IAS 16 SOLUTIONS

SOLUTION 1

In accordance with IAS 16, 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
Electrical installation costs	9,500
Pre-production testing	4,900
Total amount to be capitalised at 1 March	91,750

The maintenance contract of $7,000 is an expense and therefore should be spread over a five-year period in accordance with the accruals concept and taken to the income statement. 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 ($73,800 x 5%) is to be shown as other income in the income statement.

SOLUTION 2

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 of the expenditure listed in the question, with the exception of general overheads would qualify for capitalisation.

The interest on the loan should also be capitalised from 1 April 2009 as in accordance with IAS 23 it meets the definition of a qualifying asset. 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 on the loan must cease when the asset is ready for use, ie 1 January 2010. At this point any remaining interest for the period should be charged as a finance cost in the income statement.

Property, plant and equipment

Store:

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

Income statement impact

With regards to the income statement this should be charged with:

- General overheads of $940,000
- Remaining interest for Jan–Mar which is now an expense $500,000 (25,000 x 8% x 3/12) and;
- Depreciation of the store. Even though the asset has not yet been brought into use, IAS 16 states 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.

Note: depreciation cannot be calculated in this question as information surrounding useful economic life has not been provided – this is for illustrative purposes only. Depreciation is covered later in this article.

SOLUTION 3

The $18,000 should be capitalised as part of the cost of the asset as the revenue earning capacity of the machine has significantly increased, which could in turn lead to the inflow of additional economic benefit and the cost of the upgrade can be reliably measured.

SOLUTION 4

Income statement extract

Depreciation expense $37,500

Statement of financial position extract

Plant

(200,000 – 50,000 – 37,500) $112,500

Working for depreciation:

31/03/09	Cost	200,000
	Depreciation – 25%	(50,000)
	Carrying value	150,000
31/03/10	Carrying value	150,000
	Depreciation – 25%	(37,500)
	Carrying value	112,500

SOLUTION 5

31 March 2008

At the date of acquisition the cost of the asset of $120,000 would be capitalised. The asset should then be depreciated for the years to 31 March 2008/2009 as:

$$\frac{\text{Cost – residual value}}{\text{Useful economic life}} = \frac{120{,}000 - 20{,}000}{10\text{ years}} = \$10{,}000 \text{ per annum}$$

Income statement extract 2008

Depreciation $10,000

Statement of financial position extract 2008

Machine

(120,000 – 10,000) $110,000

31 March 2009

Income statement extract 2009

Depreciation $10,000

Statement of financial position extract 2009

Machine

(120,000 – 20,000) $100,000

31 March 2010
As the residual value and useful economic life estimates have changed during the year ended 2010, the depreciation charge will need to be recalculated. The carrying value will now be spread according to the revised estimates.

Depreciation charge:

$\frac{100{,}000 - 15{,}000}{5 \text{ years}}$ = $17,000 per annum

Income statement extract 2010

Depreciation	$17,000
Statement of financial position extract 2010	
Machine	
(100,000 – 17,000)	$83,000

SOLUTION 6

	$000
Land and buildings	
(65,000 – 20,000)/50 years))	900
Fixtures and fittings	
(24,000/10 years)	2,400
Lifts	
(11,000/20 years)	550
Total property depreciation	3,850

SOLUTION 7

Gain on revaluation:	
Carrying value of non-current asset at revaluation date	
(100,000 – (100,000/40 years x 2 years))	95,000
Valuation	120,000
Gain on revaluation	**25,000**
Double entry:	
Dr Building cost	
(120,000 – 100,000)	20,000
Dr Accumulated depreciation	
(100,000/40 years x 2 years)	5,000
Cr Revaluation reserve	25,000

SOLUTION 8

Loss on revaluation:	
Carrying value of non-current asset at revaluation date	108,000
Valuation	95,000
Loss on revaluation	13,000
Double entry:	
Dr Revaluation reserve	
(to maximum of original gain)	10,000
Dr Income statement	3,000
Cr Non-current asset	13,000

The revaluation gain or loss must be disclosed in both the statement of changes in equity and in other comprehensive income.

SOLUTION 9

Statement of comprehensive income extract for the year ended 31 March 2010

	$000
Depreciation expense	400
Other comprehensive income:	
Revaluation gain	12,000

Statement of financial position extract as at 31 March 2010

	$000
Non-current assets	
Property	
(20,000 – 400)	19,600
Equity	
Revaluation reserve	
(12,000 – 200)	11,800

Statement of changes in equity extracts

	Revaluation reserve $000	Retained earnings $000
Revaluation gain	12,000	
Reserves transfer	(200)	200

Workings:

Gain on revaluation:	
	$000
Carrying value of non-current asset at revaluation date	
(10,000 – ((10,000 – 2,000)/40 years x 10 years))	8,000
Valuation	20,000
Gain on revaluation	**12,000**
Double entry:	
Dr Property	
(20,000 – 10,000)	10,000
Dr Accumulated depreciation	
((10,000 – 2,000)/40 years x 10 years)	2,000
Cr Revaluation reserve	12,000
Depreciation charge for year to 31 March 2010:	
Dr depreciation expense	
((20,000 – 8,000)/30 years)	400
Cr Accumulated depreciation	400
Reserves transfer:	
Historical cost depreciation charge	
((10,000 – 2,000)/40 years)	200
Revaluation depreciation charge	400
Excess depreciation to be transferred	200
Dr Revaluation reserve	200
Cr Retained earnings	200

SOLUTION 10

Statement of comprehensive income extract 31 March 2010

Depreciation charge	2,500

Other comprehensive income:

Revaluation gain	10,500

Statement of financial position extract 31 March 2010

Building at valuation	98,000

Statement of changes in equity extract

	Revaluation reserve
Revaluation gain	10,500

Working paper:
Note: revaluation takes place at year end, therefore a full year of depreciation must first be charged.

(W1) Depreciation year ended 31 March 2010

$\frac{100,0000}{40 \text{ years}} = \$2,500$

(W2) Revaluation
The carrying value of the asset at 31 March 2010 can now be found and revalued.

Carrying value of non-current asset at revaluation date (100,000 – (100,000/40 years x 5 years))	87,500
Valuation of non-current asset	98,000
Gain or loss on revaluation	10,500

Double entry:

Dr	Accumulated depreciation	12,500
Cr	NCA cost	2,500
Cr	Revaluation reserve	10,500

SOLUTION 11

Statement of comprehensive income extract 31 March 2010

Depreciation charge (20,000 (W1) + 27,500 (W2)	47,500

Other comprehensive income:

Revaluation gain	620,000

Statement of financial position extract 31 March 2010

Office block (carrying value at 31 March):

Valuation	2,200,000
Depreciation	(27,500)
Carrying value	2,172,500

Statement of changes in equity extract

	Revaluation reserve
Revaluation gain	620,000

Working paper:
Note: Revaluation takes place part way through the year and therefore depreciation must first be charged for the period 1 April 09 – 30 September 09, then the revaluation can be recorded and then depreciation needs to be charged for the period 1 October 2009 – 31 March 2010.

(W1) Depreciation 1 April–30 September 2009

$\frac{2,000,000}{50 \text{ years}} \times 6/12 = \$20,000$

(W2) Revaluation
The carrying value of the asset at 1 October 2009 can now be found and revalued.

Carrying value of non-current asset at revaluation date (2,000,000 – (400,000 – 20,000))	1,580,000
Valuation of non-current asset	2,200,000
Gain on revaluation	620,000

Double entry:

Dr	NCA cost (2,200,000 – 2,000,000)	200,000
Dr	Accumulated depreciation	420,000
Cr	Revaluation reserve	620,000

(W3) Depreciation 1 October – 31 March 2010

$\frac{2,200,000}{40 \text{ years}} \times 6/12 =$ $27,500

SOLUTION 12

The asset and its associated depreciation should be removed from the statement of financial position and a profit or loss on disposal should be recorded in the income statement.

The loss on disposal is:

Carrying value at disposal date (16,000 – 8,000)	8,000
Disposal proceeds	5,000
Loss on disposal	3,000