carrying amount ($2m - $420,000)	1,580
Fair value	2,200
Revaluation increase	**620**
(W2) Annual transfer – time apportioned for 6 months	
Historical cost depreciation charge (6 months)	20
Depreciation charge on revalued amount (6 months)	28
Excess depreciation to be transferred	**8**

As the revaluation has taken place six months into the year, this means that there is only six months of excess depreciation to be transferred from the revaluation surplus to retained earnings, in line with the company's policy.There are 39.5 years remaining from the date of revaluation (474 months).

(b) Financial statements extracts:

Extract of statement of profit or loss and other comprehensive income for the year ended 31 March 20X2:

	$'000
Depreciation charge ($20,000 + $28,000 [rounded])	48
Other comprehensive income:	
Gains on building revaluation	620

Extract of statement of financial position as at 31 March 20X2:

	$'000
Non-current assets	
Property ($2.2m - $28,000)	2,172
Equity	
Revaluation surplus ($620,000 - $8,000 [rounded])	612

Extract of statement of changes in equity for the year ended 31 March 20X2:

	Revaluation surplus	**Retained earnings**
	$'000	**$'000**
Gains on property revaluation	620	-
Annual transfer	(8)	8

Solution to Example 12

The asset and its associated accumulated depreciation must be removed from the statement of financial position and a loss of $3,000 should be recognised in the statement of profit or loss.

Workings:

	$'000
Carrying amount ($16,000 - $8,000)	8
Proceeds	5
Loss on disposal	**3**

Written by a member of the Financial Reporting examining team