




Capital Expenditure

The most likely tasks in this area fall into the following groups:

-  Calculation of depreciation
-  Calculation of profit/loss on disposal
-  Accounting for depreciation and disposals

Calculation of Depreciation

Recall that capital expenditure is that undertaken to purchase or improve fixed assets, whilst revenue expenditure is that on day to day business expenses. Capital expenditure is not recorded in the Profit and Loss account – when fixed assets are purchased, they are shown in the Balance Sheet (originally at their historic cost).

Depreciation is an attempt to spread the cost of an asset over its useful economic life. For example, if an asset is purchased for £10,000, kept in use for 8 years, and then sold for £1,000, it has cost the business £9,000. Depreciation tries to apply the accruals (or matching) concept, by matching that £9,000 with the income the asset has generated.

As such, an annual depreciation charge should be shown as an expense in the Profit and Loss account. Additionally, the value of the asset in the Balance Sheet should be reduced by each year's charge.

Depreciation should be calculated in a way which most closely reflects the manner in which the asset is being used up. The two most commonly used methods need to be known for the central examination:

| | |
|------------------|--|
| STRAIGHT LINE | <i>A fixed percentage on cost each year The same monetary amount each year</i> |
| REDUCING BALANCE | <i>A fixed percentage on net book value each year A reducing monetary amount each year</i> |

Example

A machine is purchased for £30,000. It is expected that this machine will be used for 10 years, at the end of which it will be sold for £1,500.

Calculate the depreciation to be charged for each of the first 3 years of the machine's life, using:

- (i) The straight line method
- (ii) The reducing balance method at 20% pa

Solution

- (i) Under the straight line method, the net cost is simply divided by the expected life.

$$(\text{£}30,000 - \text{£}1,500) / 10 = \text{£}2,850$$

So, the annual charge for every year of the machine's life is £2,850.

Note that the policy could have been expressed as "straight line at 9.5%" or "depreciation at 9.5% pa on cost" – the percentage is calculated as $\text{£}2,850 / \text{£}30,000 \times 100$.

- (ii) Under the reducing balance method, the charge for depreciation reduces each year:

| | | |
|--------|--|--------|
| Year 1 | $\text{£}30,000 \times 20\%$ | £6,000 |
| Year 2 | $(\text{£}30,000 - \text{£}6,000) \times 20\%$ | £4,800 |
| Year 3 | $(\text{£}30,000 - \text{£}6,000 - \text{£}4,800) \times 20\%$ | £3,840 |

Note that the expected residual value is ignored in these calculations – it will have been incorporated (along with the original cost and expected life) into the choice of 20% as an appropriate rate.

Calculation of Profit/Loss on Disposal

The depreciation charged each year is based, whatever the policy, on estimates of useful life and residual value. Only when the asset is disposed of will it be clear how good those estimates were. On disposal, the actual disposal proceeds will show the true net cost of the asset. This may reveal that too much or too little depreciation has been provided over the asset's life.

This over or under provision of depreciation is shown in the Profit and Loss a/c as a *profit or loss on the disposal of fixed assets*.

Example

An asset is purchased on 1 January 2005 for £40,000, and is depreciated using the reducing balance method at 20% pa.

The asset is sold on 1 January 2008 for £23,000.

Calculate the profit or loss arising on this disposal.

Solution

The sales proceeds must be compared to the net book value on the date of disposal.

The latter is calculated as follows:

| | |
|-----------------------------------|--------|
| Original cost | 40,000 |
| Depreciation y/e 31.12.2005 (20%) | 8,000 |
| | ----- |
| Net book value at 31.12.2005 | 32,000 |
| Depreciation y/e 31.12.2006 (20%) | 6,400 |
| | ----- |
| Net book value at 31.12.2006 | 25,600 |
| Depreciation y/e 31.12.2007 (20%) | 5,120 |
| | ----- |
| Net book value at 31.12.2007 | 20,480 |
| | ----- |

Thus, there is a profit on disposal of £23,000 - £20,480 = £2,520

In the above example, the disposal occurred exactly 3 years after the acquisition. The inherent assumption in the solution is that the business prepares accounts with a year end of 31 December each year.

In practice, acquisition or disposal may occur part way through the accounting year, which necessitates a decision regarding depreciation. For example, suppose the disposal in the above example had occurred on 1 October 2007 – how much depreciation would have been charged for the year ended 31 December 2007?

The answer depends upon the policy of the business under consideration. It may decide that a fraction of the whole year's charge should be provided, based on the number of months that the asset was held:

$$£5,120 \times 9/12 = £3,840$$

Alternatively, it may decide that this approach is too involved for something which is only an estimate. A popular depreciation policy would be:

A full year's charge in the year of acquisition but none in the year of disposal

In the above example (with disposal on 1 October 2007), under this policy, no depreciation would be charged for the year ended 31 December 2007.

Alternative policies could also be adopted – be guided by the specific requirements of the question.