FINANCIAL ACCOUNTING (LECTURE-18)

DEPRECIATION

Depreciation is a systematic allocation of the cost of a depreciable asset to expense over its useful life. It is a process of charging a fixed asset to profit & loss account.
Fixed Assets are those assets, which are:

- Of long life
- To be used in the business
- Not bought with the main purpose of resale.

When an expense is incurred, it is charged to profit & loss account of the same accounting period in which it has incurred. Fixed assets are used for longer period of time. Now, the question is how to charge a fixed asset to profit & loss account. For this purpose, estimated life of the asset is determined. Estimated useful life is the number of years in which a fixed asset is expected to be used efficiently. It is the life for which a machine is estimated to provide more benefit than the cost to run it. Then, total cost of the asset is divided by total number of estimated years. The value, so determined, is called 'depreciation for the year' and is charged to profit & loss account. The same amount is deducted from total cost of fixed asset, in which depreciation is charged. The net amount (after deducting depreciation) is called 'Written Down Value'.
WDV = Cost of fixed asset – Accumulated Depreciation

Depreciation is accumulated over the years and is called accumulated depreciation.

GROUPINGS OF FIXED ASSETS

Major groups of Fixed Assets:

- Land
- Building
- Plant and Machinery
- Furniture and Fixtures
- Office Equipment
- Vehicles

No depreciation is charged for 'Land'. In case of 'Leased Asset/Lease Hold Land' the amount paid for it is charged over the life of the lease and is called Amortization.

RECORDING OF JOURNAL ENTRIES

Purchase of fixed asset:

Debit:	Relevant asset account
Credit:	Cash, Bank or Payable Account

For recording of depreciation, following two heads of accounts are used:

- Depreciation Expense Account
- Accumulated Depreciation Account

Depreciation expense account contains the depreciation of the current year. Accumulated depreciation contains the depreciation of the asset from the financial year in which it was bought. Depreciation of the following years in which asset was used, is added up in this account. In other words, this head of account shows the cost of usage of the asset up to the current year. Depreciation account is charged to profit & loss account under the heading of Administrative Expenses. In the balance sheet, fixed assets are presented at written down value. i-e. WDV = Actual cost of fixed asset – Accumulated Depreciation.

Journal entry for the depreciation is given below:

Debit: Depreciation Account
Credit: Accumulated Depreciation Account

METHODS OF CALCULATING DEPRECIATION

There are several methods of calculating depreciation. At this stage, we will discuss only two of them namely:

- Straight line method
- Reducing balance method

STRAIGHT LINE METHOD

In this method, a fixed amount is calculated by a formula. That fixed amount is charged every year irrespective of the written down value of the asset. The formula for calculating the depreciation is given below:

Depreciation = (cost – Residual value) / Expected useful life of the asset

Residual value is the cost of the asset after the expiry of its useful life.

REDUCING BALANCE METHOD

In this method, depreciation is calculated on written down value. In the first year, depreciation is calculated on cost. Afterwards written down value is calculated(cost – accumulated depreciation) and depreciation is charged on that value.
In reducing balance method, a formula is used for calculation of depreciation rate. i e.

$$\text{Rate} = 1 - n\sqrt{Rv/c}$$

Where:

"RV" = Residual Value
"C" = Cost
"n" = Life of Asset

POLICY FOR DEPRECIATION

The management of the business selects the policy for the charge of depreciation. There is no law binding on the management. The management is free to choose method of depreciation and policy of charging depreciation. Normally two policies are commonly used:

- Depreciation on the basis of use
- In the year of purchase, full year's depreciation is charged, where as, in the year of sale no depreciation is charged.

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Now it is up to the management to decide, what method and what policy is better and effective for their business.

DISPOSAL OF FIXED ASSET

When depreciable asset is disposed of at any time during the financial year, an entry should be made to give effect of the disposal. Since the residual value of asset is only estimate, it is not common for asset to be sold at price that differs from its book value at the date of disposal. When asset is sold, any profit or loss is computed by comparing book value with the amount received from sale. As you know, book value is obtained by deducting accumulated depreciation from original cost of the asset. A sale price in excess of the book value produces profit; a sale price below the book value produces loss. This profit or loss should be shown in the profit & loss account.

ENTRIES FOR RECORDING DISPOSAL

Debit Fixed Asset Disposal A/c
Credit Fixed Asset Cost A/c
(with the cost of asset)

Debit Accumulated Dep. A/c
Credit Fixed Asset Disposal A/c
(with the depreciation accumulated to date)

Debit Cash / Bank / Receivable A/c
Credit Fixed Asset Disposal A/c
(with the price at which asset is sold)

ILLUSTRATION

Cost of asset	Rs. 200,000
Life of the asset	5 years
Depreciation method	Straight line
Residual value	Rs. 20,000
Sale price after 5 years	30,000

SOLUTION

Written down value = 200,000 – 20,000 = 180,000
Depreciation/year = 180,000/5 = 36,000 (Straight line method)

Particulars	Depreciation (Rs)	Written Down Value (Rs.)
Depreciable cost		200,000
Dep. Of the 1st year	(36,000)	164,000
Dep. Of the 2nd year	(36,000)	128,000
Dep. Of the 3rd year	(36,000)	92,000
Dep. Of the 4th year	(36,000)	56,000
Dep. Of the 5th year	(36,000)	20,000

Book value after five years	Rs. 20,000
Sale price	Rs. 30,000
Profit on sale	Rs. 10,000 (30,000 – 20,000)

Same illustration is solved by reducing balance method

Cost of asset	Rs. 200,000
Residual value	Rs. 20,000
Estimated useful life	5 years

Calculation of depreciation rate

$$\text{Depreciation Rate} = 1 - n\sqrt{Rv/c}$$

$$= 1 - 5\sqrt{20{,}000/200{,}000}$$
$$= 37\%$$

Allocation of depreciation is given below:

Particulars	Depreciation (Rs)	Accumulated Depreciation (Rs.)	Written Down Value (Rs.)
Depreciable cost			200,000
Dep. Of the 1st year			
200,000 x 37%	74,000	74,000	126,000
Dep. Of the 2nd year			
126,000 x 37%	46,620	120,620	79,380
Dep. Of the 3rd year			
79,380 x 37%	29,371	149,991	50,009
Dep. Of the 4th year			
50,009 x 37%	18,503	168,494	31,506
Dep. Of the 5th year			
31,506 x 37%	11,657	180,151	19,849

Book value after five years	Rs. 19,849
Sale price	Rs. 30,000
Profit on sale	Rs. 10,151 (30,000 – 19,849)